Australian Government
Productivity Commission

Economic Regulation of Airport Services

Productivity Commission Draft Report

August 2011

This is a draft report prepared for further public consultation and input.

The Commission will finalise its report after these processes have taken place.

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The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au) or by contacting Media and Publications on (03) 9653 2244 or email: maps@pc.gov.au

Opportunity for further comment

You are invited to comment on this draft inquiry report in writing and/or by participating in the public hearings, as shown below. Anyone interested in participating in a public hearing should contact Christine Underwood on (02) 6240 3262.

Written responses should be sent to the Productivity Commission by **23 September 2011.** If possible, please provide submissions by email (airport-regulation@pc.gov.au).

For those participating in the public hearings, the Commission would appreciate receiving advance copies of submissions or a brief summary on the main discussion points at least **2 working days** prior to the relevant hearing date. Subject to demand from participants, the Commission may add further hearings, details of which would be published on the Commission's website.

The final report will be prepared after submissions have been received and public hearings have been held, and will be forwarded to the Australian Government by 15 December 2011.

Public hearing dates and venues

Location	Date	Venue
Canberra	5 October 2011	Hearing Room
	Commencing at 9.00 am	Productivity Commission
		Level 2, 15 Moore Street
Melbourne	6 October 2011	Rattigan Room
	Commencing at 9.00 am	Productivity Commission
		Level 12, 530 Collins Street

Commissioners

For the purposes of this inquiry and draft report, in accordance with section 40 of the Productivity Commission Act 1998 the powers of the Productivity Commission have been exercised by:

Wendy Craik	Presiding Commissioner
John Sutton	Associate Commissioner

Terms of reference

I, Bill Shorten, Assistant Treasurer, pursuant to Parts 2 and 3 of the *Productivity Commission Act 1998*, hereby refer the current economic regulation arrangements for airport services to the Commission for inquiry and report within twelve months of receipt of this reference.

Background

In 2006, the Productivity Commission conducted a review of the regulatory arrangements for pricing airport services. The review examined the price monitoring regime that had replaced the price capping regime in 2002. The review found that the price-monitoring regime had delivered important benefits, and recommended that the existing arrangements continue.

The Australian Competition and Consumer Commission (ACCC) has continued to prepare Airport Monitoring Reports for public release on an annual basis. In 2008, the Government directed the ACCC to formally monitor prices, costs and profits relating to car parking at Australia's five major airports.

In the 2009 National Aviation Policy White Paper, the Government announced that it would continue with the existing regime including the price and quality of service monitoring conducted by the ACCC with a review to be conducted by the Productivity Commission in 2012. The Government reserved the right to conduct the review earlier. In addition, the Government announced that a second tier self-administered price and quality of service monitoring regime would be introduced for Canberra, Darwin, Gold Coast and Hobart airports. Other airports will also be encouraged to adopt web-based reporting of customer satisfaction measures and outcomes. The airports in the second tier scheme are expected to commence reporting in this financial year.

The purpose of this inquiry is to examine the effectiveness and efficiency of the current economic regulation and quality of service monitoring regime for airports and whether new arrangements are needed. It is also to make recommendations in relation to the requirement for future regulation and monitoring of services and the scope and appropriate mechanism for the provision of greater transparency and accountability in airport infrastructure provision and services.

Scope of Inquiry

1. The Commission is to report on the appropriate economic regulation of airport services, including the effectiveness of the price and quality of service monitoring, in achieving the following objectives:
   - promoting the economically efficient and timely operation, use of and investment in airports and related industries
   - minimising unnecessary compliance costs
   - facilitating commercially negotiated outcomes in airport operations.
2. The inquiry is to focus on the provision of passenger transport services at and surrounding main passenger airports operating in Australia's major cities.
3. The Commission is to examine:
   - aeronautical services and facilities provided by airport operators
   - passenger-related aeronautical services and facilities provided by major airline tenants
   - the provision and quality of land transport facilities providing access to the airports.
4. In undertaking its assessment, the Commission is to examine the economy wide costs and benefits and distributional impacts of the regime. As far as practical, the Commission should seek to quantify and provide evidence for these costs and benefits. It should also seek to provide international comparisons of the performance of the airport operators.
5. The Commission should consider:
   - whether the existing regime is effective in appropriately deterring potential abuses of market power by airport operators
   - whether the existing range of remedies is effective in dealing with potential and suspected abuses of market power
   - the effectiveness of the monitoring regime conducted by the ACCC, including the methodology used and the adequacy of the information collected
   - whether the current regime impacts on the ability of airports to price, operate and invest in airport infrastructure in an efficient and timely manner
   - whether the coverage of the current regime is appropriate
   - any improvements or enhancements that could be made to the existing regime
   - the appropriate future role of the regime

- the adequacy and arrangements for the control of planning, operation and service quality monitoring of land transport access to major airports
- whether existing arrangements for the planning and operation of land transport linkages to the airports are effective.

6. To the extent applicable, the Commission is to have regard to the ACCC's Airport Monitoring Reports. This includes the matters raised by the ACCC in these reports such as:
   - the quality of service at major Australian airports
   - land side access to airport terminals such as car parking and its alternatives, and the cost and quality of car parking facilities
   - the extent to which monitored airports can act strategically to raise costs of on-airport car parking by controlling the conditions of landside access to terminal facilities.
7. The regulatory price cap and price notification regime for regional air services into and out of Sydney Airport (Declaration 92 under section 95X and Direction 32 under section 95ZH of the *Trade Practices Act 1974*) is not within the scope of this inquiry.
8. The second tier self-administered price and quality of service monitoring regime is not within the scope of this inquiry.

Process

9. The Commission is to undertake an appropriate public consultation process including holding hearings, inviting public submissions and releasing a draft report to the public.
10. The Government will consider the Commission's recommendations, and the Government's response will be announced as soon as possible after the receipt of the Commission's report. The Government will release the Commission's report.

Bill Shorten
Assistant Treasurer
[Received 15 December 2010]

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Abbreviations and explanations

Abbreviations

AAA	Australian Airports Association
AAL	Adelaide Airport Limited
AAP	Andrew's Airport Parking
ACCC	Australian Competition and Consumer Commission
ACI	Airports Council International
Airports Act	*Airports Act 1996* (Cwlth)
ANAO	Australian National Audit Office
APAM	Australia Pacific Airports (Melbourne)
ARFF	aviation rescue and fire fighting
ASA	Airservices Australia
ASQ	Airport Service Quality (survey program)
ASX	Australian Stock Exchange
ATIA	Australian Taxi Industry Association
ATRS	Air Transport Research Society
BAC	Brisbane Airport Corporation
BAF	Building Australia Fund
BARA	Board of Airline Representatives of Australia
BIC	Bus Industry Confederation
BITRE	Bureau of Infrastructure, Transport and Regional Economics
CAA	Civil Aviation Authority (UK)
CASA	Civil Aviation Safety Authority
CBD	central business district
CCA	*Competition and Consumer Act 2010* (Cwlth)

CEO	Chief Executive Officer
COAG	Council of Australian Governments
CPI	Consumer Price Index
CTFR	counter-terrorism first response
DEA	data envelopment analysis
DIT	Department of Infrastructure and Transport
DRET	Department of Resources, Energy and Tourism
DTL	domestic terminal lease
EBITA	earnings before interest, tax and amortisation
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cwlth)
ESC	Essential Services Commission (Victoria)
EU	European Union
FAC	Federal Airports Corporation
FIDS	flight information display screens
GA	general aviation
GDP	Gross Domestic Product
GFC	global financial crisis
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IFM	Industry Funds Management
IPA	Infrastructure Partnerships Australia
JUHI	joint user hydrant installation
LCC	low-cost carrier
MAp	Macquarie Airport
MLCP	multi level car park
MTOW	maximum take-off weight
NCC	National Competition Council
NNI	necessary new investment
OECD	Organisation for Economic Cooperation and Development

pax	passengers
PC	Productivity Commission
PFC	Passenger Facilitation Charge
PFP	partial factor productivity
PPP	public-private partnership
QAL	Queensland Airports Ltd
QIC	Queensland Investment Corporation
RAAA	Regional Aviation Association of Australia
Rex	Regional Express Holdings Ltd
ROI	return on investment
RPT	regular public transport
SACL	Sydney Airport Corporation Limited
SFA	stochastic frontier analysis
SLA	service level agreement
TFP	total factor productivity
TTF	Tourism and Transport Forum
VFR	visiting friends and relatives
WAC	Westralia Airports Corporation
WACC	weighted average cost of capital

Explanations

Billion	The convention used for a billion is a thousand million (10^9).
Findings	*Findings in the body of the report are paragraphs highlighted using italics, as this is.*
Recommendations	***Recommendations in the body of the report are highlighted using bold italics with an outside border, as this is.***
Requests for further information	*Information requests are paragraphs highlighted using italics, as this is.*

Glossary

Access undertaking	The terms and conditions under which an airport owner will provide access, as agreed with the ACCC under Part IIIA of the *Competition and Consumer Act 2010* (Cwlth).
Aeronautical services	Services provided by infrastructure that facilitates aircraft movements (eg runways), and passenger processing facilities as defined under the Airports Regulations 1997 (Cwlth).
Building block model	A methodology, often used by regulators, to calculate a price for the services provided by a large infrastructure facility.
Common-user terminals	Terminals and associated infrastructure managed by the airport operator and used (potentially) by a number of different airlines. All international terminals at core-regulated airports are common-user terminals as are some domestic terminals.
Core-regulated airports	Leased airports designated as such under the *Airports Act 1996* (Cwlth). They comprise Adelaide, Alice Springs, Brisbane, Canberra, Darwin, Gold Coast, Hobart, Launceston, Melbourne, Perth, Sydney and Townsville airports.
Domestic terminal lease	An arrangement whereby an airline leases the entire terminal from an airport and provides terminal services such as check-in and baggage facilities directly to passengers.
Dual till	An arrangement for setting airport charges whereby only the costs and revenues of providing aeronautical services are included in the assessment of allowable aeronautical prices. In other words, aeronautical services are priced on a 'stand-alone' basis, without regard to any net revenues from non-aeronautical services.

Full-service carrier	An airline that provides ancillary services (such as the use of an aerobridge and in-flight catering) as part of the airfare paid.
General aviation	Aircraft operations that are not regular public transport, such as private charter and aircraft training flights, and Royal Flying Doctor Services.
Light-handed monitoring regime	A regulatory regime whereby the ACCC is empowered to monitor price and quality of aeronautical and car parking services at the five monitored airports.
Line in the sand approach	A regulatory approach to valuing airport assets under which the value of an airport's aeronautical asset base for monitoring purposes is the value of tangible non-current aeronautical assets reported to the ACCC as at 30 June 2005, plus new investments, less depreciation and disposals.
Load factor	The number of passengers carried expressed as a percentage of the number of seats available.
Locational rents	Payments to land above opportunity cost that derive from its locational advantages for a particular use.
Low-cost carrier	An airline that provides a more rudimentary low-cost service than a full-service carrier.
Monitored airports	The five Australian airports (Adelaide, Brisbane, Melbourne, Perth and Sydney) currently subject to the light-handed monitoring regime.
Necessary new investment	Under the previous price cap arrangements, a regulatory system whereby core-regulated airport operators were permitted to recover the costs of necessary new infrastructure expenditure through price increases for aeronautical services.
Non-aeronautical services	Services provided by or at airports that are not aeronautical services (eg car parking, hotels, retail shops and food outlets).

Objective measures	Observable, quantitative measures introduced as part of the quality of service monitoring such as 'the number of passengers per baggage trolley (during peak hour)' as an indicator for the overall quality of service for 'baggage trolleys'.
Passenger movement	A passenger arriving or departing on a scheduled regular public transport service.
Phase 1 airports	Airports leased to private operators in 1997 — Brisbane, Melbourne and Perth.
Phase 2 airports	Airports leased to private operators in 1998 — Adelaide, Alice Springs, Canberra, Coolangatta, Darwin, Hobart, Launceston, Townsville, Mount Isa, Tennant Creek, Archerfield, Jandakot, Moorabbin and Parafield.
Public-private partnership	An arrangement whereby the government and a private business operator jointly fund an investment project, where the day-to-day management is the responsibility of the private business.
Regional ring fence	A feature of the Slot Management Scheme for Sydney airport which effectively creates a separate pool for regional slots.
Regular public transport	Scheduled aircraft operations provided to the general public on a commercial basis.
Revenue passengers	Passengers paying any fare on a scheduled regular public transport service, including passengers travelling on tickets acquired through frequent flyer programs.
Sensitive development	A proposed development at an airport that increases the number or size of houses, care facilities or educational institutions. A sensitive development is prohibited, unless granted Ministerial exception under section 89A of the *Airports Act 1996* (Cwlth).
Single till	An arrangement for setting airport charges whereby all airport revenues and costs are taken into account in setting aeronautical prices. Allowable aeronautical prices are set on a 'residual basis', after subtracting from total airport costs the revenue derived from non-aeronautical activities.

Slot	A permission for an aircraft movement.
Sticker shock	Customer surprise at the cost of a product or service.
Tripartite deed	A document that clarifies investors' rights in the event of a an airport lease termination.
Weight-based charges	Airport charges for the use of airport services based on the weight of the aircraft (usually maximum take-off weight).
Yield management	Discriminatory pricing by airlines designed to maximise revenue from each flight.

OVERVIEW

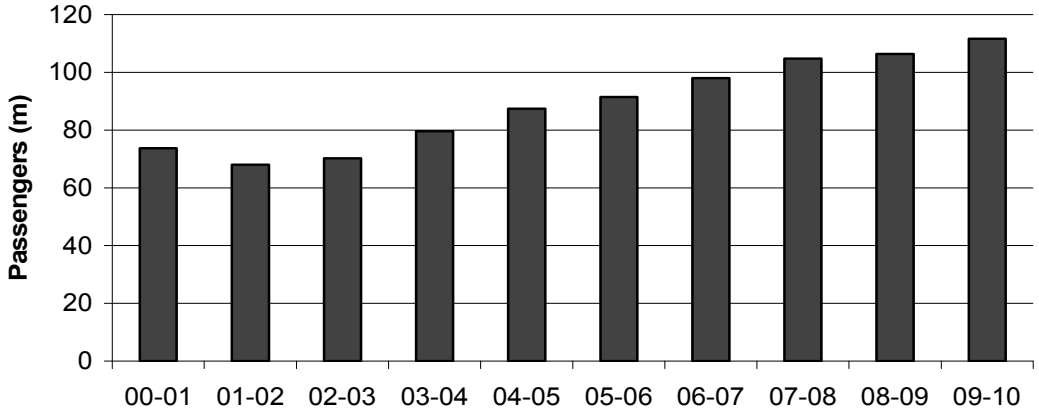
Key points

- Under light-handed regulation, airports have continued to invest to meet the growth in air travel, without the bottlenecks that have beset other infrastructure areas:
  - there has been a marked increase in aeronautical investment since the removal of price-caps, with an additional $9 billion projected over the next decade
  - aeronautical charges do not indicate misuse of market power and quality outcomes are generally 'satisfactory', although airlines have, on occasion rated two airports as 'poor'
  - Australian airports' aeronautical charges, revenues, costs, profits and investment look reasonable compared with outcomes at overseas airports.
- Commercial agreements with airlines are becoming more sophisticated and now can often include: service level obligations, price paths subject to variation in agreed circumstances; consultation on capital investment; and dispute resolution.
- Airlines, however, consider that airports adopt a 'take it or leave it' stance, transfer risk to airlines, fail to provide information and manipulate investment parameters.
  - But, airports and their customers retain a strong desire to continue with commercial negotiation — no party sought a return to regulatory price setting.
- Successive Australian Governments have not acted on the regulator's concerns that some airports might potentially be misusing their market power.
  - Drawing on its monitoring role, the regulator should be able to direct an airport to show cause why its conduct should not be subject to a 'forensic' price inquiry.
  - Where the regulator is dissatisfied with the response, the Government should invoke such a price inquiry that is guided by the Aeronautical Pricing Principles.
- Further action, such as deemed declaration and mandatory codes of conduct, would fundamentally alter the nature of commercial negotiation and are not warranted.
  - There is scope to improve the conduct of commercial negotiations through amending the 'Pricing Principles' or developing a new voluntary code of conduct.
- Access charges paid by competitors to on-airport car parking are not so high as to impede competition, but conditions of access are less transparent. Concerns that airports 'inefficiently delayed' investment in car parks are difficult to substantiate.
- Access to airport precincts in most major cities is congested, owing to inadequate arterial roads and insufficient mass transit services — sometimes because government contracts place anti-competitive restrictions on rival services.
  - Developments on airport land (a Commonwealth responsibility) can also add to congestion on connecting transport links (state and territory responsibilities).
  - A raft of reforms, including new consultative forums, to better integrate airport transport planning across jurisdictions has been introduced. A review of the efficacy of these changes should be undertaken in 2015.

Overview

Australia relies on airports to keep its citizens and regions connected to each other and the world. In 2009-10 over 100 million passengers transited through the major airports (figure 1). Annual traffic is projected to more than double in two decades, with Brisbane, Melbourne and Sydney each expected to accommodate at least 50 million passengers per year.

Figure 1 **Passenger growth at Australia's 10 largest airports**



In 1997, the Australian Government began privatising its airports, concluding with the sale of Sydney airport in 2002. Recognising that some airports had significant market power, the privatised capital city airports were subject to price cap regulation and monitoring of their service quality.

In 2002, a Commission inquiry found that the informational challenges confronting the price control regime risked regulatory failure by distorting production decisions and 'chilling' airport investment. In line with the recommendations of that inquiry, price controls were replaced by light-handed monitoring of aeronautical services at Adelaide, Brisbane, Canberra, Darwin, Melbourne and Perth airports and introduced at the newly privatised Sydney airport (box 1).

A further Commission inquiry, in 2006, confirmed the expectations that light-handed regulation would deliver important benefits. It recommended that the regime continue with some changes, including the excision of Canberra and Darwin airports from coverage.

Box 1 **Price monitoring arrangements**

Provisions in Part VIIA of the Competition and Consumer Act (CCA) and the Airports Act provide for the ACCC to monitor the prices, costs and financial returns relating to the supply of aeronautical and related services at designated airports. Relevant services include: aircraft movements; passenger processing, including security; landside vehicle access; and car parking. Retail, rental and business park activities are not monitored under the 'dual till' approach. The ACCC also reports on service quality, drawing on information from airports, airlines, passengers and border agencies.

The information enables the ACCC to ascertain if airports may have misused their market power. If monitoring indicates that further investigation is required, the Government can direct the ACCC (or another body) to undertake a public inquiry, potentially resulting in the reintroduction of stricter price controls at particular airports.

Separately, at any time, an airport user can apply to another regulatory authority — the National Competition Council (NCC) — for relevant airport services to be declared under Part IIIA of the CCA. If the criteria are satisfied, the Minister may declare access, providing a right for the parties to negotiate terms and conditions, backed by resort to arbitration by the ACCC.

For the 2006 review, the regulator — the Australian Competition and Consumer Commission (ACCC) — supported continuation of monitoring, underpinned by the Part IIIA national access regime. In March 2010, the ACCC, on releasing its annual monitoring report, suggested that Sydney Airport had increased profits by running down the quality of its services. It also suggested that some airports might have influenced unduly the cost or convenience of alternatives to their on-airport parking businesses, thereby contributing to high margins. In light of this, the Government brought forward the Productivity Commission's scheduled 2012 review of airports regulation. (A subsequent ACCC monitoring report for 2009-10 reiterated the regulator's previous concerns.)

There has also been emerging unease about the state of surface transport access to airports, especially the interface between airports' planning and surrounding state and territory planning regimes. Indeed, while Australian airports may be positioned to meet the increases in passenger growth, passengers could struggle to get to and from airports because of traffic congestion in and around airports.

A changing environment

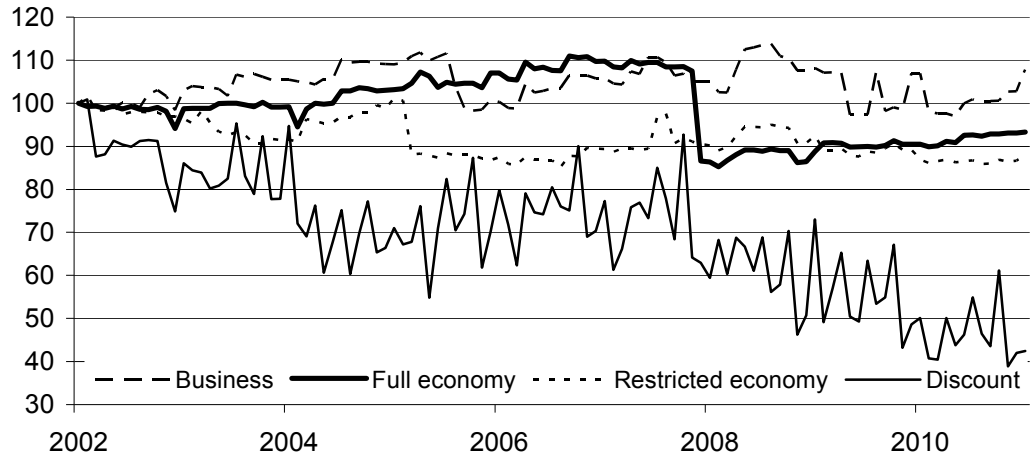
Airports and airlines face risks from global events, such as terrorist attacks, the outbreak of severe acute respiratory syndrome, the global financial crisis and volcanic eruptions. Local influences, including the collapse of Ansett airlines and

cyclones and floods in leisure destinations such as parts of Queensland also reduce demand for air travel and airport services. However, the impact of such events on airports can be mitigated by the actions of airlines. For instance, as the global financial crisis dampened demand for air travel, the airlines responded by heavily discounting fares to maintain demand that, in turn, shielded airports from large declines in passenger flows through their facilities.

But other developments have posed challenges for airports. Airlines increasingly are moving from national, to regional and global, catchments. Asian and Middle Eastern airlines, which have the capability to fly directly to any airport, are expanding rapidly. Global network airlines and airline alliances and partnerships have increased options for aircraft deployment — Sydney and Melbourne airports are now subject to competitive 'beauty contests' by foreign airlines seeking to open new routes to Australia.

The growth of leisure passengers has delivered more travel options, with low cost carriers (LCCs) able to operate between any two airports within a broad catchment. Discount air fares have fallen by more than half (in real terms) since March 2002 (figure 2). LCC's have often bypassed, or limited services to, major city airports. Gold Coast and Avalon airports have provided competitive pressures on Brisbane and Melbourne airports respectively. Remote airports, such as Cairns and Darwin, increasingly compete to attract passenger services, especially from abroad. Similarly, Hobart and Launceston airports compete for the 'fly-drive' Tasmanian tourism experience.

Figure 2 **Australian airfares index**



Claim and counter-claim

The Commission received contradictory views about the performance of light-handed regulation (box 2).

Box 2 Claim and counter-claim

The airports contend that the arrangements are working well,

> … starting from a zero base at the time of privatisation, there is now a network of mature, flexible and mutually beneficial commercial arrangements that have been negotiated between Australia's major airports and their airline customers. (Australian Airports Association)

whereas the airlines argue that outcomes are unreasonable.

> … the current regulatory framework does not strike the appropriate balance between providing incentives for airports to invest in airport infrastructure and ensuring that mechanisms are in place to prevent airports' unreasonable behaviour and excessive pricing of facilities and services. (Qantas, Virgin, Regional Aviation Association of Australia, Board of Airline Representatives Australia)

Airport investors consider the arrangements facilitate necessary investment,

> The industry has grown and performed strongly under the current regime as is demonstrated by the strong investment over the 2005–2010 period, with approximately $3 billion invested in infrastructure (e.g. new passenger terminals, runway extensions) at the airports in which Hastings' funds are invested. (Hastings Funds Management)

as does the Government's Department of Infrastructure and Transport.

> … Australia's major airports have continued to invest in, improve and operate aeronautical infrastructure to meet steady growth in the aviation market. They have been able to finalise negotiations for commercial agreements with the airlines on airport charges notwithstanding the inevitable tensions from time to time. The airports have delivered relatively efficient pricing, high levels of productivity and operational efficiency in international terms …

But, the two regulatory authorities in this field have contradictory views.

- The ACCC proposes that aeronautical services be deemed declared to enable airports and airlines: 'to carry on business as usual, but with the threat of ACCC arbitration in the case of a dispute'.
- The National Competition Council (NCC) counters that the ACCC's proposal increases the risk of regulatory error, is problematic for implementation and 'to so impose regulation by legislative fiat reduces confidence in the integrity of the National Access Regime'.

Airports claim that the light-handed framework is working well. Airlines say that airports adopt unreasonable 'take it or leave it' tactics — Sydney airport is often nominated as especially culpable. Other users, such as car rental, land transport and logistics companies object to the airports' approach to negotiation. There were few

submissions from consumers, although the cost of airport car parking appears to be an issue for many in the community. In terms of government perspectives, the relevant department considers light-handed monitoring a success, the ACCC contends it has failed, whereas the NCC says that the ACCC's deemed declaration approach is wrong.

Framework for analysis

Enduring market power stemming from monopoly supply can lead to market failure. In advanced economies, market failures are normally addressed in an ex post conduct context through general competition laws. In exceptional circumstances, some industries — typically integrated network infrastructures, such as electricity transmission, fixed telecommunications and gas pipelines — are subject to industry-specific regulation.

Australian airports are complex, stand alone, multi-product private entities, which investors generally regard as a class of assets with greater exposure to demand shocks than energy network infrastructure. Accordingly, a case for specific ex ante regulation of airports to address potential deadweight losses would need to show:

- an airport is using its market power in a way that creates distortions that detract materially from community welfare — that is, the market failure is policy-relevant
- a regulatory response beyond general competition law is the most appropriate means to address the problem
- it is feasible to devise a regulatory response that can address the problem without imposing a net cost.

All of these conditions would need to be met because the trade-off between imperfect competition and imperfect regulation is heightened by the asymmetric nature of regulatory risk. That is:

- although 'permissive' regulation can lead to income transfers from airlines and other users to airports
- too restrictive regulation can distort production, impede investment and deter innovation.

Indeed, the Commission's 2002 review of the then price cap regime found that, at best, it encouraged strategic behaviour by all parties, increased compliance costs and discouraged commercial negotiation, and at worst, 'discouraged efficient

investment by sending poor price signals both to airport operators and users about the costs of providing aeronautical services'.

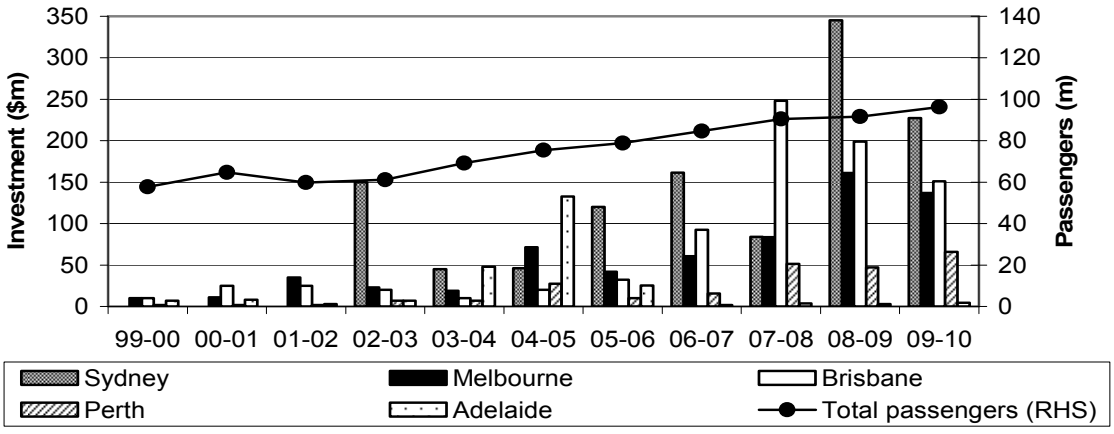
Where an airport has the ability and incentive to misuse market power and chooses to do so, the primary concern is that airlines will pass on inflated aeronautical charges, dampening demand for air travel and/or increasing the costs faced by passengers. If significant, such outcomes would indeed be adverse ones for the Australian community. In practice, however, aeronautical charges typically have only a minor effect on airfares. This is so even after taking account of their greater impact on the growing market serviced by 'no frills' airfares (box 3).

Overall, disputes principally revolve around distributional tussles between airports and airlines. And while distributional issues are 'front and centre' for them, the Commission's focus is on outcomes for the Australian community. To this end, it has assessed whether outcomes, and the processes to achieve them, are consistent with, or systematically diverge from, efficiency.

Investment outcomes continue to be strong

Airports have responded to the growth in air travel over the last decade without the bottleneck problems that have bedevilled other infrastructure sectors — there has been an appreciable increase in aeronautical investment since the removal of price caps in 2002, with new facilities and a projected $9 billion in the pipeline. While airlines raised concerns over the consultation, transparency and timing of airport investment, there is little evidence to suggest systemic failure in the delivery of investment. Rather, the evidence points to the contrary (figure 3).

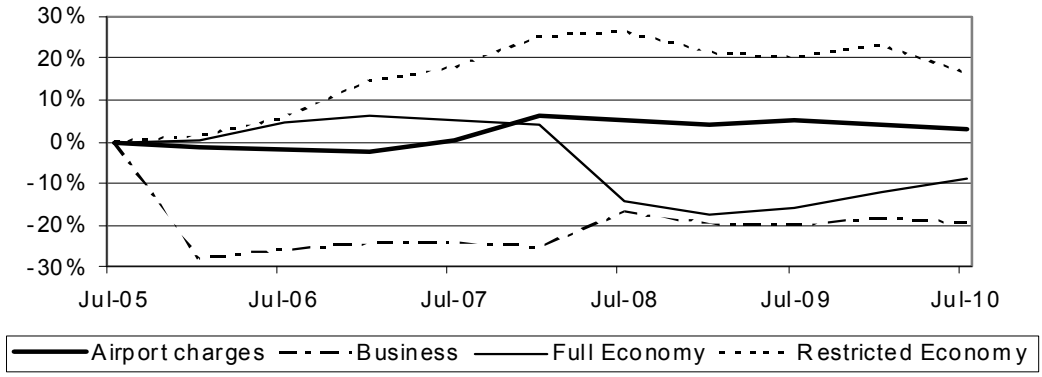
Figure 3 **Additions to aeronautical tangible non-current assets**



Box 3 **Airport charges as a proportion of airfares**

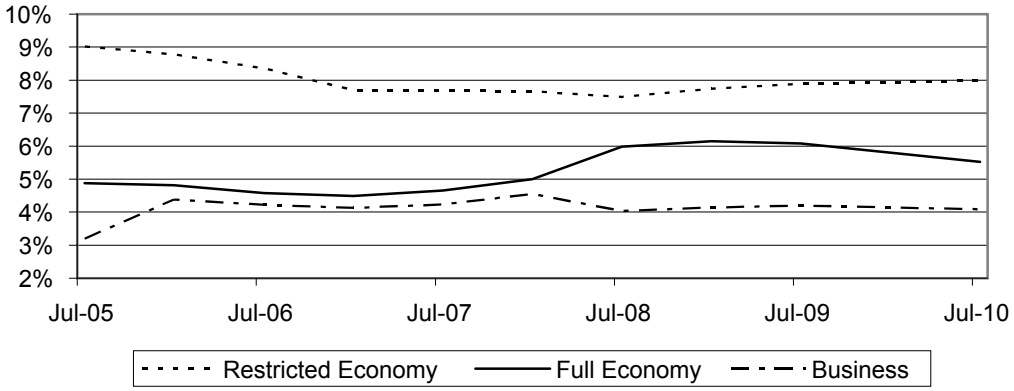
Figure A illustrates changes in Melbourne-Sydney return airfares (lowest fares, full service carriers) and airport charges over 2005−2010. The cumulative Melbourne and Sydney airports charges increased by 3 per cent in real terms over that period.

Figure A ***Movements in airport charges and lowest airfares***



While figure A shows that airfares were subject to significant price movements over 2005−2010, figure B shows that airport charges as a proportion of airfares have remained low and relatively stable over that period.

Figure B ***Airport charges as a proportion of the lowest available airfare***

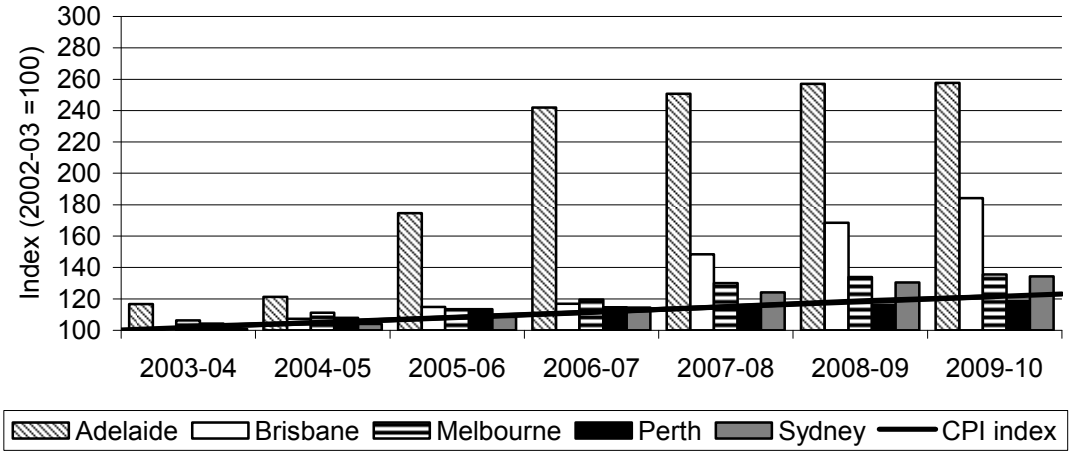


For LCCs, (apparent) airport charges will represent a larger proportion of airfares. This is subject to several caveats: LCCs tend not to use aerobridges, so the airport charges they actually pay are lower; the lowest LCC fares are available to few passengers and exclude ancillary charges (eg baggage fees). And, airports have less scope to raise charges to LCCs owing to their more price sensitive patronage — LCCs can and do 'shop around' for airports. Finally, in 2010, the lowest Melbourne-Sydney discount return airfares (not shown in figure A) were 60 per cent lower than in 2005.

Pricing outcomes appear to have been within reasonable expectations

Examination of airports' pricing and financial information data appears not to provide evidence of misuse of market power, particularly when revenues are considered in the context of investment (figure 4). In terms of aeronautical revenue per passenger — a proxy for prices — some observations can be drawn:

Figure 4 **Change in aeronautical revenue per passenger**



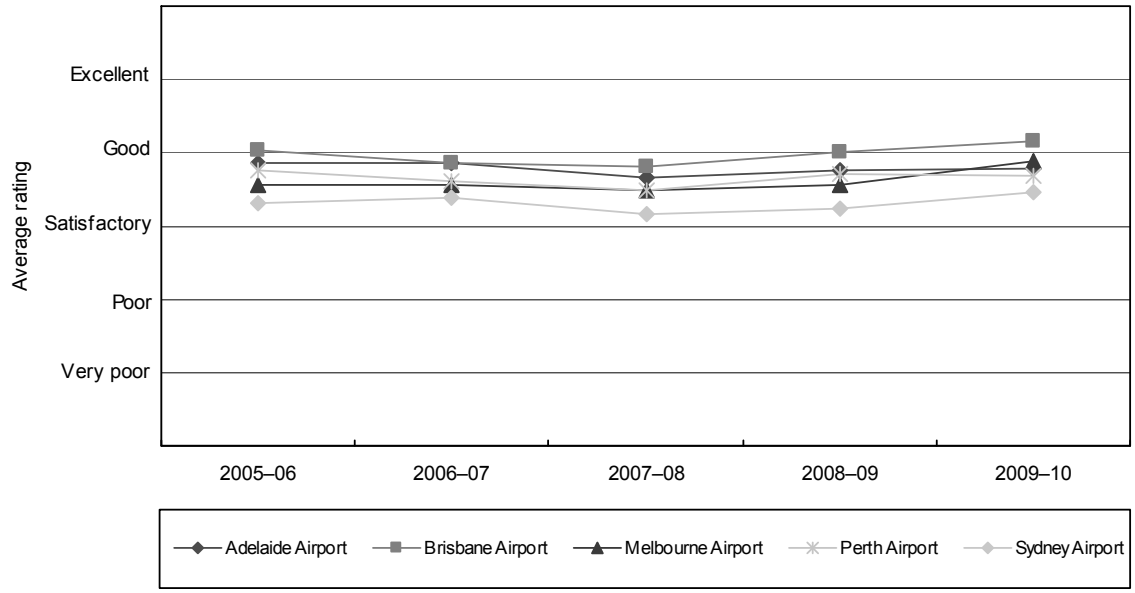
- Adelaide airport's aeronautical revenue per passenger in 2009-10 was over two and a half times its 2002-03 (index base year) level. This reflects the need to recover its substantial investment in a new terminal, combined with its relatively low passenger base (roughly one fifth of Sydney's).
- The next most notable increases are for Brisbane airport for 2007-08 to 2009-10. These rises coincide with substantial investment in its international terminal.
- Revenues at Sydney and Melbourne airports were roughly 35 per cent higher in 2009-10 than in 2002-03. On an average annual basis, and in real terms, these increases are not substantial and reflect new investment programs by both airports.
- At 18.5 per cent over the period, the change in aeronautical revenue per passenger at Perth airport is below CPI. However, it has planned investment of over $500 million in aeronautical infrastructure from 2011 to 2014, which is likely to be reflected in subsequent revenue per passenger estimates.

Quality outcomes are 'satisfactory'

Quality of service information is drawn from several sources including airport operators, airlines, passengers, and border agencies. The ACCC publishes this information and aggregates these sources to give an overall rating (figure 5). The

monitoring regime only ranks the five monitored Australian airports, so there is no sense of how they compare with any international counterparts.

Figure 5 **Overall ratings of airport quality of service**



The overall ratings for all airports over the last five years are 'satisfactory' to 'good' and have trended upwards in the last two years The disaggregated results show that passengers generally report higher ratings than airlines. For example, the airlines have rated Sydney (three times) and Perth (twice) as 'poor'.

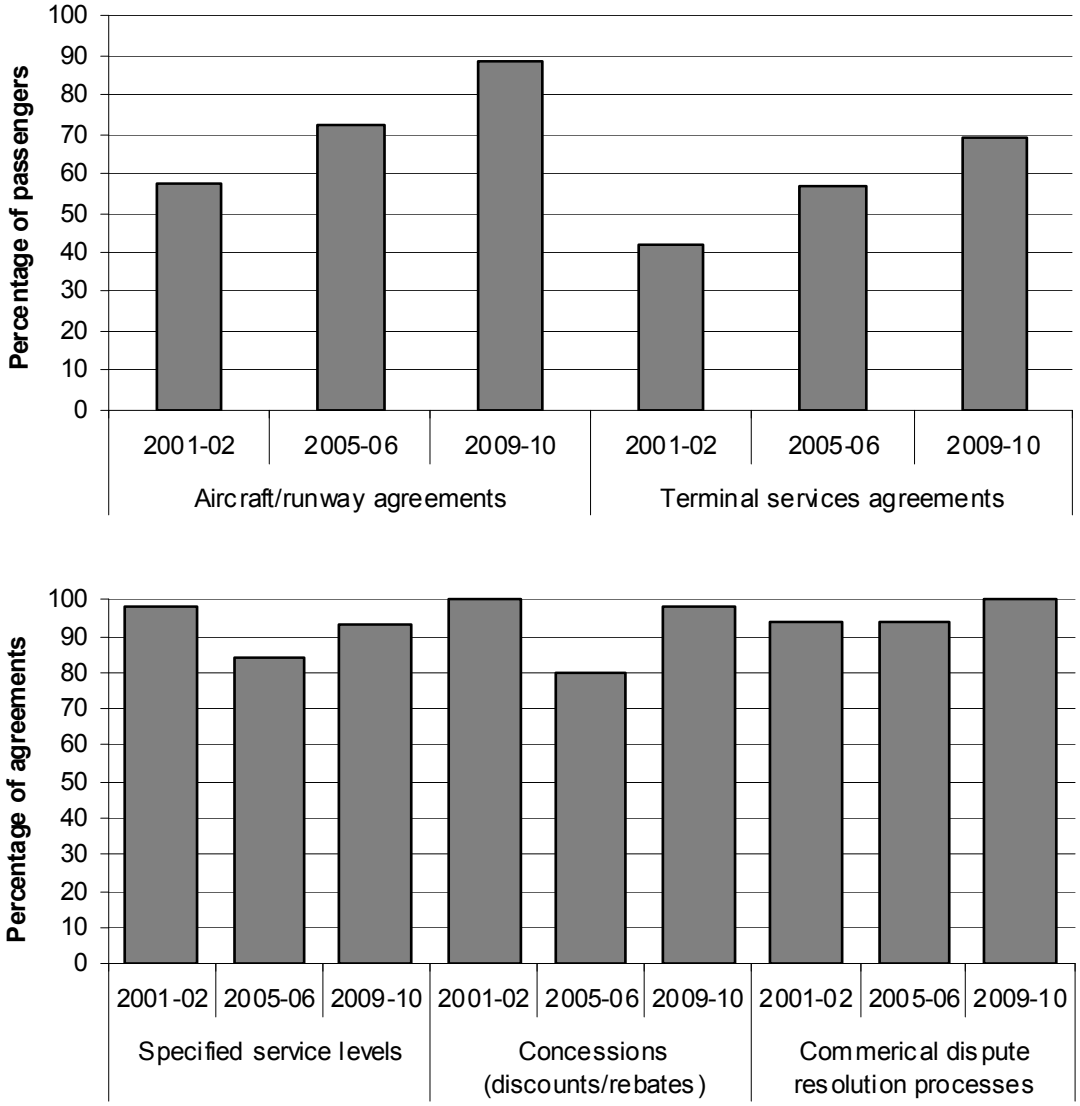
Airlines are well-informed users of airport services, but they may have incentives to 'game' the regulatory system by giving low scores for airport quality. It appears that the reservations raised by the ACCC in its most recent monitoring reports place greater emphasis on the airline surveys. Even so, the overall ratings do not indicate persistent trends that would justify concerns about the misuse of market power.

Commercial negotiation continues to develop

Commercial negotiation between airports and airlines is maturing slowly, albeit differentially across airports. Because genuine commercial negotiation commenced only after 2002, this process has tended to involve discrete stages, each with a learning curve, from relatively rudimentary 'conditions of use' to increasingly sophisticated agreements. Today many agreements include features (for instance, service level standards and dispute resolution) that were, not very long ago, quite novel.

Most passengers fly on airlines that have commercial agreements with airports for aeronautical services and also for terminal services. Over 90 per cent of these agreements specified service levels for at least one service, 98 per cent offered discounts, rebates or enticements, and all specified commercial dispute resolution processes (figure 6). Airlines, however, state that commercial negotiation is unnecessarily protracted and that some airports' adopted a 'take it or leave it' attitude.

Figure 6 **Coverage and content of commercial agreements**



Airports are passenger throughput-based businesses with long-term horizons whereas airlines typically operate with shorter horizons. Commercial tensions are to be expected and airlines' dissatisfaction is not indicative of systemic failure. Nevertheless, there appears to be some way to go before commercial negotiation achieves the level of maturity envisaged with the lifting of heavy-handed price regulation nearly a decade ago.

Australian airports perform quite well relative to overseas airports

While there are difficulties in benchmarking airports, especially across the small sample of markedly heterogeneous Australian airports, international comparisons using a sufficiently large sample can locate Australian airports within a large international field.

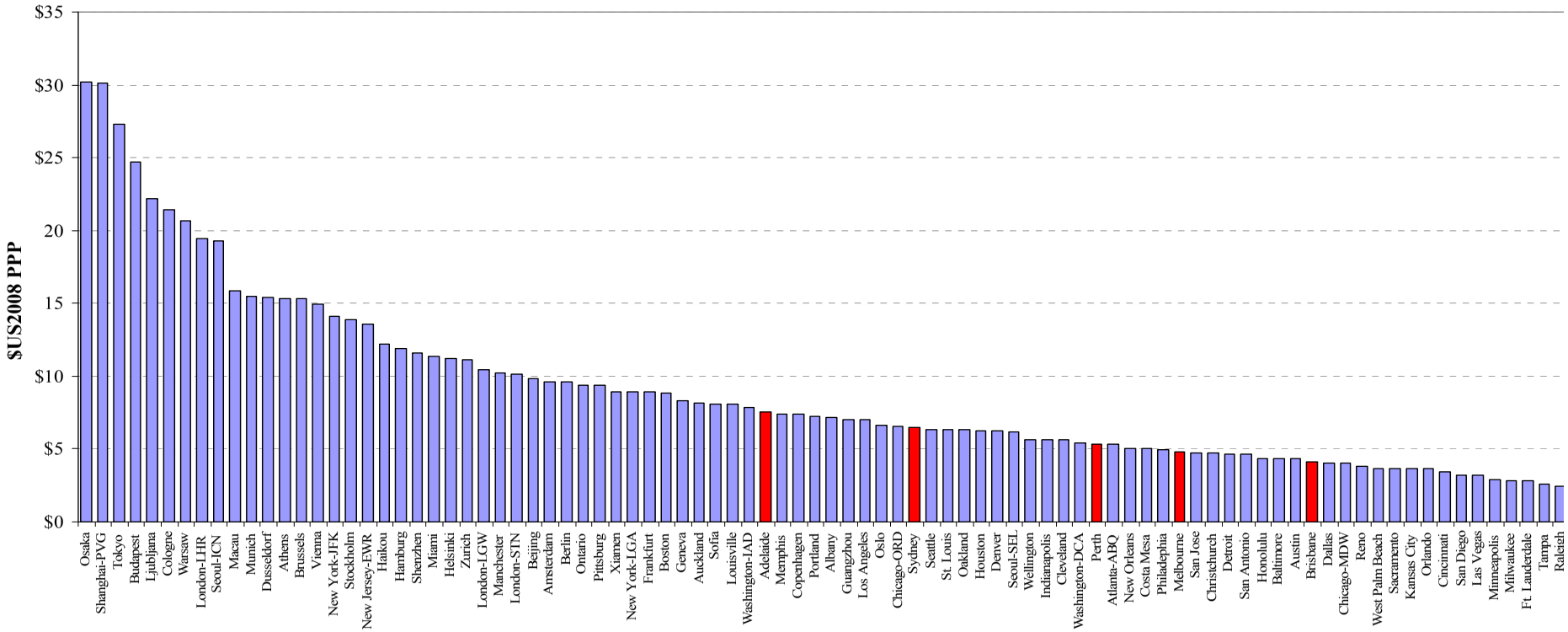
Relative to their overseas counterparts, Australian airports are well within the range across several metrics. For instance, Australian airports display:

- relatively low aeronautical and non-aeronautical revenues per passenger
- relatively low total costs, operating costs and staff costs
- relatively high profits
- average to above average capital expenditure per passenger and return on capital employed.

Taken together, the evidence suggests that Australian airports perform reasonably well and, despite earning below average revenues per passenger, are able to benefit from cost reductions. Significantly, the international comparisons include overseas government-owned airports that lack a commercial focus and which may subsidise aeronautical charges for national 'tourism' reasons (figure 7).

Figure 7 **Aeronautical revenue per passenger, 2008**

$US 000s, purchasing power parity



The light-handed regime can be improved

In examining the merits of the regulatory framework, it is instructive to recap the current requirements. Australia's Competition and Consumer Act:

- enables the ACCC to monitor the prices, costs and profits related to the supply of aircraft- and passenger-related services and facilities and car parking services
- enables the ACCC to recommend to the relevant (competition) Minister that there be a price investigation of an airport — the Minister can require the ACCC or other body to conduct an inquiry without such a recommendation
- prohibits the misuse of market power where a corporation prevents competitors entering into the market — provisions that may be relevant for upstream or downstream services such as car parking
- confers on the ACCC information-gathering powers that enable it to require a person to provide information if it has reason to believe that the Act has been, or may be, contravened
- enables an airport user to initiate an application to the NCC that an airport be declared (box 1). Alternatively, the Minister can commence an application to the NCC to make a recommendation that a service be declared.

So many triggers, few shots fired

The ACCC has not, however, recommended a Part VIIA inquiry and the relevant Minister has not instructed the ACCC or any other body to undertake one. There have been few Part IIIA access cases. Some freight-related services were declared at Melbourne airport (1997) and Sydney airport (2000). Following an application from Virgin Blue, domestic airside services at Sydney airport were declared in 2005 for five years. No airport user sought to have that declaration extended. Acknowledging that the Part IIIA route can be costly and time consuming, its lack of use is nonetheless noteworthy.

Fundamental to the effectiveness of the light-handed approach is the credible threat of sanction for airports that abuse their market power. Given the avenues available now, such a threat should already exist. In practice, successive Australian Governments have opted not to respond with direct instruments, such as a Part VIIA price inquiry. Instead, they have referred such matters to the Productivity Commission for system-wide review rather than specific evaluations into individual airports' conduct.

In its 2006 review, the Commission referred to the need to make the system more 'active' — that is, to remove 'passive' inaction with 'determined' inaction or action. It made recommendations to this effect that were accepted, but ultimately not implemented, owing to the impact of the global financial crisis and some ensuing design flaws in the Government's proposed response.

The Commission believes that there remains a need to make the system more 'active'. Hence it proposes that:

- at the time of publication of its annual monitoring reports, the ACCC should be able to issue a direction that a particular airport (or airports) show cause why its (their) conduct should not be scrutinised under a Part VIIA price inquiry.
- if the ACCC were dissatisfied with an airport's response to a show cause direction, it would recommend that the relevant Minister initiate a Part VIIA inquiry to be conducted by the ACCC or other suitably qualified body. The review would be guided by the Pricing Principles.

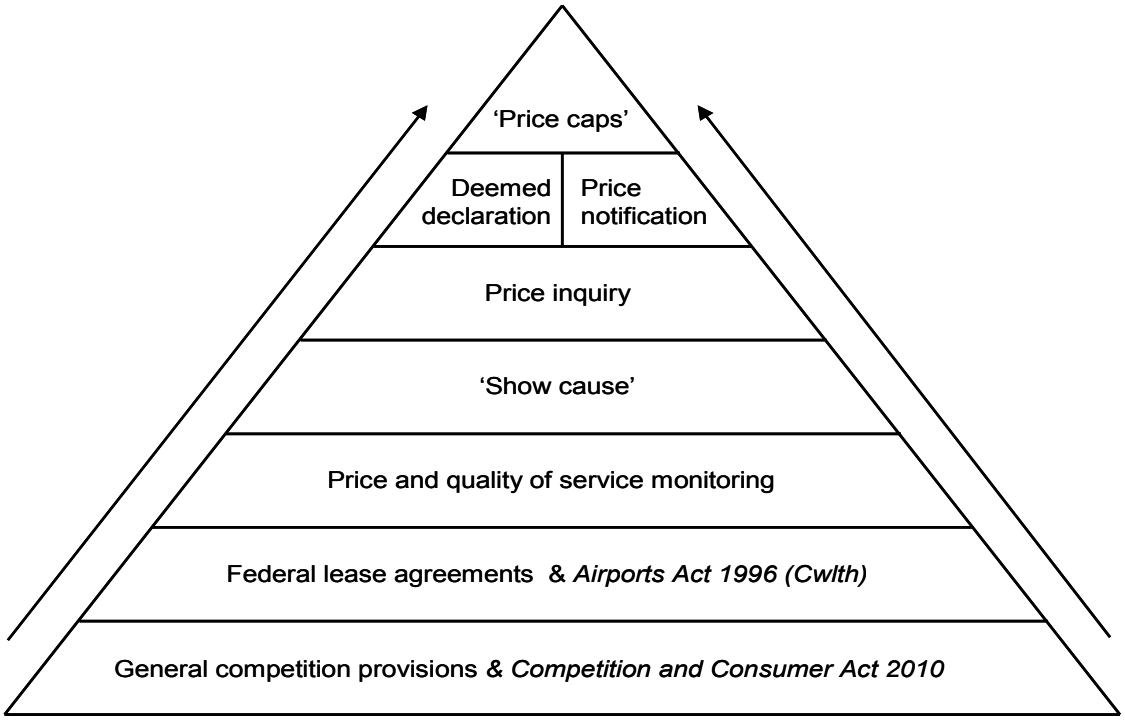
The first stage (show cause direction) would assess (suspicion of) misuse of market power, based on the monitoring reports. The second stage (price inquiry) would be far more broad ranging and examine airport conduct, including taking evidence from the airport operator, its customers and other relevant sources.

In terms of operational design, it is imperative that a show cause direction not be issued solely on the basis of particular outcomes in any one year. Rather, the ACCC should, after drawing on the latest and prior monitoring reports, come to a view that there is prima facie evidence that an airport has, over time, demonstrated a consistent pattern of achieving aeronautical returns in excess of a reasonably expected band of outcomes, having regard to price paths, the quantum and timing of investment and how that bears on quality outcomes, and market conditions. In keeping with an evidence-based approach with the ACCC assessing trends, a complaints-based system is not appropriate.

This process would place responsibility on the ACCC to be explicit in its judgments and prepared to stand by and act on those judgments. While the capacity to initiate a price inquiry has been available since 2002, its activation potentially looms large under this 'determined action' / 'inaction' model. The strength of the implied threat comes from formalising the 'trigger' in tandem with the potential outcomes from this process (figure 8).

And if the ACCC and/or relevant Minister failed to act, an airline customer could always initiate a Part IIIA declaration application in an attempt to achieve a similar outcome.

Figure 8 **An airports regulatory enforcement pyramid**



Other reform proposals

The ACCC contends that Part IIIA does not present an effective constraint on the behaviour of the airports because of the time taken and the cost faced by airlines seeking declaration. It proposed that airports with market power be deemed as declared. Deemed declaration would enable the parties negotiating a commercial agreement to, if necessary, seek an arbitrated settlement by the ACCC. While current commercial agreements include independent dispute resolution already, deemed declaration would operate during the contract formation stage.

The NCC argued that, rather than being deemed, declaration should be predicated on an independent decision maker being satisfied that the declaration criteria are met. To do otherwise would increase the risk of regulatory error and reduce confidence in the national access regime.

The Commission shares these reservations. It further considers that a fast track to easy arbitration could be readily used by airlines as soon as existing contracts lapsed, with negotiations for new agreements progressively centring around a narrowing band of arbitrated outcomes. This would risk a return to institutionalised determination of charges and conditions.

It is not that long since combative airlines and airports focused on getting the best regulated outcome. Having moved to commercially focused negotiations with increasing levels of constructive engagement, it would be a retrograde step to once again displace this by interposing the regulator.

Nevertheless, the Commission accepts that 'best practice' negotiation does not occur at all airports. It considers that faster progress to better practices might be expedited by 'moral suasion'. To this end, the Commission sees merit in either strengthening the Pricing Principles or introducing a voluntary industry code of conduct.

Further encouraging good faith commercial negotiation

Airlines sought greater information disclosure on strategic issues revolving around investment, such as measures of whether existing assets were being deployed as efficiently as possible and whether improved demand management practices could delay new investment. They also sought more structured processes to facilitate agreement on effective service level agreements with airports, especially for terminals.

In principle, a new code of conduct could address some of these issues as well as elaborating on 'conduct' matters already embodied in the Pricing Principles (for example, good faith negotiation; information exchange; processes for resolving disputes).

Alternatively, strengthening the Pricing Principles would achieve a similar end, with the added benefit that the Principles would play a key role in any Part VIIA price inquiry triggered under the draft show cause process. Behaviour in contravention of the Principles would likely be viewed unfavourably, which would give the Principles more ex ante 'teeth'.

Other reform proposals ranged from the some airports suggesting that monitoring should be abolished, to airlines recommending mandatory codes of conduct, and greater regulatory involvement in setting parameters for the building blocks model used by the parties in negotiations.

The Commission is satisfied that its proposed 'show cause' mechanism would achieve the necessary balance to further commercial negotiation. In undertaking negotiations, airport managers would take account of the potential for the ACCC to issue a show cause direction, the Government acting to initiate a price review and ultimately introducing stricter controls.

Future role for price and quality monitoring

The ACCC's price and quality monitoring role is fundamental to providing the information necessary to establish whether there is a prima facie case of misuse of market power.

Without continuation of such evidence gathering, any show cause mechanism would have to be triggered through a complaints-based process — an arrangement that the Commission considers would be undesirable, particularly given the problems with previous attempts to devise a complaints-based show cause mechanism.

The Commission has little issue with the robustness of the price and financial data reporting requirements, but has significant reservations about the derivation and reporting of quality of service monitoring. It has made several recommendations for content and process improvements in this area.

Car parking

As noted, in recent airport monitoring reports, the ACCC has suggested that car parking prices at some airports likely reflect monopoly profits. Specifically, the ACCC claims:

- Melbourne Airport seems to impose excessive levies on, and limit the service to, competitors such as off-airport parking providers and private bus operators
- Brisbane Airport might possibly have earned monopoly profits for airport parking by 'inefficiently' delaying investment in a multi-level car park.

Airport car parking can be a contentious issue for some members of the public, especially infrequent users of airports and or those unfamiliar with the parking rates that apply in central business districts. The 'sticker shock' from airport car parking prices, which like taxi fares can exceed the cost of budget airfares, elicits strong responses (table 1).

Car parking prices will generally be more than cost-reflective. Prices must take account of:

- the fixed and variable costs of the service — unit construction costs and also roads, lighting, security and traffic management
- the over-capacity to cater to peak demand by guaranteeing an available car park — when the airport is not busy, the empty spaces do not produce revenue

- demand management strategies — pricing to stop longer-term parkers from taking up the limited short stay spaces
- the opportunity cost of the land — the rate of return on car park land relative to alternative uses.

Table 1 **Cost of transport options**

	Kerbside	*Off-airport parking*	*On-airport parking*		*Taxi*	*Rail*
			short-term	*long-term*		
	$	$ per day	$ per day	$ per day	$ return CBD/airport	$ return CBD/airport
Adelaide	free	21–30	30	25	32	n.a
Brisbane	free	16–25	40	40	68	28
Melbourne	free	9–35	52	29	108	n.a
Perth	free	20–30	36	16	48	n.a
Sydney	free	20–30	52	25	76	25

There has been substantial new investment in car parking at most airports. Car parking spaces at Melbourne airport, for example, grew from around 15 000 to 20 000 in the five years to 2010. In relation to Brisbane, the Commission was not able to determine that the airport inefficiently delayed its car parking investment to artificially constrain supply. Indeed, airports have long lobbied their respective state governments to increase mass transport services to airports — an action seemingly inconsistent with the misuse of market power.

However, airports are vertically integrated with landside services through car parking businesses, so there is potential for airports to impede access to off-airport car park operators in order to reduce competition and maintain excessive prices.

Airports charge access fees for vehicles ranging from zero for private vehicle drop-off and pick-up to differential fees for taxis, limousines and shuttle buses, including direct competitors such as off-airport car park providers. Access fees do not appear to be excessive and the Commission could not substantiate suspicions that Melbourne Airport has impeded access to competitors (table 2).

The ACCC proposed that airports with significant market power in landside vehicle services should be subject to mandatory Part IIIA access undertakings for landside vehicle access services.

Table 2 **Ground transport access charges at monitored airports**

		Bus				
	Taxi	*Small*	*Medium*	*Large*	*Public bus*	*Limousine/ hire car*
	$	$	$	$	$	$
Adelaide	2.00	–	2.00	2.00	–	na
Brisbane	3.00	na	9.50	11.50	–	na
Melbourne	1.32	4.00	6.00	12.00	–	3.00
Perth	2.00	–	–	–	–	2.20
Sydney	3.50	5.00	7.00	12.00	–	4.50

If access prices were set with an exclusive emphasis on costs without proper reference to the opportunity cost of land (especially kerbside and forecourt), then efficiency could be compromised. To manage traffic flows through congested kerbside and forecourt spaces, airports have legitimate reasons to strictly enforce rigorous conditions and ration access.

The Commission considers that there is insufficient evidence to warrant mandatory Part IIIA undertakings for landside vehicle access. However, it further considers that:

- it would be in the public interest for the monitored airports to publish the prices and terms and conditions of access for transport operators
- the ACCC should continue to monitor prices and access charges for car parking at the price monitored airports.

Land transport access and integration

The roads to and around major city airports are often congested during peak times, with airport traffic contributing to already heavy flows. In large part, this is a result of insufficient investment in land transport infrastructure generally. And, without remedial action, population growth, coupled with the projected increases in passengers at capital city airports, will exacerbate this congestion. The situation, particularly in Sydney, is compounded by conflicting incentives that encourage airport users to drive rather than use public transport (box 4).

Box 4 **Land access to Sydney airport — clogged arteries**

Sydney airport serviced almost 35 million passengers in 2009-10 and is also a major freight hub. It is eight kilometres from the CBD and situated next to Port Botany. Major arterial roads, which converge on and encircle the airport, are often congested with commuter, passenger, air freight and seaport container traffic. Half of the traffic on Qantas Drive, located along the northern boundary of the airport and linking the international and domestic terminals, is non-airport commuter traffic.

There is also congestion on the M5 arterial from western Sydney, which feeds the airport, the port and commuter traffic to the city. A decision to remove the existing toll has meant that, since 1997, the state government has reimbursed private motorists for the toll paid.

The rail service to the airport carries only 11 per cent of airport users. The low usage has been linked, in part, to the high price of tickets — users of the airport terminals must pay an additional 'station access fee' of $11.80 per adult. This fee was part of the terms agreed by the state government when it commissioned construction of the line.

There is one bus services to the airport. It is not direct to the CBD but travels between Bondi Junction and Burwood. Two other bus services travel from the CBD and stop a kilometre or more from the airport. The state government's ability to have these buses terminate at the airport is constrained by its contractual obligations with the private rail station operator, whereby competition would trigger compensation.

Planning and development on federal airport sites are regulated by the Australian Government, whereas surrounding areas are subject to state, territory and local government laws. Planning development on and around airports has not necessarily been coordinated well.

The Australian Government plays a significant role in planning and funding major infrastructure, and this can include roads around airports. Infrastructure Australia advises the Australian Government on the merit of infrastructure projects — typically in transport, communications, energy and water — based on national infrastructure priorities.

The primary responsibility for road funding, however, rests with state, territory and local governments. State and territory governments are also responsible for providing public transport. Finally, airport operators are obligated to fund terminal access roads and facilities in landside areas under their lease.

In some cases, all levels of government and airports have contributed to surface transport infrastructure development, with the latter paying for connection works, ceding land or even making ex gratia payments. But some local and state governments believe that airports should finance upgrades to neighbouring roads

and even arterial roads well beyond airport boundaries. This argument, which essentially would involve airports making 'developer contributions', is most often raised in relation to traffic generated by airport's non-aeronautical developments.

The Commission considers that where infrastructure upgrades provide comparable benefits to airport and non-airport related traffic, it would be better funded by government. Where the benefits are not equally shared, it does not automatically follow that airports should be required to pay developer contributions to contribute to the cost of infrastructure outside the airport boundaries. However, the Commission is seeking further views on this.

The Australian Government is beginning to play a greater role in the strategic oversight of Australian cities. The Council of Australian Governments has agreed that state and territory governments will have in place capital city strategic planning systems that meet national criteria by January 2012.

Moreover, recent legislative changes aim to better align airport planning with state, territory and local government planning. Airport master plans now have new requirements, including specification of ground transport plans to show how airports connect with surrounding road and public transport systems and analysis of how plans align with state, territory and local government planning laws.

If these mechanisms are successfully implemented, they should partly reduce the past planning and transport coordination problems. It would be prudent to allow these changes to take their course. However, if these changes prove inadequate, it may be necessary to enact more stringent requirements for airport plans to align with state and local government planning laws.

The Commission considers that the efficacy of the reforms and legislative changes should be reviewed in 2015.

Draft findings and recommendations

Market power and regulation

Information request: The Commission requests additional information on whether an airport's ability to earn non-aeronautical revenue provides an incentive to constrain aeronautical charges, and if so, to what extent this currently occurs.

DRAFT FINDING 4.1

Although the continued growth of low-cost carriers and competition from some secondary airports has reduced the potential for airports to exploit market power, Brisbane, Melbourne, Perth and Sydney airports — and to a lesser extent Adelaide airport — retain sufficient market power to be of policy concern. However, there is insufficient evidence to suggest the scope of monitoring should be expanded.

DRAFT FINDING 4.2

In general, the coverage of the current monitoring regime is appropriate, and despite recent technological developments (such as online passenger check-in facilities), the additional benefits of attempting to fine tune the monitored aeronautical facilities and services is unlikely to outweigh the cost.

Airport investment and capacity

DRAFT FINDING 5.1

The Australian Government has a number of regulatory and other levers to influence the timing and nature of investment at Australian airports, including lease provisions and requirements under the Airports Act 1996. To date, these levers have not been triggered, as investment has exceeded requirements established at the time airports were sold.

DRAFT FINDING 5.2

There is evidence of significant investment in aeronautical infrastructure at Australian airports in the period since light-handed monitoring was introduced in 2002, with significant future investment planned. Compared to other Australian infrastructure, airport investment outcomes rate favourably.

DRAFT FINDING 5.3

Despite instances of delays to aeronautical investment, it does not appear that such delays have been unreasonable. Moreover, airport operators appear to consult with airlines and other airport users about nature and timing of individual investments at the airports for which they are responsible — although not always to the satisfaction of airlines — and the degree of consultation varies between airports.

Airside and terminal: price and service monitoring

DRAFT FINDING 6.1

Price monitoring data since 2002-03 show substantial total price increases at most of the monitored airports. However, taken in context, these increases do not indicate systemic misuse of market power.

DRAFT FINDING 6.2

Recent quality of service monitoring for the overall and passenger survey results alone do not indicate any persistent trends that would suggest the misuse of market power.

DRAFT FINDING 6.3

Quality of service ratings from airline surveys are notably lower, including ratings of 'poor' for both Sydney and Perth airports. Concerns raised by the ACCC appear to place greater emphasis on the airline surveys.

Airside and terminal: effectiveness of monitoring

DRAFT FINDING 7.1

In part due to the alignment of price monitoring requirements with the Corporations Act, and the flexibility afforded under the quality of service monitoring, compliance costs for the monitoring regime are low.

Information request: The Commission seeks participants' views on the appropriateness of including capital costs, such as the cost of borrowing, in the ACCC's price monitoring program. Are there reliable measures that can be collected with relatively low compliance costs? If so, which is the best measure?

Airport car parking and land access

Information request: The Commission seeks more information on the nature of the off-airport parking market, particularly in Perth and Adelaide.

DRAFT FINDING 8.1

Australians mostly access airports using private vehicles and in doing so largely opt for free kerbside pick-up and drop-off. Beyond that they can choose to park and fly using off-airport car parks at a lower price for a less convenient product, or park on-airport in either long-term car parks or the most convenient and expensive short-term car parks adjacent to the terminals. Substitution between the modes of transport limits, to some degree, airports' ability to increase the price of on-airport car parking above competitive levels.

DRAFT FINDING 8.2

At a minimum, car parking prices at airports reflect the fixed and variable costs of the service, the inbuilt over-capacity inherent in catering to peak demand and the opportunity cost of the land. Added to this is the imperative to ensure that passengers are guaranteed the convenience and amenity associated with a short-term car park when needed, and the necessity to enable demand management strategies to use price as a mechanism to shift long-term car parkers away from scarce short-term places.

DRAFT FINDING 8.3

Airports generally have invested in car parking facilities in response to the growing demand for such services. Concerns that Brisbane Airport may have inefficiently delayed investment are difficult to substantiate especially given the problems of access to finance during the global financial crisis.

DRAFT FINDING 8.4

Airports charge access fees for vehicles, ranging from nothing for drop-off and pick-up to differential fees for taxis, limousines and shuttle/mini buses, including direct competitors such as off-airport car park providers. At face value, the fees do not appear excessive, notwithstanding that they may be in excess of costs for reasons of reducing congestion in the limited forecourt areas and rationing of scarce resource to those ground transport providers willing to pay for premium access. However, information about terms and conditions of access is less transparent.

Commercial negotiation

DRAFT FINDING 9.1

Reflecting that commercial negotiation in a light-handed environment only commenced between 1997 and 2002 and that commercial agreements typically are for a duration of five years or more, the opportunity for the parties to progressively iterate to more comprehensive and refined agreements has been limited.

DRAFT FINDING 9.2

Commercial agreements now incorporate features that airlines considered were absent or deficient in 2006. But despite these advances, airlines continue to claim that commercial negotiations with some airports are one-sided and dysfunctional.

DRAFT FINDING 9.3

Commercial agreements are the basis for the relationships between airports and most airlines. Problems with commercial negotiation are not symptomatic of system-wide failure, but appear to reflect different practices across airports. Sydney airport in particular attracts more criticism than other airports. This variation underscores that commercial negotiation can, but may not always, work well.

DRAFT FINDING 9.4

The divergence in the observations and assertions made by airports, on the one hand, and their customers on the other, seems to reflect 'positioning' to either protect or change the distribution of profits between them. While not surprising, testing the veracity of opposing propositions is difficult. Ultimately, the claim and counter claim nature of the evidence means that it is not possible to make a definitive call that greater regulatory intrusion is warranted. Some negotiations are said to work well and others not. These differences might reflect personalities and experience as much as systemic parameters. There is considerable scope to improve commercial negotiation as it has not yet achieved the level of maturity envisaged with the lifting of price regulation nearly a decade ago.

Performance of Australian airports

DRAFT FINDING 10.1

Compared to their overseas counterparts, Australian airports' aeronautical charges, revenues, costs, profits and investment outcomes remain within the performance range of their overseas counterparts. The analysis suggests that, despite earning below average revenues per passenger, Australian airports are able to profit from cost reductions.

Options for future airport regulation

DRAFT FINDING 11.1

Despite complaints from airport users and the public stance on airports taken by the Australian Competition and Consumer Commission (ACCC), existing safeguards have been very little used.

- *The ACCC has not called for, nor has the relevant Minister instigated, a price investigation of any airport.*
- *For nearly a decade no airport user has commenced an application to the National Competition Council to have airport services declared, nor has the relevant Minister commenced such an application.*
- *No user sought to have the declaration of domestic airside services at Sydney extended beyond the December 2010 expiry date.*

Information request: The Commission seeks comment on whether the ACCC should be responsible for both issuing show cause directions and conducting any subsequent Part VIIA inquiry.

DRAFT RECOMMENDATION 11.1

The Australian Competition and Consumer Commission (ACCC), on publication of its monitoring reports, should be empowered to issue a direction that an airport has six weeks to show cause why its conduct should not be subject to scrutiny under a Part VIIA price inquiry.

To issue a show cause direction, the ACCC must form a view that there is prima facie evidence that an airport has, over time, demonstrated a consistent pattern of achieving aeronautical returns in excess of a reasonably expected band of outcomes, having regard to price paths, the quantum and timing of investment and how that bears on quality outcomes and market conditions.

Where the ACCC is dissatisfied with an airport's response to a show cause direction, it shall recommend that the relevant competition Minister invokes a Part VIIA inquiry. If the Minister initiates a Part VIIA price inquiry, the review body would draw on the monitoring reports and also take evidence and consult with the airport operator and its customers. In forming a view about an airport's exercise of market power, the review should examine:

- ***whether airport charges have consistently been set at a level higher than would be justified on the basis of costs, investment requirements and changes to service quality***
- ***how non-price terms and conditions are treated in agreements and how rights to vary such terms are set***
- ***the extent to which consultation mechanisms allow for the reasonable provision of (two way) information.***

The review body must be guided by the 'Pricing Principles'.

DRAFT RECOMMENDATION 11.2

Assessments of airport behaviour during the next period of price monitoring should continue to be governed by an overarching set of principles. All the current 'Pricing Principles' should be retained.

Information request: The Commission is seeking information on whether guidelines on matters that could improve commercial negotiation — such as information on whether existing assets are being deployed efficiently prior to new investment and processes to facilitate effective service level agreements — should be:

- *devised by the Productivity Commission and incorporated into the Pricing Principles, or*
- *encapsulated within a new voluntary industry code — a committee comprising representatives from the Australian Airports Association, the Board of Airline Representatives of Australia, the Regional Aviation Association of Australia, Qantas, and Virgin Australia (and possibly with guidance from the Australian Competition and Consumer Commission) could be tasked with this.*

DRAFT RECOMMENDATION 11.3

An airport-specific arbitration regime activated by deemed declarations of airports under Part IIIA should not be introduced. Similarly, mandatory codes of conduct and mandatory guidelines to specify matters such as, the allocation of costs to aeronautical and non-aeronautical purposes and building block parameters, should not be introduced.

Information request: The Commission is seeking information on whether there are additional readily accessible financial or other data that would assist the Australian Competition and Consumer Commission to determine if a 'show cause' direction was warranted.

DRAFT RECOMMENDATION 11.4

There should be a further period of price monitoring at Australia's major airports when the current arrangements end in June 2013. The new arrangements should continue to apply to Adelaide, Brisbane, Melbourne, Perth and Sydney airports until June 2020 and be subject to a review in June 2018.

Information request: The Commission seeks participants' view on the potential means to standardise passenger survey methodology, such as the use of ACI Airports Service Quality information, without incurring substantial increases in compliance costs.

Information request: The Commission invites participants' views on its proposals in relation to airline surveys and service level agreements. In particular, would annual publication of the coverage of, and performance under, service level agreements improve regulatory outcomes?

DRAFT RECOMMENDATION 11.5

Quality of service monitoring should continue to apply to the price monitored airports until June 2020. However, specific improvements are warranted:

- ***the objective criteria should be reviewed and updated by the middle of 2013***
- ***the Australian Competition and Consumer Commission should explore means of standardising the passenger survey across airports, while maintaining low compliance costs***
- ***where an airport has service level agreements with all of its regular passenger airlines, which stipulate methods for recourse in the event of a failure to meet a standard, the airline survey should no longer be conducted for that airport***
- ***government agencies should no longer be surveyed as part of the program. Any relevant variables can be picked up through objective measures and passenger surveys.***

DRAFT RECOMMENDATION 11.6

In administering the monitoring regime, the Australian Competition and Consumer Commission should:

- ***take steps to make as much of its methodology publicly available as possible (subject to a review of statutory requirements)***
- ***focus its conclusions on trends over time at a given airport, rather than comparisons across the five monitored airports. Such attempts at benchmarking are better suited to less frequent, broader reviews that can examine the airports in a wider international context.***

DRAFT RECOMMENDATION 11.7

For Adelaide, Brisbane, Melbourne, Perth and Sydney airports, the Australian Competition and Consumer Commission should continue to monitor and publish:

- ***prices, costs and profits relating to the supply of car parking***
- ***access charges and the associated revenues for ground transport operators***
- ***qualitative indicators of service provision drawn from passenger surveys.***

DRAFT RECOMMENDATION 11.8

Mandatory Part IIIA access undertakings setting out prices, terms and conditions for surface transport operators to access airports should not be introduced. The price monitored airports should be required, however, to publish on their websites the general prices and terms and conditions of access for transport operators. This should not preclude airports and their customers from being able to agree to vary these general conditions to suite their particular circumstances.

Land transport access and integration

Information request: The Commission is seeking views about the adequacy of communication between airports and the tiers of governments in relation to the provision of information such as estimated traffic volumes, travel time projections and other key performance indicators relevant to current and future efficiency of access to airports.

DRAFT FINDING 12.1

While ground transport access issues, such as congestion, arise in most major city airports to varying degrees, they seem to be most extreme in and around Sydney airport.

DRAFT FINDING 12.2

When entering into public-private partnerships, governments need to consider carefully restrictive competitive arrangements that aim to ensure profitability for the private provider. Locking in such arrangements, especially for extended periods, may lead to inefficient transport outcomes.

DRAFT RECOMMENDATION 12.1

The recent changes to master plan requirements and the introduction of the consultative forums should be allowed to take their course before other policy options are considered. The efficacy of these measures should be reviewed in 2015.

Information request: The Commission seeks views on whether an airport should contribute to the cost of infrastructure outside its boundary as a result of future on-airport non-aeronautical development.

If funding is viewed as necessary, the Commission also requests information regarding:

- *the basis for funding such infrastructure including the benefits*
- *the form of funding (such as upfront financial contributions, rate payments or land transfers)*
- *the method of calculating contributions and how the contributions would relate to existing developer charges levied by local governments*
- *how such funding would align with the conditions under which airport leases were granted.*

Other matters

Information request: The Commission seeks information on the potential costs and benefits of extending the Pricing Principles to regional airports. How might the principles be applied, and is the problem of sufficient magnitude to warrant any potential enforcement mechanisms?

1 About the inquiry

The main purpose of airports is to enable aircraft to land and take-off, allowing the movement of people and freight. Beyond that, there are significant differences between airports. Some airports:

- are unstaffed aerodromes, with rudimentary facilities catering to infrequent general aviation
- are 'end' destinations catering predominantly to the (often price-sensitive) tourism market
- are near population centres, but separate from capital cities, sometimes becoming hubs for low-cost carriers
- are essential, national gateways with associated clusters of aeronautical and non-aeronautical business services
- develop into an airport-centred economic region (or 'aerotropolis') with substantial employment in not only airport services, but also in commercial activities.

Airports also differ in their forms of ownership (local or state government, or private), proximity to other airports (for example, Brisbane, Archerfield and Gold Coast) and their sensitivity to economic conditions (budget tourism versus business travel). A particularly important area of difference is the scale of the airport footprint and its capacity to expand (which can be constrained by its proximity to either urban settlement or geographic features), including diversification into large-scale non-aeronautical commercial development.

These differences are critical to the economic regulation of airport services. In general, the larger the airport, the greater the potential for tensions between it, its key stakeholders — the airlines — and also surrounding communities. A privatised airport will seek to maximise its return on investment and to undertake new investment necessary to grow passenger numbers and freight volumes. Some airlines will similarly seek to increase passenger numbers, others will be more focused on yield, and dominant carriers are likely to seek to entrench themselves at their hub airports and oppose airport investments that increase airline competition. People in surrounding communities (and their elected representatives) are sensitive to noise, pollution and traffic congestion. On the other hand, state and territory

governments may simultaneously encourage investment around airports because of their economic benefits, while confronting the planning independence of Commonwealth-leased airports and the budgetary challenges of building infrastructure to support growth.

The economic regulation of airport services in Australia has evolved within this context of differing airport characteristics and competing interests.

1.1 Background to the inquiry

In 1997, the Australian Government began privatising the 22 airports then operated by the Federal Airports Corporation (FAC), concluding with the sale of Sydney airport in 2002.

The Government recognised that some major airports[1] had significant market power, which they could potentially use to unduly inflate their charges, or to allow service quality to deteriorate. Consequently, privatisation was accompanied by airport-specific price regulation — then comprising price notification, price monitoring, price caps and special provisions for 'necessary new investment' and quality of service monitoring. These measures were additional to the prevailing general competition laws, applicable to all industries.

In 2002, a Productivity Commission inquiry into the price regulation of airport services determined that market power concerns did not warrant such heavy-handed regulation. The Commission concluded that the potential costs of the price control regime were compounded by the severe information problems confronting the regulator. The upshot was a significant risk of regulatory failure, leading to distorted production decisions and, in particular, a 'chilling' of airport investment decisions.

The Commission recommended that price caps and price notification of aeronautical services be replaced with light-handed regulation as a 'probationary regulatory package designed to facilitate the transition to a more commercial environment, while providing credible constraints on the use of market power' (PC 2002a, p. XLV). This recommendation was implemented, with light-handed regulation largely consisting of price and quality monitoring of aeronautical services at Adelaide, Brisbane, Canberra,

[1] At the time, these consisted of those airports identified in the *Airports Act 1996* as 'core-regulated airports', namely: Adelaide, Alice Springs, Brisbane, Canberra, Darwin, Gold Coast, Hobart, Launceston, Melbourne, Perth and Townsville. Sydney airport was also considered a core regulated airport but, due to its different time of sale, was subject to separate, but similar, regulations.

Darwin, Melbourne, Perth and Sydney airports. The exception to this was (and still is) the price notification arrangements for regional air services using Sydney airport.

A further Commission inquiry, in 2006, concluded that light-handed regulation had delivered important benefits and that the regime should continue with some changes, including the excision of Canberra and Darwin airports from coverage. Accordingly, since 2007, price and quality monitoring of aeronautical services has applied to five airports: Adelaide, Brisbane, Melbourne, Perth and Sydney. In 2008, the Government directed the Australian Competition and Consumer Commission (ACCC) to formally monitor car parking prices, costs and profits at these airports as a separate undertaking. Car parking has been monitored continuously since 1997, but was previously encompassed in the general monitoring program.

In the 2009 National Aviation Policy White Paper (DITRDLG 2009a), the Government confirmed that the price and service quality monitoring would continue and announced a new, second tier self-administered price and service quality monitoring regime for Canberra, Darwin, Gold Coast and Hobart airports. Other airports, including those not regulated under the *Airports Act 1996* (such as Cairns), were encouraged to adopt web-based reporting of customer satisfaction measures and outcomes.

In line with its annual reporting responsibilities, in March 2010, the ACCC released the 2008-09 *Airport monitoring report* (ACCC 2010a). In the press release that accompanied the report, the ACCC observed that Sydney airport had increased profits at the expense of the quality of services, and also expressed concerns about monopoly pricing for car parking:

> This year's report has found the performance of Sydney Airport to be of greatest concern. The indications are that Sydney Airport has increased profits by permitting service quality to fall below that which the airlines reasonably expect …
>
> The indications are that car parking prices likely reflect an element of monopoly rent. At least some car parking charges increased at all of the monitored airports during the 2008-09 financial year, or since then. The ACCC has observed that some airports may affect the cost or convenience of potential alternatives to on-airport parking, which could contribute to the high margins reported for on-airport car parking. (ACCC 2010b, p. 1)

In light of these concerns, the Government announced that it would bring forward the scheduled review of the economic regulation of airports:

> We had announced previously … that the Productivity Commission would do a review in 2012. As a result of this ACCC report, I have asked the Productivity Commission to bring that forward to as soon as possible. (Albanese 2010, p. 1)

The ACCC subsequently restated its concerns in its 2009-10 *Airport monitoring report* (ACCC 2011), released after this inquiry commenced. Its submission to this inquiry synthesises concerns from the two most recent monitoring reports, which found:

> … indications that Sydney Airport has increased profits by permitting service-quality levels to fall … It seems that the timing of Sydney Airport's upgrade of the international terminal … might have been (inefficiently) delayed, and there was inadequate maintenance before this time. … it is possible that Brisbane Airport has been earning monopoly rents for airport parking as a result of inefficiently delaying investment. … Melbourne Airport seems to impose excessive levies on, and limit the service offering to, off-airport parking and private bus operators. (sub. 3, pp. 11, 27, 28)

At the same time, concerns have also arisen about land transport access to airports, including interfaces with surrounding state, territory and local government planning regimes and infrastructure provision:

> [Airports] are vital transport hubs operating in multi-layered local, state, national and international transport networks. Ensuring ease of access to our airports is therefore critical for the end-to-end value chain. Whether for business or leisure, a journey never ends at the airport.
>
> At present, land transport access to our major airports is problematic. Planning and investment in land transport to airports has not kept pace with the rapid growth in airport passenger traffic over the last decade. … When investment has occurred, it has often fallen short of meeting the needs and requirements of both airline travellers and airport employees. … Transport demand around airports however, is not solely generated by the aviation sector — airports are often located beside key metropolitan arterial roads which carry heavy commuter traffic to the CBD. ... These factors have led to severe road congestion in and around airport precincts. (Tourism and Transport Forum, sub. 53, Booz & Company attachment, p. 6)

As discussed below, land transport access issues have been included in the terms of reference for this inquiry.

1.2 The Commission's task

The Australian Government asked the Commission to report on the effectiveness of the current economic regulatory regime for airport services, centreing on three main objectives:

- promoting the economically efficient and timely operation, use of and investment in airports and related industries
- minimising unnecessary compliance costs
- facilitating commercially negotiated outcomes in airport operations.

The focus of the inquiry is on:

- aeronautical services and facilities provided by airport operators
- passenger-related aeronautical services and facilities provided by major airline tenants
- land transport facilities providing access to the airports.

An overarching concern of the inquiry — reflected in the terms of reference — is the need to balance the ability for airports to price, operate and invest in infrastructure in an efficient and timely manner, with the effectiveness of remedies aimed at deterring and dealing with potential abuses of market power. In looking at this issue, the Australian Government asked the Commission to examine the economy-wide costs and benefits and distributional impacts of the regime. Distributional concerns focus on the share of resources between different groups within society, rather than the wellbeing of society as a whole. Specifically in the context of airport regulation, the focus is typically on the distribution between:

- *consumers*: that is, passengers or end-users of other airport services
- *airlines*: that is, the major operators of regular public transport air services. Returns obtained by airlines will flow back to their financial owners. The two major domestic airlines in Australia are Qantas and Virgin Australia. While both face restrictions on their total level of foreign ownership, nonetheless overseas interests own significant shares in these businesses. Further, international airlines that operate in Australia have a variety of ownership structures, including some sovereign-owned airlines
- *airport operators*: that is, the companies that hold airport leases and are responsible for the operation of airports and their land. Major airports in Australia are mostly owned by Australian superannuation funds, who manage the retirement savings of Australian workers.

Beyond these three major groups, further relevant groups include other intermediate users of airport land and services (such as fuel or freight providers, or hotel owners); those who live, work or commute near airport land; and taxpayers who, through governments of all levels, fund infrastructure and services affected by airport operations.

Scope of the inquiry

The terms of reference direct the Commission to focus on 'main passenger airports in Australia's major cities'. As such, the Commission has primarily examined the five currently monitored airports (Adelaide, Brisbane, Melbourne, Sydney and

Perth). Nevertheless, other airports — including those covered by the second tier monitoring regime (Canberra, Darwin, Gold Coast and Hobart), as well as airports with substantial levels of regular public transport (such as Cairns) — come within the scope of this inquiry when evaluating the current regime and assessing whether its coverage is appropriate. Further, as specified in the terms of reference, the Commission has also considered the performance of a number of overseas airports.

The terms of reference also specify that two particular aspects of the regulatory regime for airports are outside the scope of this inquiry, namely the:

- regulatory price cap and price notification regime for regional air services into and out of Sydney airport
- second tier self-administered monitoring regime for price and quality of service.

The full terms of reference are reproduced at the front of this draft report.

1.3 The Commission's approach

The Commission's approach to this inquiry takes into account the matters specified in the terms of reference and is ultimately directed by the general policy guidelines in the *Productivity Commission Act 1998*. Among other things, section 8 of the Commission's Act directs it to:

(a) improve the overall economic performance of the economy through higher productivity in the public and private sectors in order to achieve higher living standards for all members of the Australian community

(b) reduce regulation of industry where this is consistent with the social and economic goals of the Commonwealth Government

(c) encourage the development and growth of Australian industries that are efficient in their use of resources, enterprising, innovative and internationally competitive.

In pursuing these objectives, the Commission is to recognise the interests of the community generally, as well as those (such as consumers or industries) likely to be affected by its proposals.

Key stages in the Commission's approach have been to:

- identify the objectives of economic regulation of airport services, including any policy-relevant problems that may necessitate regulatory intervention (such as the potential abuse of market power)

- evaluate the performance of, and outcomes from, the existing regulatory arrangements
- investigate any necessary modifications or alternatives to the current regulatory regime that could address identified deficiencies
- recommend options for future regulation (if any) that are likely to yield the greatest net benefits to society as a whole.

Reflecting this approach, there are four parts to this report:

Chapters 1 to 4 provide context for the Commission's analysis with a description of Australia's major airports, the regulations that apply to them, as well as the framework for analysing issues of market power.

Chapters 5 to 10 analyse the outcomes at the monitored airports for a range of issues including investment, price, quality of service and land access to airports.

Chapter 11 integrates the analysis and formulates the appropriate future regime for the economic regulation of airport services.

Finally, chapters 12 and 13 examine planning and transport issues, as well as a range of policy areas related to the core economic regulation of airports.

1.4 Conduct of the inquiry

In preparing this draft report, input was sought from a broad range of key stakeholders. The Commission:

- met informally with major and regional airlines, major airports, transport providers, Australian and international academics and Australian, state, territory and local government officials (listed in appendix A).
- released an issues paper on 25 January 2011 outlining a range of matters on which it was seeking comment and information from participants. 81 submissions were received (appendix A).
- held roundtables in Canberra with representatives from airports and airlines.

As well as information from participants, the Commission has drawn on past Commission inquiries (and submissions to them), the ACCC's monitoring reports and academic literature on the regulation of airports (including comparisons with foreign airports).

This draft report sets out the Commission's preliminary analysis, findings and recommendations. Participants can comment on the draft report in public hearings to be held in October 2011 and through written submissions on the draft report, which should be received by 23 September 2011. The Commission will provide its final report to the Assistant Treasurer by 15 December 2011.

2 Australia's major airports

Key points

- Australia's largest airport by passenger throughput is Sydney, servicing almost 35 million passengers in 2009-10. In that same year, Melbourne and Brisbane airports serviced 26 million and 19 million passengers, respectively.
- Some of Australia's airport terminals operate under a common-user system, whereby all airlines 'share' the facilities provided. In other cases, airlines directly operate their own terminals under lease agreements with the airport.
- In addition to core aviation functions, airports are home to other commercial activities, such as car parking, retail and commercial tenancies.
- From 2009-10 to 2029-30, passenger numbers in Australia are expected to double, with Brisbane, Melbourne and Sydney airports each expected to cater for over 50 million passengers by 2029-30.

Air transport is essential in Australia, owing to the distances between population centres and the absence of practical alternatives for journeying overseas. As well as facilitating the movement of passengers and freight, airports can be centres of economic activity in their own right.

There are over 2000 airports and airfields in Australia (Airservices Australia 2011), although only around 10 per cent receive passengers for financial reward ('regular public transport (RPT)').

The terms of reference direct the Commission to focus on 'the provision of passenger transport services at and surrounding main passenger airports in Australia's major cities'. The Commission has included in this definition not only the various capital city airports but also regional airports with substantial RPT services, such as those at the Gold Coast and Cairns.

This chapter provides an overview of the nature and operations of these airports, and also of developments in the air travel market that influence demand for airport services. More detailed information on aspects of each of Australia's capital city airports can be found in appendix B, and is provided in the body of the report when this information is relevant to the assessment of particular matters under reference.

2.1 Australia's major airports: an introduction

Measured by passenger throughput, Kingsford-Smith Airport (Sydney) is Australia's largest airport, servicing almost 35 million passengers in 2009-10. At the same time, Tullamarine (Melbourne) and Brisbane airport serviced around 26 million and 19 million passengers, respectively. The other capital city airports and some regional airports also facilitate a large number of passenger movements, but at a magnitude significantly below the eastern capital cities' airports. Australia's 10 largest airports by passenger traffic are shown in table 2.1.

Table 2.1 **Australia's 10 largest RPT airports**
Passenger and aircraft movements, 2009-10

Airport	*Passengers*	*Aircraft movements*
	(millions)	(thousands)
Sydney	34.5	275
Melbourne	26.0	188
Brisbane	18.9	154
Perth	10.0	81
Adelaide	7.0	72
Gold Coast	5.2	35
Cairns	3.5	38
Canberra	3.3	43
Hobart	1.9	14
Darwin	1.6	26

Source: BITRE (2010a).

While major airports have facilities to accommodate a variety of air travellers, there can be marked differences in focus. Canberra airport, for example, caters extensively for business travellers, whereas Gold Coast and Cairns airports are more aligned to the leisure market. All 10 airports are equipped to service international as well as domestic and regional passengers, although direct international traffic at Adelaide, Canberra and Hobart is very limited.

With the progressive sale from 1997 to 2003 of airports formerly run by the Federal Airports Corporation (FAC), most major Australian airports are now privately owned. Their controlling companies are mostly owned by Australian superannuation funds. Sydney airport is predominantly owned by an ASX listed company, whose investors are Australian and overseas superannuation funds and retail investors. Some other airports, including until recently Cairns, as well as many smaller airports, are owned by either local or state governments. (The Queensland Government privatised the Cairns airport in 2009.)

The major Australian airports reported significant revenue and investment in 2010 (table 2.3). Details on the ownership structure, profitability and other aspects of each of major Australian airports can be found in appendix B.

Table 2.2 **Revenue[a] and investment[b] at selected capital city airports**
2010

Airport	*Revenue[a]*	*Investment[b]*
	$m	$m
Sydney	901	227
Melbourne	518	137
Brisbane	424	151
Perth	248	66
Adelaide	149	4

a As reported by earnings before interest, tax and amortisation. **b** Aeronautical capital expenditure reported.
Source: ACCC (2011).

2.2 Inside a major airport

The operation of a major airport involves complex relationships between the airport operator and various entities, such as airlines, freight companies, private contractors and government agencies. Together they employ hundreds and sometimes thousands of staff. The services and facilities provided on an airport can be categorised as:

- aircraft-related services and facilities
- terminals
- ground transport links
- other (non-aeronautical) commercial developments.

Aircraft-related services and facilities

A range of fixed physical infrastructure — such as runways, taxiways and hard-stands — is necessary for the arrival, turnaround and departure of aircraft. Sydney airport has two main (parallel) runways that can be operated simultaneously, and a cross runway. Other major Australian airports tend to have one central runway and a cross runway (although, due to concerns about increasing congestion, construction of a parallel runway at Brisbane airport is under consideration). The provision and upkeep of runways, taxiways, aprons and aircraft parking areas, as well as airfield lighting and navigational aids, are undertaken by the airport operator.

Various other services and facilities are available at major airports to assist the efficient operation of RPT aircraft. These include refuelling and ground handling services, as well as hangars and maintenance facilities. These may be provided by the airport operator, the airlines or other specialist businesses.

Services associated with the safe operation of civil aviation at airports are overseen by government agencies. For an airport to host RPT services, it must first be certified by the Civil Aviation and Safety Authority.

Some services are directly provided by government agencies, such as rescue and fire fighting services and air traffic control operations at airports. These services are provided by Airservices Australia.

Most major airports also provide facilities for smaller aircraft operations ('general aviation'), such as charters and Royal Flying Doctor Services and some, such as Darwin and Townsville airports, share facilities with the defence force.

Terminal facilities

The facilities and services provided at a passenger terminal can include check-in and baggage conveyance; security screening of passengers and baggage; departure lounges, retail outlets, public amenities, aerobridges and gates. Immigration, quarantine and customs processing are also provided for international passengers.

Passenger terminals vary at Australia's major airports, with different configurations having cost and efficiency implications. Some airports, such as Sydney and Cairns, have separate international and domestic terminals. Others, such as Darwin and the Gold Coast, have a single terminal configured to cater for both domestic and international passenger processing. Airports may also provide different terminals (or different facilities within terminals) for 'low-cost' carriers and 'full service' airlines. In Melbourne, for instance, Tiger Airways operates from a separate terminal that does not have expansive retail areas, corporate lounges, complicated baggage handling systems and aerobridges, among other things.

There are two main models for the control and operation of passenger terminals. Some airport terminals operate under a common-user system, whereby all airlines 'share' the facilities provided by the airport operator. The terminals at Adelaide and the Gold Coast airports are examples. Alternatively, airlines themselves can operate a terminal (and oversee the services provided within it) under a long-term domestic terminal lease (DTL) agreement with the airport operator (table 2.3).

Table 2.3 **Domestic terminal leases at selected capital city airports**

Airport	*DTLs*	*Expiry Date*
Adelaide	None	
Brisbane	Qantas and Virgin Blue (domestic terminal)	December 2018
Melbourne	T1 (Qantas domestic terminal)	December 2018
Perth	T2 (Qantas domestic terminal)	2018
Sydney	T3 (Qantas domestic terminal)	June 2019

Source: ACCC (2011).

Ground transport links and facilities

Airports need to provide access to terminals for private vehicles, taxis and buses. Two capital city airports — Sydney and Brisbane — also have a passenger rail link.

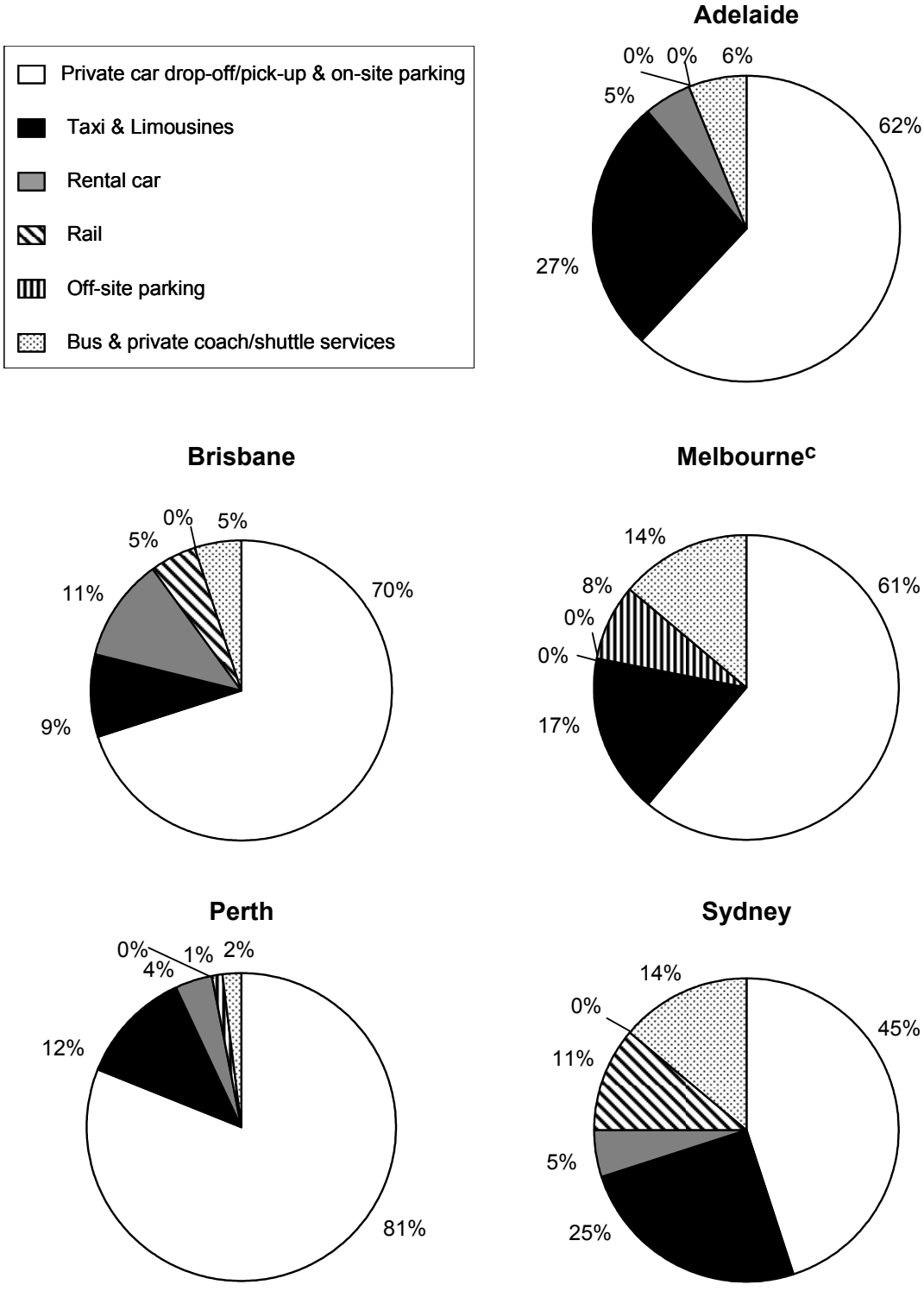
To enable such access, they must provide landside infrastructure facilities, including:

- terminal access roads
- car parks on the airport's grounds (for passengers and staff)
- areas for hire car operators and valet services
- taxi and bus zones, and holding areas and associated amenities (such as toilets, recreation and prayer rooms)
- airport rail station passenger links
- covered walkways and lighting in landside areas.

The vast majority of passengers arrive at airports by private car (figure 2.1). All major airports provide pick-up and set-down zones, as well as short-stay and long-term car parks. Most major airports also have adjacent off-airport car parks typically serviced by shuttle buses, which provide alternative long-term parking (chapter 8).

A particular 'bottleneck' at most airports is the limited kerbside space immediately in front of a terminal. Many vehicles seek access to this space — taxis, buses, limousines and private vehicles — in order to quickly pick-up or set-down passengers. Airports often set tight restrictions on the use of this space that reflect demand management and security requirements. Some airports have increased the amount of kerbside space by providing multiple (parallel and/or split level) roadways in front of their terminals.

Figure 2.1 **Transport mode share at selected airports 2010[a, b]**



a Figures at Perth airport are for domestic travellers only. **b** Off-site parking figures unavailable for Adelaide, Brisbane and Sydney airports. **c** Melbourne airport rental car proportion is included in the 'private car drop-off/pick-up and on-site parking' figure.

Data source: Tourism and Transport Forum (2011).

In many instances, particularly at congested capital city airports, operators levy charges on car parking and access to the airport for taxis and other non-private vehicles. The charging regimes are discussed in chapter 8.

Other developments on airports

Beyond the services and facilities dedicated for the use of passengers and planes, major airports are also home to a range of other commercial activities, generally sited on otherwise unused land within the airport boundary. Some of these, such as freight forwarding businesses and hotels, have an obvious relationship with air transport and, thus, with airports (table 2.4).

Table 2.4 **Recent non-aviation developments for capital city airports**

	Development	*Year approved*
Sydney	Two nine-level mixed use buildings[a]	2005
Melbourne	DHL Danzas freight facility	2006 & 2007
	Mixed use development[b]	2007
	Reject Shop distribution centre	2006
	Office development	2004
	International mail sorting facility	2004
Brisbane	Federal office building	2007
	Hotel precinct	2007
	Convenience centre	2007
	Direct Factory Outlet[c]	2004
Perth	Linfox warehouse and distribution centre	2007
	Brickworks	2006
	Coles Myer distribution centre	2006
	Woolworths warehousing and distribution park	2003
Adelaide	Hotel complex	2008
	IKEA store	2005
Hobart	Outlet centre and bulky goods/homemaker centre	2007
Canberra	Office development	2008
	Office complex	2007
	Direct Factory Outlet[c]	2006
Darwin	Home and Lifestyle Super Centre	2009

a The buildings provide 18 000m^2 floor space, which can be used for office, retail and hotel use. **b** Approximately 48 000m^2 of retail and other uses. **c** Large floor space warehouse shopping.

Sources: PC (2011a), DITRDLG (2009b).

There have also been a number of developments not closely (or at all) associated with the operation of civil aviation. For example at Dallas Fort-Worth airport in the

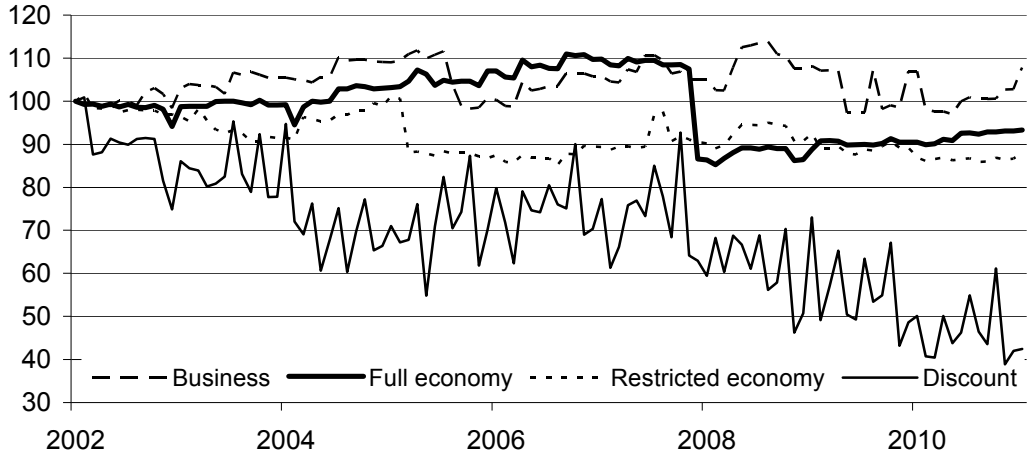
United States, there is a golf course and a jail. At Australian airports, there are no developments quite like this. However, Melbourne, Brisbane, Perth and Canberra airports, in particular, have a comparatively high number of non-aviation developments since 2005.

2.3 Developments in the air travel market

The demand for airport services is a 'derived demand', as it depends largely on the volume of aircraft movements and, in turn, the demand for air transport by passengers. Therefore, the airline market has important implications for airports.

Over the last decade, global aviation has significantly changed. Factors such as the outbreak of severe acute respiratory syndrome, the global financial crisis, and the Icelandic and Chilean volcanic eruptions have, at times, been very disruptive to the market. Additionally, terrorist attacks in the United States and elsewhere, have led to significant increases in airport security measures. Airlines have also diversified with the expansion of middle-eastern hubs that have the geographical ability to reach any destination in the world through a non-stop flight and the worldwide introduction of low-cost carriers (LCCs), which aim to keep airfares as low as possible (figure 2.2).

Figure 2.2 **Australian airfares index[a, b]**
March 2002 to April 2011



a March 2002=100. **b** The Bureau of Infrastructure, Transport and Regional Economics (BITRE) collects data on a range of airfares, including 'discount fares'. BITRE cautions that the terms and conditions for fares in particular categories may have changed over time. For example, there may be differences in baggage allowances, re-ticketing conditions and charges for different check-in and payment methods.

Data source: BITRE (unpublished).

By one measure, discount airfares have fallen by more than half in real terms since March 2002. This has made flying more affordable — particularly for leisure travellers.

In turn, the emergence of LCCs has had implications for 'full service' airlines. The collapse of Ansett Australia in 2001, for instance, was partially attributable to the erosion of its market share and the effects of lower ticket prices on its profitability, associated with the entry of Impulse Airlines and (the then) Virgin Blue into the Australian market (PC 2002a). More generally, according to the Sydney Airport Corporation:

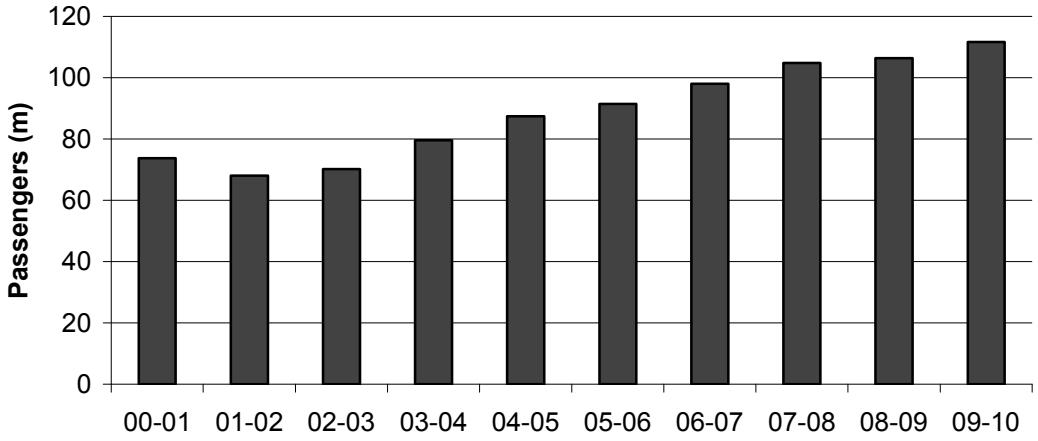
> … the development and transformation of LCCs over the past decade has changed the whole industry. A decade ago it would have been reasonable to describe almost all LCCs as niche airlines, offering cheap fares to leisure passengers on leisure routes and a basic level of service — no transfer of baggage between flights, no airline lounges, no medium or long-haul flights, no premium class, no interline agreements, no frequent flyer schemes and no alliances.
>
> Today there is no agreed definition of LCCs. Ryanair and Southwest Airlines are the largest airlines in Europe and USA respectively, but otherwise are little different to the original LCC model … In Australia, Tiger Airways and Jetstar follow a similar model. On the other hand, airlines such as Virgin Blue[1], Norwegian Air Shuttle, Air Berlin and AirAsia X have moved well away from the original model — some of them now offer many of the 'frills' that once distinguished network carriers from LCCs. (sub. 46, p. 6)

The emergence of LCCs and other 'hybrid' airlines in recent years appears to have also generated new competitive pressures on airports, not least because such airlines often have more discretion in the destinations to which they fly. Unlike time-constrained business travellers — who typically need to use airports close to major business centres — leisure travellers can potentially use one of a range of airports in a region, or even a country, to start or end their journeys. This in turn has led to some regional airports, such as the Gold Coast and Avalon, adapting their services and offering deals specifically to attract LCCs, which might otherwise direct more services to the nearby capital city airports. Remote airports, such as Cairns and Darwin, also see themselves as competing with other destinations in Australia to attract passenger air services, particularly from abroad.

Lower airfares and an expanded range of service offerings, as well as more general factors such as rising incomes and growth in population, have led to strong passenger growth over the last decade (figure 2.3), which has also been reflected in the number of aircraft movements (figure 2.4).

1 Virgin Blue (now Virgin Australia) has recently moved from an LCC to a full service carrier.

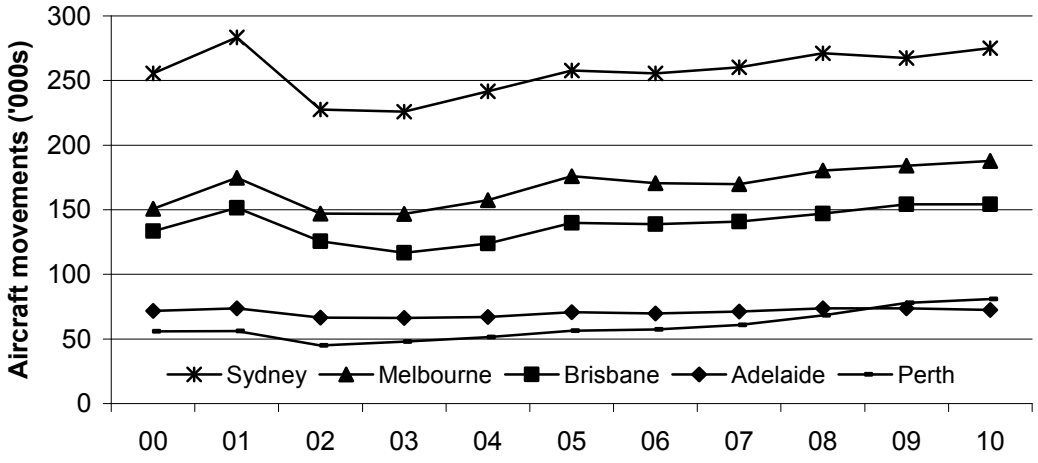
Figure 2.3 **Passenger growth at Australia's 10 largest airports[a]**
Millions of passengers from 2000-01 to 2009-10



a RPT only.

Data source: BITRE (2010a).

Figure 2.4 **Aircraft movements at selected capital city airports[a]**
1999-2000 to 2009-10



a RPT only.

Data source: BITRE (2010a).

The demand for air travel can fluctuate from year to year. Air travel in Australia fell noticeably in 2001 following the 11 September terrorist attacks in the United States and the collapse of Australia's second largest airline, Ansett. More recently, the global financial crisis, the H1N1 influenza outbreak in 2008, and flight disruptions due to a major volcanic eruption in Iceland have contributed to volatility in passenger numbers, but may have been partially offset by strong growth in LCCs.

The Bureau of Infrastructure, Transport and Regional Economics has forecast that by 2029-30, passenger movements will have doubled from their 2008-09 level, and that three airports (Brisbane, Melbourne and Sydney) will each need to accommodate at least 50 million passengers per year. Adelaide airport is forecast to receive 14 million passengers and Perth airport is forecast to cater for almost 25 million passengers by 2029-30 (table 2.5).

Table 2.5 **Air passenger movement[a] at selected capital city airports[b]**
1991-92 to 2029-30

Airport	*Number of movements (millions)*			*Annual average growth rate (%)*	
	1991-92	2008-09	Forecast 2029-30	1991-92 to 2008-09	2008-09 to 2029-30
Adelaide	3.0	6.8	14.1	4.9	3.5
Brisbane	6.7	18.8	51.2	6.2	4.9
Melbourne	10.4	24.5	57.7	5.2	4.2
Perth	3.1	9.4	24.8	6.8	4.7
Sydney	15.2	32.2	72.9	4.5	4.0

a Due to data unavailability, non-scheduled aircraft movements and seat utilisation are held constant at 2008-09 rates. **b** Due to data unavailability, the size of aircraft was taken to increase at 2 per cent a year for the first five years of the forecast period, and 1 per cent a year over the remaining forecast period.

Source: Adapted from BITRE (2010b).

Caution should be exercised in drawing inferences for future airport growth from such estimates. Factors such as responses to global warming, aviation fuel prices, and exchange rates can affect the attractiveness of air travel. Moreover, the extent to which increased air travel will translate into increased demand for more airports and/or expanded services at existing airports will depend in part on future technological and regulatory developments. For example, the use of larger aircraft and prospective developments in aircraft design and air traffic navigation have the potential to lessen aircraft noise and could facilitate a more intensive use of some existing airport facilities (chapter 13).

Even so, the magnitude of growth forecasts suggests that significant investment at the major Australian airports (in infrastructure and facilities), and possibly to the stock of airports providing significant RPT services for major cities, is likely to be required over the next two decades.

3 The institutional environment

Key points

- The Australian Government no longer runs airports, but continues to exert some control on leased airports through a range of instruments under the Airports Act. These specify required activities for airports and oblige airport operators to develop master plans.
  - State, Territory and local planning considerations may also be included in airport master plans.
- The ACCC monitors and reports annually on prices and quality of service at Australia's five largest airports. Four other airports are encouraged to 'self-monitor'.
  - A range of provisions of the Competition and Consumer Act — such as the Part IIIA national access regime — are available to discipline potentially anti-competitive practices by airports.
- State, Territory and Local governments own most local and regional airports and are involved in the provision of services and infrastructure used by airports or by people seeking to get to airports.

This chapter outlines the institutional environment of particular relevance to airports, namely:

- airport sale and lease conditions
- price and quality of service monitoring
- general competition legislation
- noise, safety and environmental regulation
- airport planning arrangements
- land access infrastructure and services.

The effect of a range of these government measures are analysed in chapters 5 to 10, and their policy merits, and alternatives to them, are the subject of chapter 11.

3.1 Airport sale and lease conditions

The *Airports Act 1996* (Cwlth) created an overarching system to govern airport activity. Among other things, the Act[1] provides for:

- *airport leases, the sale of airports and tripartite deed agreements* (see below)
- *ownership restrictions* — A minimum of 51 per cent of an airport must remain under Australian control. Airlines are not permitted to own more than 5 per cent of an airport, and there is a 15 per cent limit on cross-ownership between Sydney/Melbourne, Sydney/Brisbane and Sydney/Perth airports
- *site usage obligations* — An airport site must be used as an airport, and an airport operator is not to carry on 'substantial non-airport trading or financial activities'[2] nor undertake 'sensitive development' (box 3.5)
- *master plans* — The airport operator must establish a master plan that is subject to Ministerial approval. The master plan is a 20-year forward plan that identifies, among other things, development objectives, future aviation requirements, noise exposure forecasts, and intentions of land use and related development. The master plan needs to align with state, territory and local government planning laws, and additionally, the airport operator must provide a ground transport plan for the first five years of the master plan (box 3.4). Master plans are updated every five years
- *major development plans* — The airport operator must furnish a major development plan, for Ministerial approval, for each major development, which, among other things, covers the construction or changes to a new or existing: runway; passenger terminal; or other building, taxiway, road or railway which costs more than $20 million[3]
- *demand management schemes* — A demand management scheme may be established, subject to Ministerial approval (see box 3.3)
- *ancillary requirements* — The airport operator must conform to: environmental and safety regulations; international obligations; and standards for preparing audited accounts and reports.

A key element of the Act was the establishment of leases for certain airports to facilitate their privatisation — Brisbane, Melbourne and Perth airports were fully

1 The Airports Act has been subject to 20 amendments since commencing in 1996. The main amendments occurred in 1997, 2003 and 2010.

2 This phrase is not defined in the Airports Act, although it was examined in a recent airport development case in Brisbane — see chapter 5.

3 Mt Isa and Tennant Creek airports are not required to provide a master plan or a major development plan.

privatised in 1997, Adelaide airport in 1998, and Sydney airport in 2002. In total, some 22 former Federal Airport Corporation airports (table 3.1) were sold via 50-year lease agreements[4] between the Government as lessor and the airport operators as lessees.

Table 3.1 **Australia's federally-leased airports[a]**

Jurisdiction	*Airport*				
NSW	Sydney	Bankstown	Camden		
VIC	Melbourne	Essendon	Moorabbin		
QLD	Brisbane	Gold Coast	Townsville	Archerfield	Mount Isa
SA	Adelaide	Parafield			
WA	Perth	Jandakot			
TAS	Hobart	Launceston			
NT	Darwin	Alice Springs	Tennant Creek		
ACT	Canberra				

a Hoxton Park (NSW) was leased but subsequently sold to developers, and no longer operates as an airport.

Source: DIT (2010).

Various regulations have been made under the Airports Act elaborating on specific aspects of the airport leases. These include grounds for: refusing to transfer a lease, sublease arrangements, adherence to international obligations, and the definition of 'aeronautical services and facilities' for the purpose of the Australian Competition and Consumer Commission (ACCC's) monitoring of airports (section 3.2). The principal lease provisions are outlined in box 3.1.

Along with other provisions in the Act, the lease provisions effectively provide the Government with an ongoing element of control over the privatised airports. Additionally, the Department of Infrastructure and Transport conducts an annual review to monitor airport operators' compliance with lease conditions.

The federally-leased airports were privatised under formal sale agreements. For 10 of the airports,[5] the sale agreements included specific new aeronautical investment targets for the first 10 years of ownership (chapter 5), in addition to nominating the price paid. These investment targets were also subject to review by the Department of Infrastructure and Transport.

4 With a 49-year extension possible.

5 The 10 airports were Adelaide, Alice Springs, Brisbane, Canberra, Darwin, Gold Coast, Hobart, Launceston, Melbourne and Perth.

Box 3.1 **Airport lease provisions**

Between 1997 and 2003, the federally owned airports were sold via 50-year leases. The Department of Infrastructure and Transport has informed the Commission that the lease provisions covering each airport are broadly uniform. Drawing on the publicly available lease agreement for Canberra airport, the main provisions state that the lessee:

- has paid for a lease of the airport site (including the buildings, runways, taxiways, aprons, roads, dams, etc)
- is required to operate the site as an airport
- can pursue 'non-airport development', providing it is not inconsistent with the operation of the airport as an airport site
- can only refuse access to aircraft when the airline operator has failed to pay any amounts owing and the airport operator informs the Government of its decision to refuse access
- is required to invest in airport infrastructure (e.g. terminals, runways, taxiways, aprons, roads etc) that meets current demand and anticipates the level and nature of future demand for airport services
  - if the Government believes that an airport is not complying with its obligations to invest, it may request that airport provide it with detailed plans to bring the airport site up to the standard required. The airport has 60 days to submit a five year plan to the Government
- is to develop the airport site having regard to 'good business practice' (defined as providing appropriate facilities for comfort, ease of access, quick movement and efficient use of the airport site by passengers and other users)
- keep and maintain the airport site in 'good and substantial repair'
- is required to pay all rates, land tax, stamp duties and other taxes (or rate equivalent payments in their absence) for non-aeronautical development (as defined)
- must comply with all relevant site obligations including maintaining adequate insurance and environmental protection
- does not have rights to any minerals at the airport site
- is required to permit easements (e.g. sewerage, water etc, and 'transport or other services to the public').

The lease also provides arbitration provisions in the event of a dispute arising between the airport operator and the Government in relation to maintenance and investment issues.

Source: Canberra airport lease (unpublished).

An important lease provision was that the Government was entitled to reclaim an airport that failed to meet its lease obligations. Accordingly, for 12 of the privatised

airports, the Government entered into 'tripartite deeds' that were drawn up between the Government, the airport operator and any airport financier. The rationale for the deeds was to provide assurance to investors that, if Government reclamation occurred, the investors would be entitled to a return of their invested funds. The deeds ran for the first 20 years of the airport lease. In May 2011, the Government extended the deeds to cover the period until the expiration of relevant airport leases (Albanese 2011a).

3.2 Price and quality of service monitoring

The ACCC regime

Under Part VIIA of the *Competition and Consumer Act* (Cwlth) (CCA), the Government can direct the ACCC to monitor prices, costs and profits relating to the supply of goods or services by businesses in a specified industry. Price monitoring allows the ACCC to obtain detailed financial information from the businesses. The ACCC compiles the financial information and is permitted to make judgments on the relative levels of prices, costs and profits of the monitored businesses. Current monitored industries include stevedoring and medical indemnity insurance.

Under the CCA and in conjunction with the Airports Act, the ACCC is responsible for monitoring the prices of aeronautical services and facilities at Adelaide, Brisbane, Melbourne, Perth and Sydney airports. Prior to 2007 it also monitored prices at Canberra and Darwin airports, but these were excised following a review by the Productivity Commission (PC 2006). The monitored aeronautical services and facilities, which are prescribed in the Airport Regulations, are both aircraft-related and passenger-related (chapter 6). The services and facilities monitored range from runways, taxiways and aprons; to public areas in terminals and security systems. In addition to aeronautical prices, the ACCC monitors activity levels (that is, passenger movements), revenues, costs and profits at the five airports. The methodology used by the ACCC is prescribed under the Airports Act and must accord with accepted accounting standards. The ACCC presents its airport monitoring reports annually.

Under the Airports Act, the ACCC is also responsible for providing quality of service survey measures at the monitored airports. There are less stringent methodological requirements for the quality of service monitoring than for the price monitoring. The ACCC proposes the methodology (subject to Ministerial approval) in consultation with the industry. In practice, a selection of airlines, government agencies and passengers at each airport are surveyed. The surveys cover the quality

of airside facilities such as runways, taxiways and aprons, as well as landside facilities including common-use terminal services, taxi facilities and kerbside pick-up and drop-off points. The ACCC acknowledges that factors beyond the airports' control may influence the quality of service results:

> [T]he staffing and provision of IT equipment for check-in services by airlines and the staffing of government inspection services by the on-airport government border agencies may affect the quality results obtained for related services. (ACCC 2011, p. 13)

In addition to the aeronautical services and facilities specified in the regulations, the ACCC is also required to monitor car parking prices and quality of service levels. The monitored airports are required to furnish schedules of fees and information on charges and revenues, costs, assets, the number of parking spaces provided and the number of cars parked at each price point. These figures are disaggregated into public and staff car parking (ACCC 2009a, p. 22).

The ACCC monitoring regime is assessed in chapters 6 to 8.

Self-administered monitoring regime

In the Australian Government's 2009 Aviation White Paper (DITRDLG 2009a), it was announced that Canberra, Darwin, Gold Coast and Hobart airports would be subject to a self-administered monitoring scheme. The Government also encouraged Cairns airport to join the second tier airports' self-administered scheme.[6] Under the scheme, the airports are to establish a web-based reporting system that discloses information on:

- prices of aeronautical services
- prices of car parking services
- various quality of service outcomes
- airport complaint-handling processes and outcomes (DITRDLG 2009a, p 179).

The Government also encouraged the second tier airports to disclose customer/ passenger satisfaction surveys. It suggested that survey data be included on:

- passenger movements
- the provision of services and facilities for mobility impaired passengers
- check-in, information systems and baggage handling services
- retail services.

6 As Cairns is not a federally leased airport, the Government does not have lessor control over it. The Queensland Government currently has a 99-year lease in operation at Cairns airport.

The second tier airports are to produce their first monitoring reports later in 2011.

3.3 Other relevant competition legislation

As well as price and quality monitoring of airports under Part VIIA, other provisions of the CCA that are potentially applicable to airports are the:

- access regime under Part IIIA
- misuse of market power provisions in Part IV
- price surveillance powers under Part VIIA.

Interventions under these provisions could directly affect the behaviour of airports. Moreover, a credible 'threat' that anti-competitive behaviour could result in an action under the CCA should constrain airport behaviour, as it aims to for businesses generally. In this regard, it is worth noting that section 155 of the CCA provides the ACCC with general information gathering powers. It enables the ACCC to require a person to provide information, documents and/or give evidence if it believes that the CCA has been, or may be, contravened.

National access regime

Part IIIA of the CCA provides a legal process whereby a business can seek access to nationally significant infrastructure, on 'reasonable' terms and conditions, if it has been unable to negotiate access commercially. Part IIIA has been applied mainly to infrastructure such as key rail lines, ports or gas pipelines, but an airline or other business can also seek access to certain services provided by an airport.

For a business to obtain access rights under Part IIIA, it must first apply to the National Competition Council (NCC) to have a particular infrastructure service 'declared'. The relevant Minister also has the power to direct the NCC to examine whether a particular service should be declared. When assessing declaration applications, the NCC must consider six criteria that deal with the importance of the infrastructure service and whether declaration would promote competition in a market other than the market for the service, and be in the public interest. If the NCC considers that all the criteria are met, it recommends to the relevant Minister that the infrastructure service be declared.

Subject to the Minister's decision (and any appeals), services are declared for a period of time, which can range from 12 months to 20 years. Once declared, any business (not just the initial applicant) can seek to negotiate access to the service

with the infrastructure owner. If the parties are unable to reach agreement, the ACCC can be called upon to arbitrate a decision.

A number of access cases under Part IIIA have been brought in relation to airports. In 1996, Australian Cargo Terminal Operators brought multiple applications to declare ramp and certain other freight-related services at Melbourne and Sydney airports. The ramp access applications were later withdrawn. However, the other freight-related services at Melbourne airport were declared for 12 months from July 1997 (where the services then became subject to the access provisions of the Airports Act). Additionally, the 'other freight-related services' at Sydney airport were declared for a period of five years from 1 March 2000. And in 2002, the then Virgin Blue sought access to various services at Sydney airport. Domestic airside services were declared in 2005 for a period of five years (box 3.2).

Misuse of market power

Another CCA provision potentially applicable to an airport is section 46 of Part IV, which prohibits the misuse of market power by a corporation. In examining potential breaches, courts must determine whether the corporation has:

- a substantial degree of power in the relevant market
- used it to damage a competitor, or prevent entry or competition in the market.

Most of Australia's major airports are privatised and, as discussed in chapter 4, often have monopoly characteristics, so section 46 has the potential to apply to them. The provision might apply in upstream or downstream markets, such as aircraft refuelling or car parking services.

Prices surveillance

In addition to other competition provisions discussed above, the ACCC may conduct 'prices surveillance' under Part VIIA. The purpose of such surveillance is to achieve efficient prices in a market where the Minister deems there to be insufficient competitive pressures. In addition to price monitoring (discussed in section 3.2), Part VIIA provides two other price surveillance options, namely: a price inquiry and price notification. The Minister can instigate these measures and also has the power to require the ACCC, or any other body, to examine any specified matter.

Box 3.2 Virgin Blue's application for declaration at Sydney airport and subsequent amendments to Part IIIA

On 1 October 2002, Virgin Blue applied to the NCC to have airside and domestic terminal services at Sydney airport declared. On 6 December 2002, Virgin Blue withdrew its application for declaration of the domestic terminal services after reaching commercial agreement with Sydney Airport Corporation Limited (SACL). The application for a recommendation to declare the domestic airside services remained active (PC 2006).

The NCC issued its final recommendation to *not* declare the domestic airside services. The criterion on which the NCC failed the application was the requirement (as it stood at the time) that declaration needed to promote competition in another market. In addressing this criterion, the NCC determined that while SACL had an incentive to increase prices for domestic airside services, it was constrained by its desire to increase passenger throughput, and hence revenues, at the airport. The NCC also examined whether SACL's move from charging for aeronautical services by take-off weight to charging on a per passenger basis restricted the promotion of competition in the airline market. The Council considered that airside charges were only a small proportion of overall costs of air travel and that it was unclear that moving to a different charging basis would severely disadvantage some airlines over others, so as to limit downstream competition. Following the NCC's decision, the Parliamentary Secretary decided not to declare the domestic airside services at Sydney airport.

After a series of appeals to the Australian Competition Tribunal and the Full Federal Court, the NCC's recommendation not to declare the domestic airside services at Sydney airport was overturned. In doing so, the Federal Court adopted a new interpretation for determining whether declaration would promote competition in a dependant market. The approach effectively entailed a lower threshold than had been used previously. Following this decision, the domestic airside services at Sydney airport were declared for a period of five years. SACL unsuccessfully sought leave to appeal the Court's decision. The declaration of domestic airside services at Sydney airport expired on 8 December 2010. During the period of declaration, one dispute was raised with the ACCC, although this was resolved commercially and no arbitration was required. No inquiries or applications were received by the NCC in relation to declaration of the services for a further period.

The interpretation adopted by the Full Federal Court in deciding that the domestic airside services should be declared caused concerns that the threshold for declaration had been lowered to such an extent that Part IIIA could supplant the light-handed regime. However, that decision revolved around superseded declaration criteria. Since October 2006, Part IIIA has incorporated a higher threshold requirement that access promote a *material* increase in competition in a related market and also an 'objects clause' that emphasises economic efficiency. More recently, the Government introduced reforms to Part IIIA that streamline administrative processes (eg binding time limits and limited merits review).

Source: National Competition Council (sub. 21, pp. 6–9).

Price inquiry

A price inquiry involves an investigation of both prices and price movements of either a business or industry. Typically, an inquiry involves the ACCC investigating factors such as the current market structure, extent of competition, determination of prices and impediments to efficient pricing in either the business or industry. In undertaking an inquiry, the ACCC conducts hearings and, importantly, is not bound by the rules of evidence that apply in courts of law.

During the period of the inquiry, prices are not permitted to rise unless authorised by the ACCC.

The ACCC may make a wide range of recommendations to the relevant Minister. For example, in some previous price inquiries, the ACCC has recommended that:

- no further action need be taken — as in the 2008 Fertiliser price inquiry (ACCC 2008a); or
- further reviews and audits be undertaken, legislation be amended, and/or the ACCC consider taking action under other, stronger provisions of the CCA (such as under Part IV or prices notification under Part VIIA) — as in the 2007 Petrol inquiry (ACCC 2007).

At the conclusion of a price inquiry, the recommendations are presented to the relevant Minister who decides whether or not to adopt them.

Price notification

Any business can be made subject to price notification requirements, via Ministerial gazettal. Where this occurs, the business may not increase its price above the highest notified price in the preceding 12 months, unless granted an exception.

There are three current price notifications, namely:

- Australian Postal Corporation (Australia Post) over a series of prices including: impact mail, reserved letter and reply paid services
- Airservices Australia (ASA) over a series of prices including: en-route and navigational services, and aviation rescue and fire fighting services
- SACLs prices for regional air services. Sydney airport's aeronautical charges were subject to price notification prior to its privatisation in 2002.

If any of the above businesses intends to increase its prices for a notified service, it must inform the ACCC. The ACCC must then decide whether or not to object to the price increase. For example, in 2010 SACL notified the ACCC of its intention to

increase its prices for regional air services, which was to be the first price increase since 25 May 2001. However, the ACCC objected to SACL's proposed price increase. The ACCCs objection has 'moral suasion', but no binding legal effect. Hence, SACL could increase its prices to the notified rate if it so desired. However, doing so could risk triggering more intrusive regulatory scrutiny.

3.4 Other regulation of airports

A range of other regulations also affect airport operators and activities, covering such matters as noise levels on the surrounding community, safety, security and environmental protection.

Aircraft noise

Aircraft noise affecting nearby residents is dealt with through movement curfews. Four airports are subject to aircraft movement curfews: Sydney, Adelaide, Gold Coast and Essendon airports. The curfew is from 11pm to 6am the following day at all four airports. However, Sydney, Adelaide and Gold Coast airports all have specific movement allowances whilst the curfew is in effect, to permit some flights during this period. Essendon airport has no specific movement allowance; rather, movements during the curfew period are permitted based on either aircraft weight or landing or take-off noise emitted. Sydney airport also has a demand management system that restricts aircraft movement whenever the airport is operational (outside of curfew restrictions) (box 3.3).

Safety, security and environmental regulation

Airservices Australia (ASA) is responsible for safe navigation of aircraft within Australian airspace. ASA was established in 1995 and provides: air traffic services; aeronautical information, telecommunications, radio navigation services; and rescue and fire fighting services. ASA charges airports for the provision of these services, which are subject to price notification (section 3.3). Meanwhile, the Civil Aviation Safety Authority (CASA) is responsible for safe aircraft operations. This ranges from registration of aircraft to determining 'airworthiness' and maintenance accreditation. CASA also provides flight training and simulation services to pilots. CASA also grants air operator's certificates that permit business activities by an airport including: regular public transport, aerial work such as surveying and photography, and charter services (CASA 2008).

Box 3.3 **Curfews and demand management schemes**

Sydney airport

Sydney airport's curfew began in 1963 (although it was not formally codified until 1995). International passenger aircraft may take-off or land at Sydney airport between 11pm and midnight, or may land at Sydney airport between 5am and 6am, if they meet noise level restrictions, land or take-off from specified runways and the movement is approved. The regulations have prescribed lower movement limits than those originally enacted in the legislation (see below).

	Curfew Act	*Curfew Regulations*
Maximum take-offs and landings (taken together) between 11pm and midnight	• Per week: 14 Per day: 4	• Per week: 0 Per day: 0
Maximum landings between 5am and 6am	• Per week: 35 Per day: 7	• Per week: 24 Per day: 5

- *Sources*: *Sydney Airport Curfew Act 1995* (Cwlth), Sydney Airport Curfew Regulations 1995 (Cwlth).

Aircraft movement restrictions are prescribed under the *Sydney Airport Demand Management Act 1997* (Cwlth), which prescribes a maximum of 80 aircraft movements in any hour (except during the curfew period when the curfew provisions take effect). The movement cap is accompanied by a slot management scheme, which includes grandfathering provisions on rights to slots as well as a 'use it or lose it' test, and details on applying, allocating and swapping slots. It also incorporates a 'regional ring fence' which effectively creates a separate pool for regional slot users. Under the regional scheme, a regional service operator may gain a permanent slot provided the service is operated for two consecutive seasons (section 10). Regional slots are not transferrable to non-regional services (section 19).

Adelaide airport

The Adelaide airport curfew began in 2000, and is predominantly to deal with international aircraft and freight movements. Currently, the maximum weekly movements by international aircraft during curfew shoulder periods is zero take-offs and eight landings. The maximum movements prescribed for low noise heavy freight aircraft during curfew periods is 15 take-offs and 25 landings per week. Additionally, regulations specify a list of domestic jet aircraft that are permitted to take-off or land during the curfew period.

Gold Coast airport

The Gold Coast airport curfew began in 1999. Currently, the restriction is set at 24 domestic passenger jet aircraft movements *per year*, during the curfew periods. Additionally, during the curfew period, only four freight jet aircraft are permitted per week. International aircraft movements are not permitted under the regulations.

Sources: *Adelaide Airport Curfew Act 2000* (Cwlth), *Air Navigation Act 1920* (Cwlth), Air Navigation (Coolangatta Airport Curfew) Regulations 1999 (Cwlth), Air Navigation (Essendon Airport) Regulations 2001 (Cwlth), *Airports Act 1996* (Cwlth), Slot Management Scheme 1998 (Cwlth), Sydney Airport Compliance Scheme 1998 (Cwlth), *Sydney Airport Demand Management Act 1997* (Cwlth).

Security (including border security) services at the major airports are provided by a range of Government bodies, including the Australian Customs Service, Australian Quarantine and Inspection Service, Department of Immigration and Citizenship, and Australian Federal Police.

Airport operators must have regard to the environmental provisions of the Airports Act as well as other environmental statutes, most notably the *Environmental Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act). The EPBC Act ensures that matters significantly affecting the environment are fully considered through, for example, an environmental impact statement. Additionally, under the new master plans amendments, airport development needs to be consistent with state, territory and local government planning instruments.

3.5 Airport planning arrangements

Whether the airport is federally leased or under state, territory or local government control determines which planning regulatory system applies. Federally-leased airports in Australia (table 3.1) are generally only subject to Commonwealth laws. There are 138 regular public transport airfields that are under state, territory or local government control. These airports (the largest of which is Cairns) are subject to state and territory government legislation.

Federally-leased airports

As outlined in section 3.1, an important requirement of the airport operator is to establish a master plan that must be approved by the relevant Minister. A master plan must identify, among other things, development objectives, future aviation requirements, noise exposure forecasts, and intentions of land use and related development.

In 2010, the Airports Act was amended and the requirements of an airport master plan made more specific, as illustrated in box 3.4.

Box 3.4 **Additional airport master plan obligations**

As a result of the 2010 amendments to the Airports Act, airports must develop an 'environmental strategy', covering the 20 year duration of the master plan, that details:

- the operator's objectives for environmental management
- areas within the airport site (in consultation with State and Federal conservation bodies) identified as environmentally significant
- the sources (as well as studies, reviews and monitoring) of environmental impacts as a result of carrying on aviation operations and respective timeframes for completion
- specific measures to be carried out by the operator for the purposes of preventing, controlling or reducing the environmental impact of aviation operations (and their respective timeframes), which, must have regard to among other things, the history of the site.
- the consultations (and their outcomes) undertaken in preparing the strategy
- any other matter as prescribed by the regulations.

Additionally, for the first five years of the master plan, airport operators are now required to provide detailed information on:

- a ground transport system on the landside of the airport, including:
  - a road network plan
  - facilities for moving people and freight
  - linkages between the facilities, the road network and public transport system at and outside the airport
  - arrangements with State or local authorities or other bodies responsible for the road network and public transport system
  - the capacity of the ground transport system
  - likely effects of the proposed development on the ground transport system and traffic flows at and surrounding the airport
- proposed developments that are to be used for commercial, community, office or retail services or for any other purpose that is not related to airport services
- the likely effects on employment levels and the local and regional economy and community including how the proposed development fits within the planning schemes for commercial and retail development in the area surrounding the airport.

Source: *Airports Amendment Act 2010* (Cwlth).

A key element was to increase the level of public consultation. Planning Coordination Forums for all main capital city passenger airports and Community Aviation Consultation Groups for the federally-leased airports (apart from Mt Isa and Tennant Creek airports) have been established. The Consultation Forums bring together the three levels of Australian Government on issues associated with master

plans, development proposals and regional planning initiatives. The Consultation Groups facilitate discourse between the airport operator, the community, government, airport users and other stakeholders.

In addition to the master plan amendments, the 2010 amendments to the Airports Act also required master plans to identify proposed 'sensitive development' (box 3.5). Sensitive developments are prohibited unless the development has Ministerial approval as part of an airport major development plan.

Despite the recent additional master plan requirements, federally-leased airports are under no direct obligation to conform to state or territory government planning laws for landside development. They must, however, provide the same level of planning details as any other state or territory development and justify any inconsistencies with the respective planning schemes.

Box 3.5 What is a 'sensitive development'?

A sensitive development is the development (or redevelopment that increases the capacity) of:

- a residential dwelling
- a community care facility (which includes aged care facilities, a nursing home, a retirement village, or a respite facility)
- a pre-school
- a primary, secondary, tertiary or other educational institution
- a hospital.

A sensitive development does not include:

- an aviation educational facility or accommodation for students studying at the facility
- a facility with the primary purpose of providing emergency medical treatment that does not have in-patient facilities
- a facility with the primary purpose of providing in-house training to staff of an organisation conducting operations at the airport.

Source: *Airports Amendment Act 2010* (Cwlth).

Non-federal airports

The Australian Government no longer has an ongoing responsiblity over non-federal airports.[7] These airports are subject to the relevant state or territory government's planning laws. State and territory planning laws are more prescriptive than the laws that the federally-leased airports must comply with. For example, Avalon airport stated that it:

> … is currently subject to two planning regimes. The Department of Defence imposes restrictions which are not consistent with the Airports Act. The State Government has also introduced a planning scheme. Under the State jurisdiction, Avalon Airport is permitted just 3,000 square metres of retail space throughout the airport. Subsequently the restrictions at Avalon Airport are far more onerous than any other airport, and particularly Tullamarine. (sub. 51, p. 3)

The planning arrangements for airports is discussed in chapter 12, and regional airports are discussed further in chapter 13.

3.6 Land access infrastructure and services

Both public and private entities play key roles in facilitating land access to airports for passengers (as well as for freight, and airport and airline staff). For a passenger, the 'door-to-door' time and cost of a journey will depend not only on the airport/flight/airport leg but also on the efficacy and cost of land access to and from relevant airports. Thus, provision of land access infrastructure and services can affect the attractiveness of flying and of particular airports. (Equally, developments on-airport that increase travel to the airport, and thus increase demands for connecting infrastructure and services, can have ramifications for governments and planning agencies in particular.)

Most passengers access the major Australian airports by road, whether in a private vehicle, taxi or bus. State or local governments are generally responsible for providing and maintaining roads up to the airport boundary (with the airport providing and maintaining any roads on the airport). The planning and funding of road access to airports is typically undertaken by these governments, and are subject to the governments' normal planning processes, expenditure constraints and the need to prioritise funding among many competing needs and potential projects. In some cases, representatives of airports are consulted by these governments, or task forces are established, to give specific attention to the issues generated by major airports. State and local government funding has sometimes also been augmented

[7] The Government previously owned all airports in Australia, however it divested itself of all ownership of 'non-federal' airports between 1958 and 1993.

with funding from the Australian Government and/or the airport, as occurred recently in Canberra and Perth (chapter 12).

As well as having primary responsibility for providing roads, State and/or local governments also have roles in relation to wider public transport access to airports, such as the direct provision or oversight of mass transit services to airports and the licensing of taxis. Two major airports — Sydney and Brisbane — receive passenger train services. Both of these services were established under 'public-private partnerships' between the relevant State government and private operators. In both cases, establishment agreements included clauses to limit competition from bus services so as to make the rail services more viable (chapter 12).

Issues relating to the roles of different governments and private infrastructure operators at airports in providing adequate land access to airports are also discussed in chapter 12.

4 Market power and regulation

Key points

- The principal rationale for government intervention in the market for airport services is to prevent airports from abusing their market power.
  - Abuse of market power could be reflected in unduly high prices for airport services, or an unduly low quality or range of services offered, inefficiently provided services or wasteful expenditures. Such outcomes would adversely affect airlines, passengers and other industries.
- Some recent developments in airport markets — most notably the growth in low cost carriers — appear to have lessened the market power of many airports.
  - Non-aeronautical revenues may also have some mitigating effect on an airport's incentive to misuse its aeronautical market power.
- Nonetheless, the market power of Sydney, Melbourne, Brisbane and Perth airports is sufficient to warrant policy attention, while that of Adelaide airport is more marginal.
  - Darwin and Canberra airports have insufficient market power to warrant price and quality of service monitoring.
- While some technological innovations and changing industry practices have likely reduced airports' market power over some aeronautical services, the benefits of trying to fine tune the current monitoring coverage are unlikely to outweigh the costs.
- In assessing the appropriate regulatory response, there are a number of important factors.
  - The main effect of insufficiently restraining airports' market power is likely to be inefficient increases in prices, resulting in a transfer from airlines to airports.
  - However, excessive 'clamping down' on aeronautical prices is likely to detract from economic efficiency and, in particular, diminish investment incentives.
  - Price discrimination by airlines may ameliorate some of the welfare effects caused by any inefficiently high airport charges.
  - Furthermore, airport charges are a low (and stable) proportion of airfares, further reducing the likelihood that increased prices will reduce passenger numbers.

There is extensive economic literature on the technical conditions for economic efficiency and how market forces and/or government intervention can help achieve that goal. The literature recognises the important role of prices in allocating resources in a market economy, while also recognising that government intervention is sometimes warranted to address certain deficiencies in markets. In the case of airports, the key rationale for intervention is to address the potential abuse of market power by airports associated with their monopoly characteristics.

In this framework chapter, the Commission revisits the case for the economic regulation of airports, and sets out principles for gauging its effectiveness. These matters were canvassed extensively in the Commission's previous reports (PC 2002a, 2006). Rather than duplicate those reports, this chapter covers the key aspects. The chapter:

- outlines what 'economic efficiency' does (and does not) mean in the airports context (section 4.1)
- sets out the adverse efficiency effects associated with the abuse of market power, and identifies which major airports have material market power, and over which services and facilities they may be able to exercise it (sections 4.2–4.4)
- examines the merits of other rationales that are sometimes advanced to support the economic regulation of airports (section 4.5)
- discusses the implications for assessing the current regulatory regime and possible alternatives or improvements to it (section 4.6).

Using the efficiency principles established in this chapter, subsequent chapters evaluate how the current regime is performing and whether improvements can be made.

4.1 Economically efficient airports

An economically efficient firm or industry is one that uses land, labour, capital and other resources in a way that generates the greatest possible value for the community — whether workers, investors, consumers, taxpayers or others affected by its activities. While few firms or industries ever fully attain this state, the efficiency concept provides a useful theoretical benchmark against which to appraise the performance of firms and industries, and whether (additional) government intervention may be warranted to improve outcomes.

General requirements

There are four broad requirements for an economic entity — whether an individual, a firm, an industry, a sector or an economy — to be economically efficient:

- whatever the quantity and quality of goods or services that the entity produces, it must produce them at the least possible cost (called 'productive efficiency')
- the entity needs to produce the 'highest value' range and balance of goods and services possible with the resources it uses (an aspect of 'allocative efficiency')
- the entity needs to expand up to, but no further than, the point at which using additional resources elsewhere (for example, in other parts of an economy) would provide more value than using those resources within the entity (another aspect of 'allocative efficiency')
- the entity must achieve these feats through time, with the rate of expansion (or, in some cases, contraction) balancing the benefits of generating more consumption today with those of saving resources, or investing today, to have more to benefit from tomorrow (called 'dynamic efficiency').

In very general terms, these requirements would mean an optimal number and distribution of airports around the country, with the nature, capacity and utilisation of airports reflecting the demands of travellers and other airport users and the costs of building and operating them.

For any particular airport, efficiency would mean that the range, quality, quantity and configuration of facilities and services provided — whether runways, terminal space, check-in counters, retail options or car parks — reflected the demands of airlines, travellers and others who use or are affected by the airport, and the costs of providing or changing different facilities and services at the airport. It would also require that the services and facilities provided be utilised or 'consumed' efficiently; that is, without either undue congestion or excessive spare capacity. To achieve this, such an airport would need to expand (or retire) capacity in a timely but not precipitate manner. And at any particular point in time, it would need to ensure that its services and facilities were priced or rationed appropriately. (What constitutes an efficient level and pattern of investment in, and production and consumption of, airport services is explained in more detail in later parts of this report.)

'Efficient' pricing

In the market sector of an economy, the 'price mechanism' plays a pivotal role in promoting economically efficient levels and patterns of production, consumption and investment. Among other things, prices reflect a consumer's 'willingness to

pay' for a good or service relative to other goods and services, indicating its value to that consumer. The aggregate price of the production inputs is a measure of the costs entailed in making a good or service. In a competitive market (where prices are not inflated unduly above relevant costs), and other market distortions are not present, consumers will generally purchase the goods and services that yield the greatest value to them. Likewise, the potential for higher profits will drive businesses to produce only those products for which the value to consumers — as reflected in the price they are prepared to pay — exceeds the production costs by the greatest margin possible. Beyond these fundamental functions, market prices also ration use of existing assets and scarce resources, with prices rising where there is 'excess demand' and thus reducing consumption, and vice versa. This in turn can signal the need for investment/disinvestment in a particular activity.

For a business to operate efficiently in an allocative sense — that is, to ensure the best use of the existing services and facilities — it generally requires that those services and facilities be priced no higher than their short-run *marginal* cost. In competitive markets, the presence of profits in an industry (that is, where prices exceed the marginal cost of production) will attract generally attract new businesses to the industry, who compete and reduce prices until they are equal to the marginal cost. However, as the Commission noted in 2002, airports exhibit characteristics of a 'natural monopoly' — a particular market case where it is more efficient for a single firm to produce the entire output for the industry, rather than multiple competing firms.

Natural monopolies often occur in industries that are dominated by high capital (or 'fixed') costs, resulting in economies of scale. For an airport, the cost of building aeronautical facilities (such as a runway) is large, but the marginal cost (the cost incurred in producing an extra unit, such as an additional runway takeoff) may be close to zero. In this case, where short-run marginal costs are less than the average cost of production, marginal cost pricing will not provide a normal return on investment and, in the long-run, would be likely to result in a less-than-efficient expansion in the capacity of the airport. As the Commission's 2002 report concluded, where airports are required to be self-financing, efficient (average) prices will exceed short-run marginal cost, although they will not be so high as to generate persistent excess profits.[1]

[1] However, the Commission has also noted that even in the presence of large fixed costs and a requirement for a natural monopoly to be self-financing, efficient levels of output may be feasible if the firm is not constrained to set uniform prices. With multipart pricing and/or price discrimination, fixed costs can be allocated fully to customers, but with marginal consumers and/or marginal sales making little, if any, contribution (PC 2002a).

While the price mechanism can help promote efficient outcomes, determining whether particular airport prices are consistent with efficiency turns on a range of (technical) considerations. Additionally, there are a number of reasons why prices might exceed the marginal cost of providing aeronautical services and still deliver efficient outcomes.

First, pricing services and facilities in excess of costs may not create inefficiency to the extent that the higher prices reflect 'locational rents'. As discussed in chapter 8, this issue is particularly important with respect to car parking, where at least part of the price for parking close to terminals is attributable to the high demand for such land relative to its supply. The benign efficiency effects of prices that reflect locational rents can be contrasted with the adverse effects of prices inflated due to restrictions on competition. As the ACCC stated:

> Location rents are linked to the scarcity of land and monopoly rents are additional returns that can be extracted through the use of market power. The distribution of location rents does not necessarily affect economic welfare. However, monopoly behaviour could lead to a loss of consumption and discourage the use of alternatives to on-airport car parking. (sub. 3, p. 2)

Second, where there is congestion at an airport (that is, demand for services that exceeds an airport's ability to provide them), higher prices ensure that the scarce available capacity at the airport is allocated to those airlines (and their customers) with the highest willingness to pay, reflecting the value to those customers. In the absence of higher prices, congestion is often alleviated through quantity restrictions for customers (such as rationing), queuing and other delays, or particular customers simply 'missing out' on consuming the services they desire.

A third aspect of airport pricing is that there can be complementarities between aeronautical and non-aeronautical services. Airports receive revenue from airlines, but also directly from air passengers, for example when using on-airport car parks or retail outlets owned (or leased) by the airport operator. Airport operators have a commercial incentive to consider restraining aeronautical charges to airlines to indirectly induce more passengers to use their airport, and thereby potentially contribute to non-aeronautical revenues (box 4.1). In previous inquiries, airlines have argued that profits earned through non-aeronautical activities should be used to reduce aeronautical charges — effectively, to cross-subsidise the aeronautical facilities paid for directly by airlines. However, the Commission found that efficient aeronautical pricing does not necessarily require the transfer of non-aeronautical revenues to reduce aeronautical charges. Doing so may well lower charges below the marginal (long-run or even short-run) costs of providing those services and discourage investment in them (PC 2002a).

A fourth issue relates to whether price increases required to recoup the costs of large scale infrastructure should be brought forward (ahead of the facility becoming operational) or await the start of operations. This issue has arisen in relation to the proposed new runway at Brisbane airport. The literature, while not definitive, indicates that raising charges for the use of an existing runway may be an efficient mechanism for addressing the financing costs of the new runway given congestion of existing infrastructure (chapter 5). This indicates that the normal nexus between efficient prices and costs, when dealing with congestion and infrastructure with long lead times, is not straightforward.

The upshot is that a range of prices, and price-cost gaps, across different airport services and facilities and different airport users may be consistent with efficiency.

Box 4.1 The impact of non-aeronautical revenue on airport charges

As discussed in chapter 1, Australia's major airports are multi-product businesses, providing both aeronautical facilities and services to airlines, and complementary facilities and services to other businesses — and by extension — passengers. Depending on the degree of complementarity (that is, how decisions about one part of the business impact on the prices and profits of another, and thus overall profitability), airports may not have an incentive to exercise their market power to the same degree as if they were a single product monopolist.

As noted earlier, a firm with market power will maximise profits by reducing the quantity of goods or services it supplies to the market in order to increase the price it charges. In practice a profit-motivated firm will engage in behaviour that maximises its total profits, not simply the profits from one segment of its business.

In the context of an airport, the value of non-aeronautical assets that provide aeronautically-related services is likely to be maximised when passenger throughput is maximised. For each of the price monitored airports, in 2009-10 their total airport rate of return was higher than the rate of return on aeronautical assets alone (ACCC 2011). It is possible that by setting aeronautical charges at monopolistic levels, airports could damage their overall profitability if such charges resulted in a reduction in passengers.

Given that non-aeronautical revenues contribute a sizeable proportion of the major airports' total revenues, the Commission would welcome further information on this issue.

Information request: The Commission requests additional information on whether an airport's ability to earn non-aeronautical revenue provides an incentive to constrain aeronautical charges, and if so, to what extent this currently occurs.

Some non-requirements

While the services and facilities offered by an economically efficient airport would be strongly attuned to user demands, meeting some user demands will not pass a cost–benefit test. An economically efficient airport may not always:

- *satisfy the demands of all prospective users* — Where useable land or other resources on an airport are constrained, the airport will need to ration the resources among a range of prospective uses. In some cases, it will be economically efficient that 'lower-value' uses miss out on access to a particular airport, to provide more scope for 'higher value' uses.
- *offer high quality services and facilities* — While some passengers and other airport users may value, and be willing to pay for, high quality services and facilities, others will prefer more rudimentary facilities. An efficient airport will balance different user demands, and may offer a range of different quality services and facilities. However, depending on the costs of providing differentiated service levels, it may be economically efficient — or 'fit for purpose' — for some airports to provide only lower quality, budget services.
- *eliminate congestion* — While congestion imposes costs on users, investment in additional capacity to alleviate congestion also entails costs, and inevitably there is uncertainty around demand forecasts and whether future demand will turn out to justify capacity expansion. Determining the optimum timing of investment in additional capacity is difficult but it will not necessarily always be efficient to expand capacity in advance of demand (chapter 5).
- *keep prices low and tied to production costs* — As discussed above, while efficiency generally requires that the prices charged for goods and services reflect their cost of production, sometimes prices in excess of physical production costs are necessary to reduce excess demand for services and facilities, and thus lessen congestion, while also providing a signal that greater investment in a particular service or facility may be warranted. Airports may also undertake 'Ramsey pricing' — setting prices above marginal costs for users or uses that are price-insensitive, in a bid to recoup some of the large fixed costs associated with an airport — while keeping prices lower for users and uses that are price-sensitive. And for some services and facilities, locational rents may justify prices in excess of costs.

This highlights the need for careful analysis in assessing the extent to which particular airport actions might diverge from the efficiency objective. Some actions that prima facie may appear economically undesirable may on closer examination be economically sound.

4.2 The market power rationale for airport regulation

The economic case for regulating airport services rests on the argument that, left to their own devices, 'market forces' are unlikely to lead to an economically efficient pattern and level of investment in, and/or use of, airports.

As noted, the primary area of potential 'market failure' in relation to airports is the scope for them to abuse their market power. A firm can be said to have market power if it can sustain prices above the efficient cost of supply for a significant period of time. It is widely accepted that many airports are geographic monopolies or, at least, face insufficient competition from nearby airports to prevent them from exercising some market power. According to the ACCC:

> A monopoly does not have an incentive to set prices at an efficient level because there is no competitive discipline on the firm's decisions. A monopolist does not need to consider how and whether or not other firms will respond to its prices. The firm's profits depend only on the behaviour of consumers, its cost function, and its prices or the amount supplied. This classic economic model of monopoly behaviour can be applied to the major airports. (sub. 3, p. 8)

As discussed in previous reports (PC 2002a, 2006), the exercise of market power by airports can manifest in some or all of a range of ways. First, an airport with market power could seek to raise prices for its services above economically efficient levels. In doing so, the airport would effectively lower the consumption of its services and 'deadweight losses' (the benefit that consumers would have gained if they had used the airport at the competitive price) would ensue. Second, an airport with market power could, while maintaining prices, allow quality to fall, for example by reducing staffing levels, using cheaper inputs or replacing plant and equipment less frequently. This would also have the effect of reducing consumption as, at the margin, some consumers would be unwilling to pay the same price for the lower quality service. Such a practice may be likely where prices are constrained — for example, by price control regulation. Third, lack of competitive pressures could enable a firm to operate inefficiently by allowing its costs to rise or by it not adopting cost-saving or innovative technologies. Such inefficiency could be at the expense of the airport's profits but may yield a 'quiet life' for managers.

However, it is important to note that airports do not provide air services to passengers directly; rather, they provide services that airlines rely on to provide their own services to passengers. The extent to which increases in aeronautical prices impacts on the welfare of society as a whole depends (at least in part) on the airlines' response to such increases. Given their market power, airlines themselves may be able to ameliorate much of the welfare effects (the deadweight loss) through price discrimination (box 4.2).

Box 4.2 Price discrimination and welfare effects

The economic literature argues that a monopolist will maximise its profits by reducing the total quantity of goods or services it supplies to the market, in order to increase the price charged. This has two effects: first, some of the consumer surplus is 'transferred' from consumers to the monopolist (this is a *distribution* of welfare), and second, some of society's welfare is 'lost', as some consumers are no longer willing to consume the good at the increased price. The consumer surplus they would have received from consuming the good at the original price is a reduction in welfare.

However, airports do not supply air services directly to passengers; rather, they supply services to airlines. Thus, any analysis of the welfare impacts of airport charges depends on the impact that changes in aeronautical charges have on the final consumption of airline services by passengers. Instead, for there to be a reduction in welfare caused by an increase in aeronautical charges, there must be a change in the quantity of airline services consumed by passengers. Given that aeronautical charges are an input into an airlines' costs, all other things being equal, an increase in charges will increase the cost of supply, and reduce the quantity of air services supplied by airlines at each price.

For this to occur, airlines must be able to vary the quantity of air services they provide. While that might be possible in the long-run (for example, returning aircraft at the end of a lease), submissions (eg Qantas, sub. 52) indicate that for airlines, their quantity of air services is reasonably fixed.

The other way airlines might reduce quantities is to reduce their *load factors*. Load factors represent the utilisation rate of aircraft on each route flown. In a simple fashion, an airline has two options when faced with an increase in aeronautical charges:

- Keep prices constant, which will reduce the yield (profitability) of each flight, but maintain the number of passengers (load factor)
- Increase prices, which will lead to reduced load factors; flying each aircraft with fewer passengers but maintaining the yield of each flight.

Each of these options have different impacts: reducing the yield of each flight represents a distribution of profits from airlines to airports. Increasing prices, but reducing load factors, reduces total consumer surplus (and thus welfare), as described above.

This analysis is predicated on any increase in aeronautical charges being passed on to consumers. However, in practice airlines potentially have a third option for managing increases in aeronautical charges — that is, to take advantage of different levels of demand passengers have for flights. 'Price discrimination' refers to the practice of firms charging different prices to different consumers for the same product. A firm that is able to do this 'captures' the consumer surplus for each identifiable group of consumers, increasing profitability without the loss of welfare that would come from increasing prices for all consumers.

(Continued next page)

Box 4.2 (continued)

Airlines actively price discriminate across passengers, in a number of different ways:

- Airlines offer a number of different ticket 'classes' (such as business and economy), where the difference in ticket prices is not fully accounted for by differences in underlying costs. Airlines price discriminate further by segregating the economy class passengers. For example, the airline may impose baggage restrictions (which could be either weight or quantity based, or a combination), offer 'exit row seating', and/or offer inflight catering.
- Airlines also price discriminate based on time. A passenger may be able to receive a relatively cheaper airfare the further in advance that they book, and vice versa. Additionally, there maybe 'popular' route times; for example business travellers would tend to value early morning and early evening flights more than a flight during the day. If there is sufficient demand for the popular route times, airlines can ration the excess demand by charging a higher airfare.

The extent to which airlines can price discriminate against passengers (including the degree to which it can discriminate which passengers pay airport charges) reduces the welfare effects of an increase in airport charges. In practice, airport charges make up such a small proportion of total airfares that even large increases in these charges are unlikely to have significant welfare effects, and will largely represent a 'distribution' between airlines and airports.

4.3 Which airports have market power?

The Commission's 2002 analysis

The Commission has previously noted that the degree of market power, and the extent to which it persists, depend broadly on:

- the extent of barriers to entry to an industry
- the availability of reasonably close substitutes (PC 2002a).

Accordingly, the Commission analysed these factors for airports generally, as well as considering their incidence for individual airports.

At the general level, it found that barriers to entry (the inability for a second airport to be established nearby) provide significant protection for incumbent airport operators. It also found that the responsiveness of demand for airport services varied (box 4.3).

Box 4.3 **Elements of the Commission's 2002 analysis**

Barriers to entry

The Commission's 2002 report concluded that significant barriers to entry in the airports sector can arise due to the monopoly characteristics of airports coupled with regulatory constraints. Based on a detailed analysis of the market cost structure and investment, airports were found to: have high fixed costs, resulting in potential 'sunk cost' risks; exhibit both economies of scale and scope; and benefit from airline networks (eg airlines undertaking substantial 'sunk' investments at airports). It found that regulatory barriers to entry could arise as a result of planning or noise restrictions, and environmental legislation.

Substitution possibilities

In assessing the scope of airports' market power, the Commission examined the elasticity of demand for airport services. ('Elasticity' refers to the responsiveness of demand for airport services to changes in its price.) In so doing, it examined four areas, namely: the sensitivity of air travel to a particular destination; alternative sources of supply for a particular airport's services; airport charges as a proportion of airline costs; and the elasticity of supply (supply responses) of other inputs. It found that the responsiveness of demand for airport services varied across airports and market segments, due to factors such as the location of alternate airports and the degree of substitution with other forms of travel.

Source: PC 2002a.

Based on detailed airport-by-airport analysis of the then 12 'core-regulated' airports, the Commission concluded that:

- Alice Springs, Coolangatta (now Gold Coast), Hobart and Launceston airports appear to have little market power because of their reliance on the tourism market and, particularly for this market segment, scope for competition from 'nearby' airports. Townsville airport also has limited market power because of its reliance on the holiday market (and scope for competition between holiday destinations and from other transport modes).
- Adelaide, and to a lesser extent, Canberra and Darwin have a moderate degree of market power. Although Adelaide and Canberra have high proportions of business and travellers visiting friends and relatives (VFR) and do not face significant potential for airport substitution, they (especially Canberra) do face material competition form alternative transport modes.
- Brisbane, Melbourne, Perth and Sydney possess a high degree of market power in domestic markets due to high proportions of business and VFR travellers, and their status as the main international ports of arrival and departure in the country.

Competition among those airports for international traffic may moderate, though not eliminate, this latter effect.

While concluding that a number of major airports had high or moderate market power, the Commission also observed that there were a number of commercial disincentives or constraints on its use. These included the importance of non-aeronautical revenues to airports (which provide them with some incentive to restrain charges so as to not unduly constrain patronage) and the potential for some airlines to exercise countervailing power.

Nevertheless, it concluded that Adelaide, Canberra and Darwin (as well as Brisbane, Melbourne, Perth and Sydney airports) had sufficient market power to warrant being subject to the light-handed regulatory regime recommended by the Commission for major airports.

The Commission's 2006 update

In its 2006 inquiry, the Commission used the previous report's analysis as a starting point from which to assess what (if any) changes to market power had occurred during the intervening period. The Commission observed that there had not been substantial change in either airlines' passenger mix (eg business or holiday) or the availability of modal substitutes, although it found that airline countervailing power had generally been less effective than had been anticipated in 2002 (PC 2006). In examining whether market power concerns were sufficient to warrant continuation of price and quality monitoring, the Commission concluded that they remained sufficient for all of the then monitored airports other than Darwin and Canberra (both of which had been assessed as having the least market power of the airports subject to monitoring):

- In relation to Darwin, several factors were judged to have constrained the airport's monopoly power. Virgin Blue had cancelled around one third of its flights, leaving the Qantas Group with strong countervailing power.
- In relation to Canberra, the airport indicated that around one third of flights servicing the airport had been withdrawn since 2002, the majority of which originated from Sydney, from where alternative forms of transport were particularly competitive. Qantas had been left with 75 per cent of the remaining market share, and it had material countervailing power.

Recent developments

Submissions to this inquiry presented a range of views as to whether airports have market power. Airlines and other airport customers typically argued that airports have market power and the ability and incentive to exercise it. While airports generally accepted that they possess market power, they add that it can be overstated and that airlines often wield countervailing power (box 4.4).

In the Issues Paper, the Commission sought views and evidence on the extent to which there have been *changes* in the overall market power of price monitored airports since the previous reviews.

Some participants suggested that there had been no substantial change. Indeed, the Board of Airline Representatives of Australia (BARA) said that:

> … for international services, BARA does not consider that there has been any material change in the market power of price monitored airports since the 2006 review. BARA sees little merit in the Commission again evaluating the market power of airports and countervailing market power of airlines in detail for the third time in ten years. The Commission reached sensible conclusions over airport market power and airline countervailing power after the regime had been in operation for around four years. (sub. 19, p. 42)

Other participants pointed to some changes that they considered could have implications for market power. MAp Airports stated:

> Airport competition is substantially greater than when MAp made its first investments in 2002, largely as a result of changes in the airline industry. … The major trends that have increased airport competition have been the rapid growth of:
>
> - **Leisure passengers:** who have a wider choice of travel options.
> - **Low cost airlines:** which have the ability and willingness to operate between any two airports within a broad catchment area — and frequently run competitions for new bases.
> - **Network airlines with bases in multiple countries**: which have increased choice of aircraft deployment.
> - **Travel from Asia and through the Middle East:** which has shifted the majority of growth to airlines which have the choice of destinations anywhere in the world. (sub. 22, p. 2)

Box 4.4 **Participants' comments on airports' market power**

Qantas Group:

> Airports in Australia display characteristics of natural monopolies, regardless of size. Given the size and geographic distribution of the Australian population there is little or no real competition between domestic airports. (sub. 52, p. 18)

The Regional Aviation Association of Australia (RAAA):

> [RAAA's experience]… has been characterised by inappropriate use of airports' market power in the form of massive price increases, lack of adequate consideration of operational needs including safety issues, the loss of security of tenure, amenity and the ability to negotiate. (sub. 49, p. 4)

The Overnight Airfreight Operators Association:

> There is widespread concern within the aviation industry regarding the blatant use by some of the privatized airports of their monopolistic powers when setting fees and charges. (sub. 13, p. 1)

Hertz, Europcar, Thrifty, Avis and Budget:

> Sydney, Melbourne, Brisbane, Perth and Adelaide airports each represent a strategic bottleneck in the supply of landside transport services, including rental car services. This unique position gives those airports a high degree of market power. As a result of their market power, airports have the ability to impose costs on rental car companies, for access to inputs that are necessary for the provision of rental car services, that exceed efficient levels. (sub. 47, p. 3)

The Australian Airports Association:

> The aviation industry is dynamic and the extent of the market power held by each participant (airlines and airports) vary from time to time, from location to location, and from issue to issue (eg location of maintenance facilities/hubs). The market power of individual airports can clearly be reduced by the availability of alternative and competing airports. (sub. 18, p. 74)

Brisbane Airport Corporation:

> BAC acknowledges that it carries natural monopolistic power but reiterates ... that the mere existence of these attributes does not necessarily indicate that it has the ability to raise and maintain prices above the competitive price level. Further, BAC contends that there is little scope for airports to abuse their theoretical market power, and there is no evidence during the 13 years since privatisation to indicate that they have done so. This is due to:
>
> - Competition between individually operated airports in Australia ... to attract new airline services (both passengers and freight); … for a role as a hub airport and for transfer between hubs; ... for General Aviation users [within urban areas]; and … for the provision of services at airports.
> - Significant countervailing market power from the major users of airports;
> - An airport's inability to withhold service; and
> - The threat of 'big stick' regulation through the enabling of existing legislation, such as Part VIIA of the CCA [Competition and Consumer Act], that allows greater involvement by the ACCC in what should be a commercial environment. (sub. 40, p. 43)

Perth Airport:

> WAC submits that while it has market power in the market for aeronautical services, there is no evidence to suggest that it has abused that power. The absence of abuse of market power is reflective of the countervailing power of the airlines and the incentives WAC has to increase the passenger throughput of its facilities. (sub. 41, p. 53)

Of the international trends identified by MAp, perhaps the key developments from an Australian perspective have been the continuing growth in market share of low cost carriers (LCCs) aligned with an increase in leisure travel. As noted in chapter 2, LCCs have grown rapidly over the last decade. On the other hand, some airlines that initially commenced as LCCs are now shifting to a hybrid model or even towards 'full service' status. Most recently, Virgin Blue rebranded itself as Virgin Australia, in order to compete with full service carriers.

LCCs typically have more choice in using particular airports than full service airlines, which must fly to airports at the major population centres with good access to the associated business districts. In this respect, the growth in LCCs may reduce the market power of airports, particularly as other airports in the same region may prove more feasible substitutes. The Commission has heard that LCCs in some instances have bypassed, or offered limited services to, major city airports and used nearby regional airports instead. Gold Coast and, to a lesser extent, Avalon are two airports that appear to have provided some competitive pressure to their nearby capital city airports — Brisbane and Melbourne airports, respectively — albeit limited to competition primarily for non-network carriers (box 4.5).

Another facet of the growth in LCC air travel is that the elasticity of demand is higher, as they cater mainly for leisure travellers. Airport charges represent a greater proportion of ticket prices for LCCs than for full service carriers, and leisure travellers are typically considered more price sensitive than business travellers. As the ACCC commented:

> The growth of 'budget' domestic air travel in recent years suggests that the market may have expanded to include demand that is more sensitive to the price of air travel. For example, Tiger Airways began domestic operations in Australia in late 2007 and has since expanded both in its aircraft fleet size and destination count. Higher prices for these travellers may influence their decisions to use alternatives to air travel, or indeed whether to travel. (sub. 3, p. 9)

This also means that airports have less scope to raise charges to airlines without risking loss of patronage. If airports were to increase charges in these circumstances (and suffer the resulting drop in passengers), the efficiency costs would be greater than in the case of air services for which demand is less responsive to price (such as business travellers).

The Tourism and Transport Forum provided data, for each of the price monitored airports, on the proportion of domestic traffic travelling on a 'low' fare. It reported that 44 per cent of Melbourne airport's passengers were travelling on a low fare, with 38 per cent at Adelaide airport, 37 per cent at Sydney airport, 34 per cent at Brisbane airport and only 20 per cent at Perth airport (sub. 53, attachment 1, p. 19).

Box 4.5 **Competition from Avalon and Gold Coast airports**

Avalon airport, which is around 70km from Melbourne airport, began providing Regular Public Transport services in 2004. Both Jetstar and Tiger airways use the facility, with both airlines currently providing around six flights per day to and from the airport. Melbourne Airport argued that:

> Competition from Avalon has particularly affected Melbourne Airport's market power in relation to domestic passenger services … For example, both Tiger and Jetstar have moved flights from Melbourne Airport to Avalon Airport and vice versa. (sub. 29, p. 51)

However, Avalon Airport indicated that it received 700 000 domestic passengers in 2010 (compared to Tullamarine's 21.7 million), that it has been hampered by not being permitted to host international flights, and that 'genuine competition … has not yet been achieved' (sub. 51. p. 2).

Gold Coast airport, which is around 100km from Brisbane airport, is used by several international and domestic low cost carriers — including: Jetstar, Tiger Airways and Airnorth. With over 5 million passengers per year, it is the sixth busiest international airport in Australia. Brisbane Airport Corporation argued:

> Brisbane Airport's market power is significantly less than almost all of the major airports in Australia due to competition from Gold Coast Airport and, to a lesser extent, Sunshine Coast Airport. All Queensland airports share high exposure to tourist markets. International and domestic growth at Gold Coast Airport has been higher than Brisbane over the last few years, following their investment in new terminal facilities targeted specifically at lower cost carriers. Jetstar International have chosen to focus on Gold Coast Airport, rather than Brisbane. (sub. 40, p. iv)

While these nearby regional airports have evidently provided some competition for their nearby capital city airports in the LCC market, Virgin Blue stated that it does not consider that they have caused changes in the overall market power enjoyed by the major, price monitored airports:

> Most airlines have little ability to bypass or withdraw their services from major airports. This is because the need to provide connectivity capability is a significant constraint on the ability of airlines to move services to other airports. Further, network airlines in particular have special service features and infrastructure requirements. These can require a substantial, complex and costly investment in airport infrastructure which some airports are unable to provide. These include:
>
> - large integrated networks, consisting of own networks and those of codeshare partners;
> - connectivity capability to effect the seamless transfer of passengers and baggage both domestically and internationally;
> - a more diverse fleet, which may require additional space to house parts and equipment;
> - special services such as premium class travel, in flight catering and entertainment, lounges and valet parking services which require special infrastructure;
> - aerobridge boarding and quality terminal facilities …
>
> Network airline customers are also more likely to be business travellers who are likely to want to continue to fly to larger airports such as Melbourne Airport and Brisbane Airport given that these are often closer to city CBDs. (sub. 54, p. 16)

While this growth in LCC traffic may have lessened the potential for airports to exploit market power at the aggregate level, the main effect is likely to apply to those airports that cater mainly for leisure travellers — such as Gold Coast and Darwin — which are already excluded from the price monitoring regime. The growth in LCCs is likely to have somewhat mitigated the potential market power of the major city airports; however, all retain a large share of non-LCC traffic.

A further development has been the apparent emergence of increased competition between major airports in different states (and even different countries) to attract airlines and flights. International visitors often have some discretion over the state from which they enter or depart Australia, and indeed over whether they come to Australia at all. According to Sydney Airport Corporation:

> Increasingly the airlines no longer serve primarily national catchments, but instead serve economic regions … All airports globally are competing for the new aircraft which are being delivered to airlines — deliveries which are predominantly to Asian, Middle Eastern and LCC airlines. These developments have therefore dramatically increased the level of competition among airports for traffic in Australia as elsewhere. (sub. 46, p. i)

Airports often offer incentives to attract new airlines, and the Commission understands that the major capital city airports (sometimes with backing from state governments) have at times effectively been engaged in bidding wars to secure business from new airlines.

While acknowledging these recent developments, the Commission continues to consider that Brisbane, Melbourne, Perth and Sydney airports possess a high, or at least moderately high, degree of market power in domestic markets. These airports' market power may be ameliorated to differing degrees by competition for international and LCC traffic but, in the Commission's judgment, their market power remains significant and policy relevant.

A more marginal case is Adelaide airport, assessed in previous inquiries as having moderate market power. Additional information on the countervailing power of airlines operating from that airport — as well as evidence of its pricing practices — suggest that it continues to have a lower degree of market power than the other major capital city airports (box 4.6).

Notwithstanding this additional evidence regarding Adelaide airport, the data in appendix B suggests that its relative market power has not altered significantly. There are no closely-located alternative airports, and the degree of substitution between travel modes for both visitors and business travellers remains low. On this basis, there are sufficient grounds for Adelaide airport remaining within the monitoring framework.

Box 4.6 **Adelaide airport's market power**

In previous inquiries (PC 2002a, 2006), the Commission has assessed Adelaide airport as having 'moderate' market power over aeronautical services. In this inquiry, Adelaide Airport Ltd (AAL) again presented information suggesting that its market power was less than the other major capital city airports. For example, it stated that:

> International and Regional routes serviced from Adelaide Airport are dominated by very marginal 'thin' routes, which are highly sensitive to airport charges and consequently AAL have very limited market provision of airport services in these market segments. AAL currently offers regional and international airlines a level of airport prices which are below long run average costs and also offers incentives for growth. AAL's ability to exercise any market power is heavily curtailed by the difficult nature of its international and regional markets. (sub. 12, p. 4)

And in commenting on the countervailing power held by LCCs and regional airlines operating from the airport, it noted that:

> Airlines have mobile assets that can be redeployed on more profitable routes at very short notice or withdraw services entirely. For example, at short notice Qantas Link commenced operations in Adelaide in December 2005 with 36 services per week and in June 2006 it ceased all operations. Fortunately it recommenced services in 2010. Tiger Airlines reduced its services by 43% in late 2010 after being the main driver for growth in Adelaide during the previous 2 years. (sub. 12, p. 5)

Moreover, it provided evidence of its practices that are generally inconsistent with the behaviour of a monopolist exercising market power. For example, it stated:

> AAL has a proven track record of regard for its customers whether required under its negotiated commercial agreements in recognition of changes in circumstance. This is illustrated as follows:
>
> - Discounts negotiated with a new entrant airline post the 2007 pricing negotiations were immediately offered to all other incumbent airlines servicing Adelaide Airport in accord with the commercial agreements in place. AAL offers a range of discounts based on servicing new routes and recognising airline growth over and above that allowed for in the agreed prices. (sub. 12, p. 5)

AAL went on to note that as a standard matter of practice, airlines are able to elect the charging method that suits them best, and that during the global financial crisis it deferred a previously agreed increase in its charges (linked to increases in the consumer price index), in recognition of the adverse circumstances faced by the industry at the time.

Similarly, neither the data on market segments, airport or travel mode substitutes (appendix B) nor other evidence received by the Commission would indicate that the market power of Darwin and Canberra airports — which were excluded from the regime after the 2006 inquiry — are of sufficient concern to warrant policy intervention.

Although the continued growth of low-cost carriers and competition from some secondary airports has reduced the potential for airports to exploit market power, Brisbane, Melbourne, Perth and Sydney airports — and to a lesser extent Adelaide airport — retain sufficient market power to be of policy concern. However, there is insufficient evidence to suggest the scope of monitoring should be expanded.

4.4 For which services and facilities do airports have market power?

While an airport may be judged to have material market power in the airport market, it does not follow that it has material market power over all services and facilities provided on the airport. Some services and facilities, such as 'aircraft movement facilities' (runways, aprons, airfield lighting, navigation aids and the like), are obviously areas of monopoly provision within a particular airport, but others, such as check-in facilities, retail outlets and car parking, may face competition from outside providers. Accordingly, in assessing the case for the economic regulation of airports services, it is necessary to arrive at a judgment about which services are amenable to the exercise of market power by airport operators.

Previous Commission analyses

Based on its assessment of which airports possess market power, the Commission's 2002 report examined particular services where market power exists. The Commission considered that many airport services are 'bundled' in the sense that they are (collectively) essential to airlines. Nevertheless, it found that some airlines can 'opt-out' of certain airport services, based on the:

- passenger's needs or expectations
- main market segment that is being considered — for example, business or holiday traffic, and international or domestic traffic
- location of the airport (including the region within which it operates)
- nature of supply for, and demand of, airport services (including allowing sufficient time for the market to adjust to a change in price).

The Commission's assessment emphasised the importance of distinguishing between monopoly and locational rents, as only the former may reflect welfare losses.

In assessing market power for particular services, the Commission observed that, among other things:

- Runways and taxiways are essential to the operation of an airport. At a particular airport these services tend to exhibit strong scale and scope economies, such that generally there is only one supplier of these facilities for a given location — and therefore there is a high degree of market power in providing these services.
- For passenger processing facilities such as check-in desks, if off-site passenger processing was possible, then the market power of airports providing these services would be diminished. However, the Commission concluded that the feasibility of off-site check-in was, at that time, likely to be limited.
- With respect to landside vehicle access, several airports acknowledged that they had market power in relation to kerb-side facilities. As the Commission reasoned:

  > [t]he mere fact that there are charges for competing services does not necessarily justify charges for kerb use. Charges on competing services may reflect the exercise of market power. Nonetheless, pricing access to ease congestion may be efficient, assuming the airport operator does not constrain artificially the availability of kerb-side roads. (PC 2002a, p. 155)

- For car parking, the Commission found that airports had more scope to exercise market power in relation to short-term parking and staff car parking than in relation to long-term parking, for which competition via other modes (eg taxi) and off-airport car parking providers exerted more discipline on airports.

The Commission's conclusions in relation to the various services and facilities analysed are summarised in table 4.1. The 2006 review did not revise these, except for car parking, for which the Commission recommended monitoring be discontinued.

Recent developments

The Commission received limited information from participants on the scope of services that airports might continue to have market power over. In recent years, technological developments in the aviation sector might have shifted the balance of power over some facilities, such as for passenger check-in. As airlines have developed business models around passengers self-checking in (either in terminals, or via the internet), the demand for such facilities by airlines has likely declined.

Similarly, the move by some LCCs to charge for 'ancillary' services — such as checked-in luggage — may have reduced the demand by airlines for airport-provided baggage.

Table 4.1 **The Commission's 2002 assessment of airport market power over particular services**

Service	*Degree of market power*[a]
Aircraft movement facilities	High
Passenger movement facilities	Moderate/High
Lounge space (VIP and business)	Low
Vehicle access facilities	High
Car parking	Low/Moderate
Taxi facilities	Low/Moderate
Aircraft refuelling	Moderate/High
Aircraft light/emergency maintenance sites	Moderate
Aircraft heavy maintenance facilities	Low
Flight catering facilities	Low
Freight and ground equipment storage sites	Low
Freight facility sites and buildings	Low
Waste disposal facilities	Low
Administrative office space	Low/Moderate
Commercial and retail activities	Low

[a] Where the results indicate a range of degrees of market power (eg moderate/high), this means that market power may vary by airport, or by a particular component of the service in question.

Source: PC (2002a).

Despite these limited examples, the Commission has received no evidence to suggest that, since 2006, there has been a material change in the facilities or services over which airports will potentially have market power. And given that those airport facilities that provide price monitored services form part of an airports' asset base (for the purposes of monitoring), altering the list of price monitored services may have flow-on consequences for price monitoring, without commensurate benefits.

DRAFT FINDING 4.2

In general, the coverage of the current monitoring regime is appropriate, and despite recent technological developments (such as online passenger check-in facilities), the additional benefits of attempting to fine tune the monitored aeronautical facilities and services is unlikely to outweigh the cost.

4.5 Other rationales for regulating airport services?

Some participants put forward additional rationales for the regulation of Australia's major airports; in particular, pursuing equitable pricing outcomes, and the protection of complementary investments by airlines. This section considers both of these potential rationales.

Equity?

Equity refers to the fairness of the distribution of society's resources and opportunities among its people. Equity is a component of a society's economic wellbeing, and the Commission has been explicitly asked in the terms of reference to report on the distributional effects of different policy options relating to airports.

While there is no definitive basis for determining what constitutes equity, it is widely accepted that, at least up to some point, redistribution from high income individuals to those with lower incomes improves equity. This is a key reason for the *progressive* nature of the personal taxation and social security system, and for the provision — often by subsidy — of certain public services (such as minimum levels of education, health care and local public transport) on a broadly universal basis. One question in the current context is whether equity concerns are also sensibly addressed through airports regulation, or whether such regulation should instead be focussed purely on efficiency with equity objectives pursued through more broadly-based means.

There is little doubt regulations that change prices or services in the airports market will affect different socio-economic groups differently. In simple terms, a regulatory regime that results in airports levying excessive charges will redistribute income from the shareholders of airlines, and/or their passengers and other airport users, to the shareholders of airports. A regime that clamps down unduly on prices will have the opposite effect (and may also imperil investment in airport services, potentially to the longer-term detriment of all groups involved). In this sense, the airports market is the same as many other markets (whether for food, fashion or physiotherapy), where monopoly pricing would favour producers over users while the suppression of prices below efficient levels would favour users over producers, at least in the short term.

However, it is not clear that the different groups that stand to benefit or lose from such changes in the airports market have vastly different income or wealth profiles or that any one group of airport stakeholders is obviously 'deserving' of special support on equity grounds. As noted in chapter 1, airports are owned predominantly

by Australian superannuation funds, while airlines are often foreign-owned businesses. Further, air travel has for some time been a product consumed mainly by business people and reasonably well-off citizens. A caveat noted by the ACCC is that, with the increase in the share LCCs over recent years, less well-off citizens are now more readily able to fly, so this would rebalance somewhat the average income/wealth profile of passengers (sub. 3, pp. 13–14). Nevertheless, it is unlikely that the population of air travellers in Australia would align closely or systematically with the population of the less well-off in society.

Consistent with the approach taken in the 2002 report, it remains the Commission's view that regulatory measures that artificially reduce airport charges below efficient levels are likely to have net social costs to the community greater than those associated with more broadly-based redistributive measures. In other inquiries where equity concerns have been raised, the Commission has recommended that such concerns be addressed through the taxation and social security systems. For example, in its report on urban water markets, the Commission found that where equity outcomes were pursued through price regulation, economic efficiency was likely to be compromised (PC 2011b).

Of course, regulatory measures aimed at improving efficiency may, to the extent that they prevent monopoly charging by airports, have incidental price benefits for some lower income travellers (and others). While such benefits should of course be welcomed, the Commission considers that equity is not an appropriate objective for airport price regulation: equity is better pursued through other, less distorting, measures.

Protection of relationship-specific sunk investments?

Another reason regulators might be concerned about the market conduct of airports is if there are flow-on consequences for the level of investment by airlines. Airlines (or a subset of airlines) may wish to make investments at a specific airport, to maximise the value of the product they offer to customers at that airport. If such investments are ‘sunk’ — that is, the investment has no alternative use and no residual value — then by raising their charges, an airport operator might attempt to ‘capture’ the value of that investment. If this is a potential outcome, airlines may not undertake an efficient level of investment at the airport; potentially lowering the quality or quantity of the service it offers.

Darryl Biggar discusses the types of 'relationship-specific' investments airlines might wish to make[2], noting that:

> … It is widely accepted that airlines need to make a substantial relationship-specific investment, especially at a hub or "base" airport. This investment might take the form of construction of customised facilities (such as customised terminals or maintenance bases), marketing of services to or from that airport, acquisition of take-off and landing slots, or the establishment of flight schedules, operating procedures and staffing. (sub. 1, p. 5)

If Australian airports can misuse their market power and reduce the incentives for airlines to undertake the complementary investments outlined above then, at least in theory, there may be a market failure that regulation could correct to improve efficiency. In practice, some other factors may reduce the practical application of this policy objective relative to the goal of minimising deadweight losses.

First, attracting such investments by airlines and other airport users is likely to be necessary for airports to maximise the value of their own investments. To the extent that airports must attract passengers, at the very least to underpin their own investments, 'reputation effects' will go some way to mitigating the threat of expropriation. The ACCC discussed this effect in its submission:

> It is expected that an airport would weigh the benefit of expropriation — in the form of short-term profits — against the potential reputational effects of behaving opportunistically. Such a reputation may increase the perceived risk of expropriation by the airport, which could further affect future airline investment. Demand for airport services may subsequently be reduced, which could result in foregone airport profits in the long run. (sub. 3, p. 13)

While the fact that an airport would not be able to expropriate the value of an airline investment more than once if it wished to remain an attractive prospect for future airline investments (particularly by more marginal airline services) might make it less likely to do so, it does not eliminate the risk.

Second, in Australia, airports and airlines have already been able to mitigate some of the risks through the use of long-term contracts. The period of light-handed monitoring has seen increased contracting between airports and their users, and as noted in chapter 9, the vast majority of passengers travelling though the major capital city airports do so on airlines that have a contract with the airport, covering

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2 Biggar also notes that other businesses wishing to make sunk investments (such as locating close to an airport), might face the same disincentive if airports can raise their charges. In relation to other natural monopolies, such as the provision of electricity, Biggar notes that even households make complementary sunk investments (such as in household wiring) in order to make use of the underlying service (sub. 1, p. 11).

prices, and in many cases, service levels. Moreover, it is not evident that the transaction costs of forming such contracts presents a significant barrier to their use.

And it is not clear that airlines' relationship-specific sunk investments are significant. For example, David Starkie notes the increased mobility of LCCs and their reduced reliance on airport-specific relationships (sub. 44, attachment 1), albeit in the context of Europe. But in Australia, while there may still be some risk for airlines (including potentially some general aviation operators), and perhaps full-service carriers in particular, it is not clear that the magnitude of the concern is significant, given the apparent ability of airports and airlines to form contracts. In practice, even if an airport was able to expropriate the value of an airline's sunk investment, it would only be able to do so because of any market power it has over aeronautical services. Given the difficulty regulators are likely to experience in designing price outcomes that would 'mimic' the outcomes parties might have agreed to, focussing on optimising regulation in order to minimise deadweight losses is still likely to yield the highest gains to the community.

4.6 Optimising regulation to address airports' market power

As noted, the primary rationale for the economic regulation of airports is the potential for airports to abuse market power. How a misuse of market power can lead to inefficient outcomes is set out earlier (section 4.2). In short, an airport with market power may:

- charge prices in excess of efficient costs
- while maintaining prices, allow quality to fall (for example, by reducing staffing levels, user cheaper inputs or replacing plant and equipment less frequently)
- allow costs to rise over time (for example, by not adopting cost-saving or innovative technologies).

Such behaviour would not only harm direct users of airport services (airlines and passengers) but would also adversely affect downstream industries and the economy more broadly.

Governments have a wide array of options for addressing market power in particular sectors. They range from taking no specific action and relying on existing, generally-applicable regulation to introducing sector-specific interventions. The latter may range from light-handed regulation to more prescriptive incentives and directives. At the extreme, governments may seek the ownership and control of a

firm or firms in the sector (although this brings with it the risk of government failures).

As discussed in chapter 3, following the privatisation of most major airports from the late 1990s, those airports have been subject to different regulatory regimes intended to deal with risks associated with the abuse of market power by airports. A price-cap regime applied to various services and facilities at major airports from 1997 to 2002. It was replaced by price and service quality monitoring undertaken by the ACCC in 2002. These regimes are in addition to other mechanisms, such as various provisions of the *Competition and Consumer Act 2010* (Cwlth), available to deal with abuses of market power.

While the foregoing analysis suggests that many major airports retain material market power, the critical questions for this inquiry is whether they have the incentive (and are likely) to abuse it and, if so, how well the current regulatory regime deals with the potential abuse of that power, and whether changes or alternatives to the present regime are warranted. In addition, the welfare impacts of inefficient aeronautical charges depend — at least in part — on the market response by airlines.

Several broad considerations are relevant to this assessment.

First, modelling submitted by Qantas suggests that Australians could stand to gain significant benefits if regulation is effective in restraining prices to efficient levels. Qantas' modelling estimates welfare gains in the billions of dollars annually (box 4.7). However, there are a range of factors that suggest any aggregate welfare loss (which is not at all a guaranteed outcome) would be significantly lower than Qantas' claims.

In particular, the overwhelming cost purported by Qantas to flow from an increase in aviation charges is the result of a fall in Australian tourism, and associated expenditure. This 'expenditure multiplier' analysis acknowledges that domestic tourism likely represents a 'transfer' (that is, if aeronautical charges result in lower tourism in one destination, consumers will likely spend their money in a different destination), but assumes that the full reduction in international tourists represents a loss of 'welfare' to Australia. This ignores the cost borne by Australia in earning that international tourist income, as well as the opportunity cost of the resources used in that sector. In a small flexible economy such as Australia's, a reduction in international tourists would likely see an adjustment in the tourist sector such that those resources would be employed elsewhere.

Box 4.7 Qantas Group's estimates of the welfare gains from restrained airport charges

In its submission, Qantas Group reported the results of modelling of a reduction (or reduced rate of increase) in aeronautical charges at the five main capital city airports. The modelling showed that, if the underlying assumptions hold, failure to restrain the charges could entail a welfare loss to Australians in the order of $0.8 to $1.6 billion per annum. In interpreting the results, Qantas stated:

> As would be expected, the total welfare impact depends upon the assumed increase in prices. The Qantas Group calculates that the welfare impact ranges from net welfare loss of $1.8 billion per annum for a $1 increase in charges to a $14.9 billion loss in welfare for an $8 increase in charges. Taking a conservative view, if the combination of issues with the current light-handed regulatory framework continue to result in increases in airport charges being between 10 per cent and 20 per cent (which equates to between $1 and $2), the welfare loss is estimated at between $1.8 billion and $3.7 billion. Excluding domestic tourism benefits (as it can be argued that these have no net impact across the Australian economy, only a distributional impact) the welfare loss is estimated at between $0.8 billion and $1.6 billion (for an increase of $1 and $2 in airport charges). (sub. 52, p. 69)

Qantas noted that the modelled effects understate the true impact as they exclude non-major airports, and car parking and other non-aeronautical charges. While the modelling is based on assumptions regarding key parameters, the Commission considers that the Qantas estimate — which derives from a partial expenditure multiplier analysis — overstates the welfare costs of an increase in aeronautical charges (and thus the benefits of restraining such increases). For example, the modelling assumes:

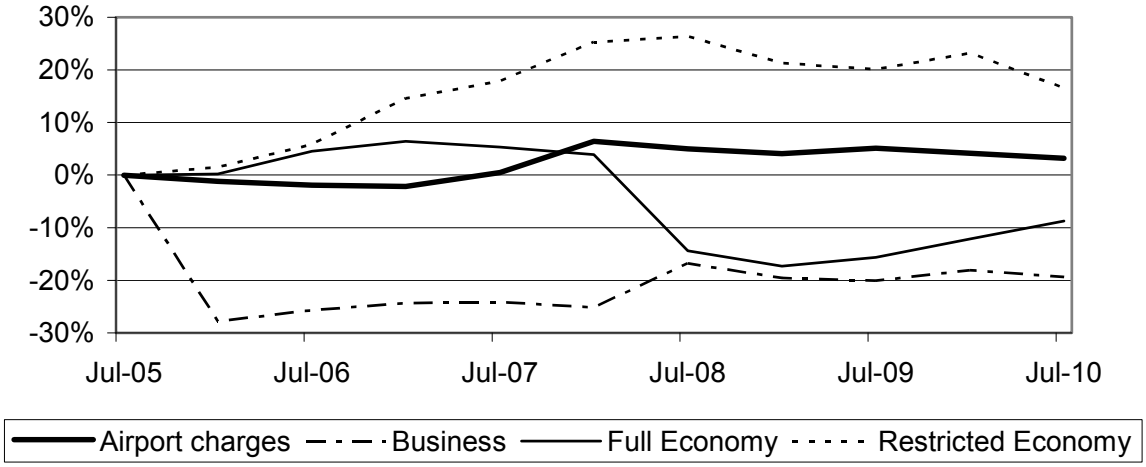
- that prices at those airports currently exceed efficient levels, and that regulatory action to restrain those prices does not have other undesirable effects on non-price variables such as service quality and investment levels
- lower airport prices are fully passed on to consumers in the form of lower airfares, which in turn induces a significant travel response. An alternative view is that reductions in airport charges would largely be 'pocketed' by airlines and/or their existing passengers, with little demand response. In these circumstances, the main effects of the restrained charges would simply be to transfer income from airports to airlines and passengers, rather than to generate a net welfare gain
- a $1 increase in aeronautical charges translates into $1 of airport profit, but that a $1 decrease in charges has a range of flow-on 'benefits' for Australian industries, such as the tourism sector. This ignores the possibility that a $1 increase in aeronautical charges could support, for example, $100 million in capital expenditure, which could have commensurate flow-on benefits in the construction industry (at least), as well as other industries.

Second, airport charges represent a low proportion of the airfares paid by passengers. In making this judgment, the Commission has drawn on BITRE airfare and airport charges data to illustrate the impact of charges on the

Melbourne-Sydney route, for a variety of airfare categories. This data represents the airport charges levied for a Boeing 737-800, and is adjusted to a per passenger charge (assuming a load factor of 76.5 per cent). The airport charges are 'turnaround charges', representing both landing and take-off at each airport.

Figure 4.1 illustrates the percentage differences in the lowest available airfare and in airport charges between July 2005 and July 2010. The cumulative effect of airport charges levied at Melbourne and Sydney airports have increased by three per cent in real terms.

Figure 4.1 **Airport charge and lowest airfare movements**
Percentage change between July 2005 and July 2010



Data source: Adapted from BITRE (2010c, unpublished).

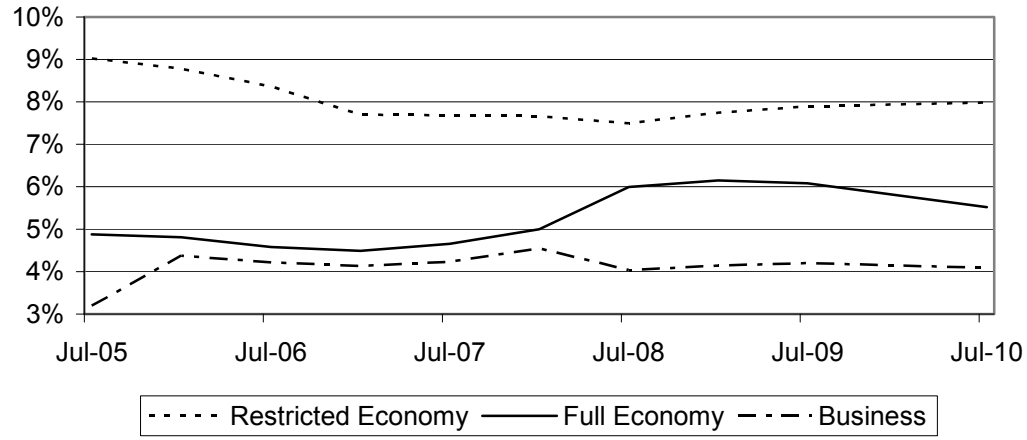
While figure 4.1 shows that airfares were subject to significant price movements over 2005−2010, figure 4.2 shows that airport charges as a proportion of airfares have remained low and relatively stable over that period.

For LCCs, (apparent) airport charges will represent a larger proportion of airfares (figure 4.3). This is subject to several caveats: LCCs tend not to use aerobridges, so the airport charges they actually pay are lower; the lowest LCC fares are available to few passengers and the presence of ancillary charges for passengers (eg check-in and baggage fees) means that the published airfare understates the total cost of air travel. And as noted above, airports have less scope to raise charges to LCCs owing to their higher price sensitivity — LCCs can and do 'shop around' for airports. Finally, in 2010, the lowest Melbourne-Sydney discount return airfare was 60 per cent lower than in 2005.

This data suggests that even if increases in airport charges are passed on fully to customers, such increases are unlikely significantly impact on the ticket prices paid by consumers, limiting any reduction in patronage (and associated welfare losses).

Figure 4.2 **Airport charges as a proportion of the lowest available airfare**

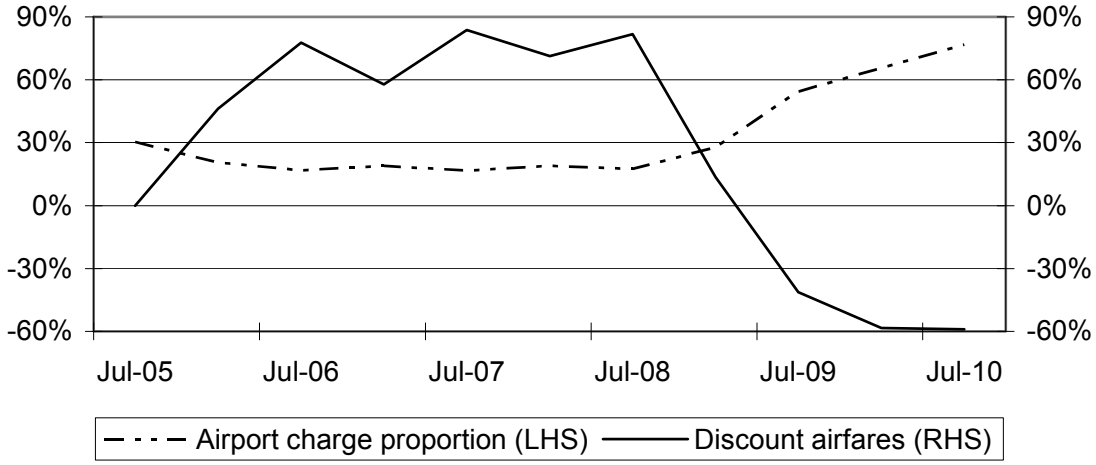
Melbourne-Sydney return trip



Data source: Adapted from BITRE (2010c, unpublished).

Figure 4.3 **Changes in lowest discount airfares and airport charges as a proportion of discount airfares**

Melbourne-Sydney return trip



Data source: Adapted from BITRE (2010c, unpublished).

Finally, even where there are potentially material benefits to be had, attaining them through regulation is not straight-forward. Just as markets can fail to generate economically efficient outcomes, so government intervention has its own costs, and may bring its own distortions. As well as observable administration and compliance costs, regulators inevitably must make decisions based on imperfect information, raising the risk of 'regulatory failure'.

In the case of airports, as discussed above, efficient pricing of airport services and facilities has several dimensions. Addressing one dimension (for example, short-run marginal-cost pricing that encourages efficient use of existing assets) may distort other dimensions (for example, incentives to invest or to provide appropriate quality levels). Further, the practical difficulties of determining precisely what the efficient prices are for airport services forces regulators to construct prices based on measurable, often historical costs, even though these may have little relevance to opportunity costs.

This creates a risk that the costs of regulating to address the abuse of airport market power may in some cases exceed the costs of inaction. As David Starkie has observed, the identification of market imperfections alone is not a sufficient justification for intervention:

> Unfortunately, a little knowledge can be a dangerous thing; the incentive mechanisms themselves can lead to distortion and unnecessary costs … In turn, this can lead to further regulatory intervention, to complex regulation (possibly with significant compliance costs) and to increased regulatory risk that has the effect of increasing the cost of capital. At the end of the day, therefore, there is a trade-off between living with imperfect regulation or with imperfect markets. It is only when the market does not work well, when there is a clear case of natural monopoly *and* when regulation can reasonably be expected to improve matters that the regulatory option is worthwhile. (Starkie 2002)

A particular risk is that regulation focussed on limiting prices may, if it overshoots, significantly curtail investment and have negative long-term dynamic efficiency consequences. Moreover, if most of the effect of restrained airport charges is, as suggested above, simply to transfer resources between airports, airlines and passengers, regulation faces an asymmetric risk:

- excessively stringent regulation (that restrained airport charges below efficient levels) would endanger efficient investment and the welfare gains associated with it, but
- insufficiently stringent regulation (that allowed airport charges to rise above efficient levels) would not significantly imperil welfare; its primary effect would be distributional.

This asymmetric risk suggests that, in appraising alternative approaches for addressing the market power of airports, it would be prudent, where uncertainty exists, to err on the side of less stringent regulation. It also suggests that there would be value in a regulatory regime that incorporates 'triggers' and 'tests' to reduce uncertainties before stringent regulation is applied.

Against this backdrop, the following chapters examine the price, quality and investment outcomes obtained under the present price monitoring regime, and how the airport sector is performing under it more broadly. Drawing on that analysis, chapter 11 considers options for improving on the current regime.

5 Airport investment and capacity

Key points

- Investment in Australian airports is a key element to meeting future demand for air travel.
  - Rates of return, regulatory certainty and airport lease conditions all influence the level, timing and nature of investment in Australian airports.
- There has been significant investment in aeronautical infrastructure at Australia's major airports since the removal of price caps in 2002, continuing the trend identified in the Commission's 2006 inquiry.
- Rates of return on aeronautical investment at airports vary considerably across airports and across time.
  - Rates of return at the major airports were too low to sustain new investment prior to the introduction of light-handed monitoring.
  - Following regulatory changes in 2002, rates of return have increased at some airports, while remaining relatively low at others.
  - Aeronautical investment at Australia's major airports compares favourably with investment in other infrastructure.
- Participants raised concerns with the consultation, transparency, timing and efficiency of airport investment. Specific concern was expressed over the 'pre-funding' of airport investments.
- However, regarding airport investment there is little evidence to suggest systemic failures, or that the Australian Government's expectations regarding airport investment are not being met efficiently.

The level of investment by airports, and their ability to meet the demand for services at an efficient price, are key issues for this inquiry. Indeed, the Terms of Reference note that one objective of the monitoring regime is to promote efficient and timely investment in airport infrastructure.

Sections 5.1 and 5.2 of this chapter examine what constitutes 'investment' and 'capacity' at airports, and the drivers of investment scope and timing, respectively. Section 5.3 discusses the level of investment that has been achieved at Australian airports, and section 5.4 examines and assesses some of airport users' concerns over the nature and timing of investment.

An annex at the end of this chapter discusses the link between infrastructure investment and pricing, with the latter considered in detail in chapter 6.

5.1 What is investment and capacity?

In a broad sense, the 'capacity' of an airport is its ability to meet the throughput demands of users, whether they be airlines, passengers or other users. Capacity is often reported as the maximum throughput of passengers over a given period of time. However, the provision of safe and efficient air travel to passengers relies on a complex mix of aircraft, airport facilities and related services. The interaction of various facilities ultimately determines the capacity of an airport at any given time, and congestion at a particular bottleneck facility (such as a runway or terminal) can reduce an airport's overall capacity (box 5.1).

Airports provide a range of 'bundled' services to airlines, as well as services directly to consumers and other tenants. Like all businesses, to provide these services an airport operator uses a combination of fixed and variable inputs. Fixed inputs are those parts of an airport business that cannot be increased in the short term (such as a new runway), while variable inputs are those that can be increased quickly and easily (such as employing additional workers).

Investment is generally considered to be any increase in the quantity or quality of a business' fixed inputs. Not all investments made by an airport will increase the capacity of the airport, and some will be made to replace existing infrastructure at the end of its life or increase the quality (rather than quantity) of the service provided.

Since privatisation, most of Australia's capital city airports have invested in terminal expansions, including the installation of new aerobridges, to accommodate increases in passenger traffic (chapter 2). Airports have also upgraded baggage handling and security screening systems to accommodate the increased security expectations from the travelling public and security requirements from governments. Additionally, airports have upgraded runway capacities to accommodate larger aircraft (such as the Airbus A380), as well as runway safety areas, to meet increased government safety requirements.

Box 5.1 **Airport capacity**

A number of factors influence an airport's capacity, including:

- *Runway size and design:* runways facilitate the landing and takeoff of aircraft. Factors such as the length, width and thickness determine the size of aircraft that can use the runway. Runway design factors include the number, spacing and orientation of runways.
- *Airport layout:* taxiways are used by aircraft to connect runways and terminals; apron parking provides 'holding' room for aircraft that are not using terminals or runways. The width, route and location of taxiways and apron parking determine the maximum aircraft throughput.
- *Terminal size and design:* terminals facilitate the loading and unloading of passengers, baggage and freight from aircraft. They provide passenger check-in and security screening facilities, immigration and quarantine services as well as general leisure and shopping outlets for passengers awaiting flights. The number of check-in desks or self-service check-in booths, security screening stations and aero bridges significantly influence the throughput of passengers at particular bottlenecks throughout the terminal, while the size and layout of the terminal determines its ability to comfortably accommodate passenger volumes.

Other factors that affect the operational capacity of an airport include regulatory conditions, such as:

- *Air traffic control:* coordinates the safe takeoff and landing of aircraft, as well as their movements to and from a terminal. Capacity may be determined by the safety and monitoring infrastructure at a particular location. Particular day-to-day events such as poor weather may reduce, or in extreme cases eliminate, the safe handling capacity of an airport.
- *External constraints:* noise abatement procedures, aircraft movement caps and curfews all affect the total number of aircraft that can use an airport. Additionally, the amount of land at an airport site will provide a constraint on future capacity growth.

5.2 Investment determinants

Investors often have options when deciding where to invest their funds. While an airport might be viewed as a single 'investment' by an external investor in practice it constitutes a bundle of assets, each with its own internal rate of return. An airport operator's decision to invest in a particular asset will change the overall attractiveness of the airport as an investment, often within a wider portfolio.

There are two key drivers of investment in capacity or quality at Australian airports:

- the level of return on the investment, or the 'profit' earned on the investment funds that in turn can be profoundly influenced by airport-specific policy settings and regulatory pressures, including perceptions of sovereign risk
- regulatory obligations that require airport operators to undertake investment.

Investment returns

In general, the most significant determinant of whether an airport will undertake any particular investment is the rate of return it will earn from that investment.

Apart from the majority-owner of Sydney airport (MAp Airports Ltd), Australia's major airports are not publicly-listed companies (appendix B). Rather, they are private companies, predominantly owned by Australian superannuation funds that invest through corporate funds managers. Australian airports compete to source investment funding, from either debt or equity markets in Australia or abroad. Those who manage the investment funds of their clients often have a range of options for investing those funds. The attractiveness of various investments will differ according to assumptions around the future revenues and costs associated with particular assets. The weighted average cost of capital (WACC) is generally considered the threshold return an asset must earn to be sufficiently attractive to investors.

Institutional fund managers discussed the criteria they apply to investment decisions. For example, Industry Funds Management (IFM) stated that it sought investments that:

> … require large amounts of capital, have long investment horizons, stable returns with low levels of volatility, operate under predictable regulatory regimes and ideally, grow at least in proportion to overall GDP growth. IFM, like most institutional investors, requires that the projected return the investment will deliver over a long-term horizon is commensurate with the risks associated with the investment. (sub. 27, p. 8)

Similarly, Hastings Funds Management noted that Australian airports as an ' … asset class and sector have been able to attract investment by providing stable investor returns supported by a history of commercial pricing agreements with airlines and an established light-handed regulatory regime' (sub. 33, p. 21).

In its 2009-10 monitoring report, the Australian Competition and Consumer Commission (ACCC) discussed the nature of the risks faced by airport businesses. An airport's risks are those factors that can result in an airport earning a lower rate of return on its investments than expected for investments in general. As the ACCC also noted, the level of risk faced by airports is relevant in considering whether there is an efficient level of investment in airport infrastructure, as well as excessive

pricing (or excessive rates of return) earned on such investments (ACCC 2011, p. 52).

Investment cycles

Airport rates of return are likely to vary across the life of a particular infrastructure asset — generally being lower early in the life of an asset at a time of excess capacity, and rising as utilisation increases. Apart from some smaller infrastructure components (such as computer equipment), the majority of an airport's assets are long-term infrastructure, with some assets (such as runways), having a life span measured in decades. Box 5.2 discusses the nature of lumpy investment.

Given that the effective working life of airport assets varies, airports must balance where an asset is in its life–cycle against possible increasing (or even decreasing) demand for its use. There is also a significant interrelationship between the assets of an airport and those of airlines — airlines wishing to invest in new technology or aircraft (such as the A380) might only be willing to do so if there is commensurate investment at an airport.

The rate of return an investor requires is calculated over the effective life of an asset. Given the interaction of an airport's various assets to produce a single 'airport service', there may be valid reasons why the construction of a needed piece of infrastructure is delayed. For example, if an airport has a shortage of car parking at a terminal, but intends to relocate that terminal to the other side of a runway, building the car park ahead of relocation would leave the asset redundant or 'stranded'. As that car park would have little residual value, the rate of return on the car park would be calculated over a much shorter period. This would lead to higher prices over the effective life of the asset. Alternatively, while some congestion might arise through delaying the investment, long-run costs might be reduced.

Balance sheet diversification

As part of purchasing their long-term leases from the Australian Government, airport operators are able to undertake developments on airport land, consistent with their obligation to use the site as an airport (chapter 2). Any investment that is not covered by the regulatory definition of an 'aeronautical service or facility' is considered to be a non-aeronautical development (chapter 6).

Non-aeronautical investments can include:

- investments that have an aeronautical component, such as parts of passenger terminals not used by airlines, roads, and corporate computer systems

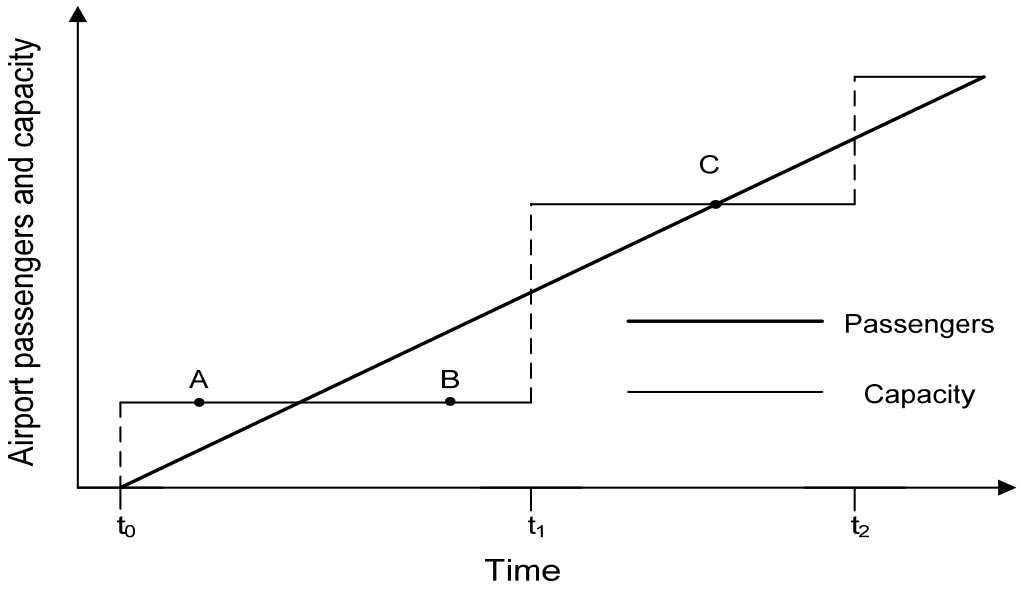
Box 5.2 **'Lumpy' airport investment**

The demand for an airport's aeronautical services is derived from the demand for air travel by passengers (chapter 4). In general, major airport investment is 'lumpy' and indivisible, meaning that it is not possible for an airport operator to incrementally increase the capacity of an airport as demand grows; rather, new investments often significantly increase an airport's capacity.

Chapter 4 discusses in detail the nature of 'efficiency' at an airport, and that for an airport with a given set of demand characteristics, there will be an efficient timing and quantum of investment in new capacity. Good regulatory policy provides incentives to airports to undertake investment at an efficient time and level.

Airports may have some flexibility as to when such investment occurs, and how prices change to reflect that investment. In short, an airport might choose to:

- allow demand to exceed capacity, causing a build-up of congestion, before investing in new infrastructure
- build new infrastructure well before demand exceeds capacity, continuing to undertake investment as demand catches up
- a combination of congestion followed by investment ahead of demand.



The diagram above illustrates the linear demand growth and lumpy investment profile that airports might face. At t_0 the airport invests in capacity, and at point A, there is more capacity at the airport than passenger demand. At point B there are more passengers using the airport than there is capacity to handle them, resulting in congestion, and at t_1 the airport invests in more capacity. At point C the capacity of the airport is equal to the passenger demand — there is no spare capacity, and no congestion. In practice, airports are likely to be at point C for short periods of time.

- aviation-related investments, such as hangars and maintenance facilities leased to airlines, leased freight terminals, and other investments predominantly used by airlines, border agencies or freight forwarders
- passenger and staff car parking facilities
- investments that facilitate activities that may be desirable, but not essential, for airport operations, including hotels and property with a logistics focus
- investments with little or no relationship to airport operations.

Airport operators undertake non-aeronautical investments to diversify their balance sheet, enabling them to mitigate the risks that come from exposure to demand conditions in a single sector (aviation), and to broaden their sources of revenue. For example, an airport might construct buildings on its vacant land that can be leased to industrial or retail tenants. The market for tenancies would typically be more competitive than aeronautical investments and the commercial risks faced by that business component would be very different to those in the aviation business.

However, the ability of airport operators to develop non-aeronautical sources of revenue has not been without controversy. At Brisbane airport, a proposed non-aeronautical development was challenged by retail operator Westfield, on the ground that the development was not related or incidental to the operation and development of the airport. The case was decided in favour of the airport operator (box 5.3).

Aside from exclusions for 'sensitive developments'[1], airport operators are relatively unencumbered in investing in non-aeronautical facilities to diversify their balance sheets. This predates privatisation, as the Department of Infrastructure and Transport noted:

> To meet an undertaking of the government of the day that the establishment of the Federal Airports Corporation (FAC) would not lead to higher airport user charges, the FAC actively encouraged the growth of revenues from non-aviation activities … Airports continue to invest in non-aeronautical infrastructure and commercial opportunities to diversify and reduce exposure to aviation industry fluctuations. Airports advise that the income streams from the non-aeronautical operations are also critical for financial institutions as lending security and to support continued investment into the future. (sub. 43, pp. 8–9)

[1] As discussed in chapter 3, the Airports Act was amended in 2010 to define what would be considered 'sensitive development' at an airport, and includes (for example) residential developments, community care facilities and educational institutions.

Box 5.3 **Non-aeronautical retail development**

In *Westfield and others v Brisbane Airport*, Brisbane Airport had agreed to construct and lease buildings for retail purposes — including the establishment of a 'Direct Factory Outlets' centre. Westfield and Centro — both shopping centre owners and operators — challenged the Minister's decision to approve the airport's Major Development Plan for the outlet centre, arguing that the project was not related to, or incidental to, the operation and development of the airport.

Westfield and Centro argued that the term 'the operation and/or development of the airport' in the Airports Act meant the operation and/or development of the airport for use as an aviation facility and for no other use. The Federal Court rejected this argument, stating (at para. 68) that in interpreting the wording of the *Airports Act 1996* (Cwlth), there was nothing:

> … which would indicate an intention to limit the activities of an airport-lessee company under an airport lease to a narrower range of activities than those carried on by the FAC [Federal Airports Corporation] under its statutory functions to operate the core regulated airports including the extended functions. Those functions included carrying on commercial activities at or in relation to Federal airports, using land at a Federal Airport for a purpose not directly related to aviation and constructing buildings on land at a Federal Airport for a purpose not directly related to aviation …

As a result of the decision, Brisbane Airport was entitled to proceed with the construction of its 'Gateway Precinct', including the retail development in question. Following the commencement of legal action (but before the court judgement), Westfield concluded the sale of its Toombul shopping centre to Centro, which was located less than 2km from the Brisbane Airport development.

Source: Westfield Management Ltd and others v Brisbane Airport Corporation Ltd [2005] FCA 32.

Regulatory certainty

The rate of return earned on an investment depends, in part, on the regulatory framework it is subject to. For long-lived infrastructure assets, the degree of certainty over regulatory settings can dramatically affect the rate of return required for that investment to be attractive.

Changes in regulatory policy can have both positive and negative consequences on rates of return:

- Apart from Sydney airport, at the time airports were privatised, sale valuations were made on the basis of the regulatory regime that was to apply directly after privatisation (the price cap regime). The subsequent introduction of the light-handed monitoring regime arguably has allowed investors to earn a higher rate of return than was necessary to recoup their initial investments. (Excluding

Sydney, the Board of Airline Representatives Australia (BARA) characterised this as a windfall gain for the airports).

- However, the possibility of regulatory changes in the future (including price or revenue constraining regulation during the life of an asset) increases the risk to earnings from the asset, and thus could increase the minimum return required to undertake new investments.

Airport operators and investment fund managers commented on how the light-handed monitoring regime facilitated an environment supportive of increased airport capital expenditure, particularly through 'regulatory certainty'. The Australian Airports Association (AAA) stated:

> … the transitional monitoring arrangements have fostered a greater degree of certainty and provided airports with confidence to invest. The result has been impressive investment in both airports and related industries. (sub. 18, p. 20)

And Colonial First State Global Asset Management stated:

> Over the past two years, both equity and debt capital providers have continued to support airport investments, notwithstanding the impacts of the Global Financial Crisis. … This is in part due to the stability and balanced investment outcomes offered by the current regulatory regime, which has underpinned the confidence of capital providers during a period when capital remains scarce. (sub. 16, p. 2)

Hastings Funds Management commented specifically on the impact that a lack of regulatory certainty has on the price of debt, a major source of funds for airport capital expenditure:

> Debt refinancing in the airport sector is common and substantial. Over $10 billion of Australian airport debt will need to be refinanced at some point during the next 10 years. Such refinancing and the pricing at which it occurs is reliant on stability of cash flow and certainty of the regulatory environment. Regulatory stability and certainty, free from undue threat of change, results in cheaper debt which benefits the public by promoting growth and delivering high quality and better priced facilities and service for airport users. Currently the majority of airport debt is short term reflecting the rate of regulatory reviews which have been occurring and the similar tenor of the airport pricing agreements signed with airlines. (sub. 33, p. 25)

Given the Australian Government privatised its airports through long-term leases (with the Government retaining a residual interest in the airport property and assets at the end of the lease), one potential risk faced by investors is that non-compliance with lease conditions by an airport operator could lead to the assumption of the lease prior to its conclusion. The Government has addressed this concern by entering into 'tripartite deeds' (box 5.4).

Box 5.4 'Lease risks' and tripartite deeds

Airport lessee companies are required to comply with a range of lease conditions; the ultimate penalty for non-compliance being the transfer of airport property and all assets (not just those in place at the time the original lease was sold) by the Australian Government. Were a lease to be terminated, assets constructed at an airport after privatisation would represent a 'windfall gain' to the Australian Government. As such, airport operators may not be able to secure financing for long-term investments (such as a runway), given investors would not have a claim on assets in the event of a lease termination.

Tripartite deeds clarify the rights of equity investors in Australian airports in the event of a lease termination. Original tripartite deeds (agreements between the Australian Government, airport operators and investors) were expected to operate for the first 20 years of privatisation; however, investments with a lifespan beyond this period are now being planned and constructed. Thus, the extension of the tripartite deed arrangements protect investors in the event that an airport lease is terminated. This increases the regulatory certainty investors have in Australia's airports.

Source: Albanese (2011a).

Regulatory and other obligations

As part of the privatisation process, 10 of the airport sale agreements imposed obligations on airport lessees to continue development of the airport site. Airport sale agreements required a lessee to:

- operate with a demonstrable commitment to the effective provision of quality airport services
- act to promote the economic development of its airport in a way that is responsive to the interests of users, the environment and the region in which the airport is located.

In addition to these general principles, the Sale Agreements contained commitments from the winning bidders to a specified amount of capital expenditure on aeronautical infrastructure during the first 10 years of privatisation (split across two five-year periods). These commitments totalled approximately $700 million, and represented about 18 per cent of the total prices paid for the leases. Table 5.1 shows the capital expenditure commitments for each airport.

Table 5.1 **Airport development commitments**

		Development commitments		
Airport	*Purchase price*[a]	*Period one*[b]	*Period two*[b]	*Total*
	$m	$m	$m	$m
Brisbane	1 314.0	44.4	292.9	337.3
Perth	631.0	54.6	33.3	87.9
Melbourne	1 254.7	78.3	29.0	107.3
Adelaide	323.2	41.4	22.6	64.0
Alice Springs	23.6	1.2	1.9	3.1
Darwin	84.1	3.3	2.8	6.0
Canberra	65.0	11.0	46.9[c]	57.9
Coolangatta	101.1	19.2	8.5	27.7
Hobart	35.0	3.8	1.7	5.5
Launceston	16.6	2.2	0.9	3.1
Total	**3 848.3**	**259.3**	**440.5**	**699.8**

[a] Purchase prices taken from ANAO audits of the Phase 1 and Phase 2 sales. Purchase prices include amounts paid to reimburse the Commonwealth for capital expenditure made between the signing of Sale Agreements and sale completion, and to reflect movements in working capital balances. [b] For the Phase 1 airports (Brisbane, Melbourne and Perth), the development Period One ran from 1997 to 30 June 2002 and Period Two from 1 July 2002 to 30 June 2007. For the remaining airports (Phase 2), the development Period One ran from 1998 to 30 June 2003, and Period Two from 1 July 2003 to 30 June 2008. [c] As part of the sale process, Canberra airport committed to $25.97m of capital works associated with a planned Very High Speed Train project. When that project did not proceed, Canberra airport's Phase 2 commitment was reduced to $20.94m.

Source: ANAO (2004).

In its 2007-08 Annual Report, the (then) Department of Infrastructure, Transport, Regional Development and Local Government reported that all 10 airports had met their sale development obligations, and in many cases had exceeded them (DITRDLG 2008b, p. 157).

In addition to these initial obligations, airport leases further impose a general obligation on airport operators to continue to maintain their infrastructure at a standard expected of an airport in Australia (and for Phase 1 airports, to the standard of an international airport), including continuing to develop the site to account for future passenger growth — that is, above simply meeting current demand. For example, the unpublished Commonwealth lease for Canberra airport states:

> **13.1 Development of the airport site**
>
> Throughout the Term the Lessee must develop the Airport Site at its own cost and expense having regard to:
>
> (a) the actual and anticipated future growth in, and pattern of, traffic demand for the Airport Site;
>
> (b) the quality standards reasonably expected of such an airport in Australia; and

(c) Good Business Practice.

The Commission understands that similar clauses are contained in the confidential lease agreements for each privatised airport. Moreover, airport operators are required to prepare Airport Master Plans that include their development objectives and an assessment of the future needs of airport users (chapter 3). The Australian Government has the ability to reject a master plan that it considers does not address future planning and investment issues sufficiently.

DRAFT FINDING 5.1

The Australian Government has a number of regulatory and other levers to influence the timing and nature of investment at Australian airports, including lease provisions and requirements under the Airports Act 1996. To date, these levers have not been triggered, as investment has exceeded requirements established at the time airports were sold.

5.3 Investment at Australian airports

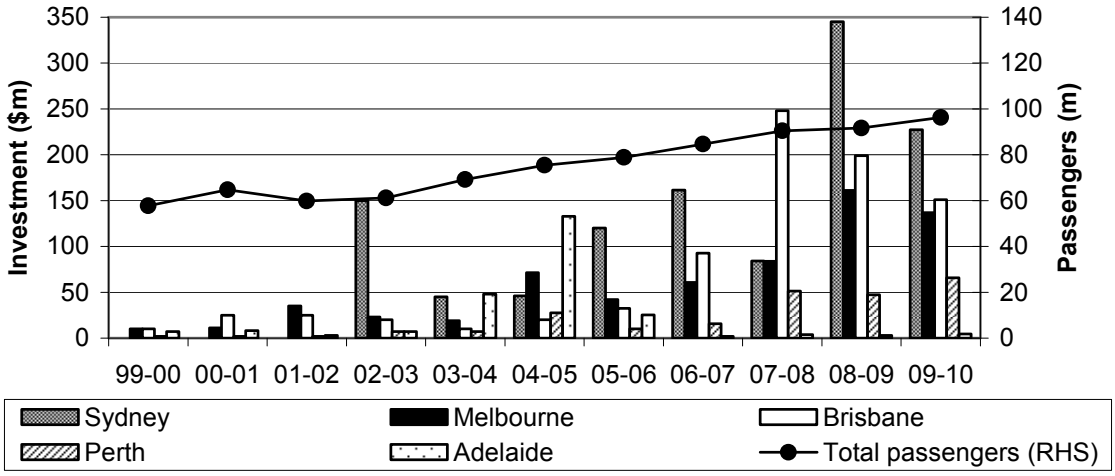
The issue of the interaction between various regulatory regimes and the incentives they create for airport investment is not new — it has been a feature of each of the reviews undertaken by the Commission into airport regulation. In re-examining the issue in its 2006 review, the Commission concluded that:

> First and foremost, the light-handed approach has made it easier for airports and airlines to agree on what new investment is required and the charges necessary to pay for it. (PC 2006, p. XV)

In that report, the Commission found that investment at Australian airports had been higher in the post-price cap period, in part reflecting investment cycle effects, as well as runway upgrades to accommodate the (then) forthcoming Airbus A380 aircraft. Further, one of the benefits delivered by the light-handed monitoring regime was the removal of the regulator (in this case, the ACCC) from investment decisions — a benefit that was likely to increase in significance as airports moved into a new post-privatisation investment phase.

Since the introduction of the light-handed regime in 2002, there has been strong investment in new aeronautical assets at most Australian airports (figure 5.1).

Figure 5.1 **Total passenger growth and additions to aeronautical tangible non-current assets[a]**



a An airport's long-term physical infrastructure used to provide aeronautical services. **b** Prior to its privatisation, Sydney airport also had aeronautical additions of $936 million in 1998-99, $400 million in 1999-2000 and $120 million in 2000-01.
Data sources: ACCC monitoring reports (various years), BITRE (2010a).

The Department of Infrastructure and Transport surveyed the federally-leased airports as part of this inquiry, noting that they had reported $6.9 billion of capital expenditure since 1997, of which more than $4 billion (59 per cent) was investment in aeronautical facilities (sub. 80, p. 1). Of this expenditure, 77 per cent was undertaken by the five largest airports.

The operators of the five price-monitored airports commented on the range of investments they had undertaken since the price-cap regulations were removed in 2002, or since the Commission's previous inquiry in 2006.

- Since 2002, Sydney airport has invested $1.8 billion, including terminal upgrades ($214 million), expansions to accommodate the Airbus A380 ($120 million), security upgrades for baggage screening ($90 million), car parking ($65 million) and other various investments (Sydney Airport Corporation, sub. 46, p. 32).
- Investment at Melbourne airport has risen from an average of $37.5 million per year under price caps to $112.4 million per year since 2002 (Melbourne Airport, sub. 29, p. 42). This has included investments in terminals and runways, security, car parking, taxi and other passenger-related services.
- Compared with investment of $116 million in the five years of price-cap regulation, Brisbane airport had undertaken $929 million of investment since 2002, including expansion of the domestic long-term car park ($28 million) and

international undercover car park ($37 million), expansion of the international terminal ($320 million) and major access road upgrades ($220 million) (Brisbane Airport Corporation, sub. 40, p. i).

- At the time of the Commission's 2006 report, Perth airport had undertaken $36 million in aeronautical capital expenditure since 2002, with an additional $12 million forecast (Westralia Airports Corporation 2006). Since 2006 (and with the increased demands on the airport from the expansion of the mining sector in Western Australia), Perth airport has invested $178 million in aviation infrastructure, including extending runway aprons ($20 million), on-airport road linkages ($20 million), expansions to the airfield ($44 million), terminal upgrades ($17 million) and additional car parking ($23 million) (Westralia Airports Corporation, sub. 41, p. 26). Further plans include consolidating aeronautical services into a single terminal to accommodate future demand.
- Since 2002, Adelaide airport has invested approximately $220 million, including a significant expansion of its main passenger terminal in 2005 (ACCC monitoring reports, Adelaide Airport 2006).
- Since 2002, there has also been investment at the second-tier airports, including a new passenger terminal and runway extension at Gold Coast airport, extensions to car parking facilities at Canberra and Darwin airports, additional aircraft parking bays at Darwin airport and runway overlay projects at Darwin and Alice Springs airports (Hastings Funds Management, sub. 33, p. 13).

Furthermore, several submissions detailed investment that is currently being undertaken at airports, or has been identified and planned for. For example, for the airports it has an ownership interest in, Hastings Funds Management forecast that around $4 billion would be invested between 2011 and 2016 (sub. 33, p. 13). Similarly, Industry Funds Management also identified a wide range of planned investments over the period 2011–21, totalling around $4 billion (sub. 27, p. 6). And the Minister for Transport has also noted that up to $9 billion of investment is planned at the major airports over the next 10 years (Albanese 2011a).

Comparisons with other industries

A number of participants drew comparisons between the strong investment outcomes at airports, and other sectors relying on infrastructure investment in Australia. While the Commission has not systematically collated investment outcomes in other sectors, Infrastructure Partnerships Australia noted that:

> Australia faces an infrastructure gap in excess of $455 billion. Infrastructure Australia's latest listing of national infrastructure priorities, *Getting the Fundamentals Right for*

Australia's Infrastructure Priorities, was released in July 2010 and lists 54 priority projects valued at a total of $82.8 billion. For the purposes of this inquiry, the Productivity Commission should note that the list does not include any aviation or aeronautical infrastructure for which the airport operators are responsible.

While the infrastructure shortfall in other sectors — road, rail, ports, water and electricity — is of ongoing concern, and its resolution critical to Australia's productivity performance and economic prosperity, it is notable that Infrastructure Australia has expressed no concerns about the provision of aviation infrastructure. (sub. 36, p. 1)

DRAFT FINDING 5.2

There is evidence of significant investment in aeronautical infrastructure at Australian airports in the period since light-handed monitoring was introduced in 2002, with significant future investment planned. Compared to other Australian infrastructure, airport investment outcomes rate favourably.

Rates of return

The ACCC reports annually each price-monitored airport's earnings before interest, tax and amortisation expenses (EBITA) as a proportion of the average value of tangible non-current assets. As the ACCC stated in its 2009-10 report, this is an indicator of the rate of return earned on all assets, and provides an indicator of the efficiency with which an airport uses its assets to produce its operating profit (ACCC 2011). Using the EBITA can make for more meaningful comparisons between airports, as it is not subject to management discretion over the treatment of interest and tax. Tangible non-current assets are used in this comparison to exclude the value of expectations around future growth and business value (which might otherwise be accounted for as an intangible asset, such as goodwill).

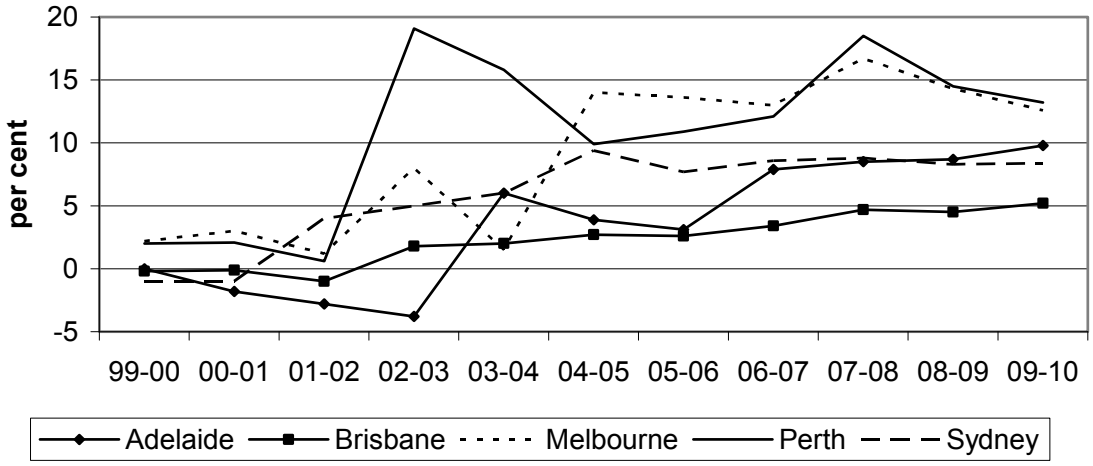
In its 2006 review, the Commission found that airport rates of return increased in the period following the removal of the price-cap regime.

As shown in figure 5.2, airport rates of return were very low in the period prior to light-handed regulation. Following the introduction of light-handed monitoring, returns at some airports did increase significantly, most notably at Perth airport. Since that regulatory change, airport rates of return have varied for each airport and across time, with most airports having experiencing periods of rising and falling returns.

However, as the Commission explained in its 2006 report, it is difficult to draw firm conclusions from rate of return data, both the headline rate in a single period and across time. Rates of return are likely to vary depending on where an airport is in its

investment cycle, as well as the values ascribed to assets under accounting standards.

Figure 5.2 **Rates of return on aeronautical services at price monitored airports, 2004-05 to 2009-10[a]**



a Earnings before interest, tax and amortisation expenses (EBITA) on average tangible non-current assets.
Data sources: ACCC Monitoring reports (various years).

This is consistent with the ACCC's view of the interpretations that can be drawn from comparing rates of return between airports, or with other infrastructure assets. In its 2008-09 monitoring report, the ACCC noted that:

> … the return on assets measure has a limitation of being reliant on each airport operator's valuation of its assets. As a result, benchmarking rates of return across airports or with firms in other industries does not provide useful information. However, trends in each airport's profitability over time (and in correspondence with trends in the operating margins) can provide some insight into the operational performance of the airports. (ACCC 2010a, p. 30)

Nonetheless, some international studies do compare rates of return across airports. Chapter 10 considers this benchmarking data in more detail.

5.4 Concerns about investment at Australian airports

Notwithstanding the quantum of investment that has occurred at (and is planned for) Australia's price monitored airports, both the ACCC and a number of airlines raised what they considered to be problems with the airport investment process. These concerns primarily focussed on:

- the consultation, timing and scope of aeronautical investment (including delays)

- the funding of airport investments.

Box 5.5 highlights some of the investment concerns raised by airport users in this inquiry.

Box 5.5 Illustrative investment concerns of airport users

International Air Transport Association:

> Airport investments have a significant impact on airport users and costs to passengers. Without effective open communication between all parties there is a real danger that individual strategies will result in unnecessary and expensive investments, resulting in over-capacity issues and unnecessary cost increases for airlines and their passengers. (sub. 9, p. 11)

Board of Airline Representatives Australia:

> BARA is also concerned that the current regime effectively guarantees a high rate of return on all the investments undertaken by airport operators regardless of the efficiency of those investments. This is encouraging excessive pre-funding of major assets, diminishing the incentives for efficient delivery and encouraging airport operators to undertake substantial increases in the scope of capital projects without consulting with airlines. (sub. 19, p. 4)

Qantas Group:

> … new investment will impact on future airport charges and the current regulatory framework will not ensure that these investments are efficient (in terms of timing, scope and cost) or that only efficient costs will be passed on to airlines … The current framework does not ensure that prices are set equitably so that existing passengers are not subsidising future passengers and that airports do not exploit their monopoly power in the delivery of these assets. (sub. 52, p. 17)

Virgin Blue:

> … airlines bear the risk of changes to the scope, timing or cost of investments and airports have no incentive to ensure that risks associated with projects are minimised. Further, in Virgin Blue's experience, some airports transfer investment risk to airlines by passing through the cost of infrastructure projects before they are available for use, resulting in airlines pre-funding investments. (sub. 54, p. 6)

Qantas Group, Virgin Blue, Regional Aviation Association of Australia, Board of Airline Representatives Australia:

> Airports are expected to invest significantly in major airport infrastructure over the next ten years. The impact on airlines of current inefficiencies and inequities in the development, delivery and pricing of infrastructure is likely to be exacerbated unless the current regulatory regime is improved to more effectively address these concerns. (sub. 55, pp. 1–2)

However, it is not the Commission's intention in this report to examine each claim made by airlines or the ACCC and the counterclaims made by airports; rather it is to examine whether there are systemic weaknesses in the process for delivering new investment at airports. Nonetheless, examination of the claims made by participants can help shed light on areas of the current regulatory framework that might not be delivering optimal outcomes.

Efficient timing, scope and transparency of investment

Airlines and the ACCC expressed concern with consultation processes surrounding new investments at airports, as well as the timing and scope of such investment. For example, in its 2009-10 monitoring report, the ACCC stated that its previous report had:

> … raised concerns that Sydney Airport appears to have increased profits by increasing prices and permitting quality of service provided to airlines to fall below a satisfactory level over several years — especially at the international terminal. This appears to have been achieved through cost-saving measures (such as inadequate maintenance and delaying investment in services provided to airlines) … (ACCC 2011, p. 45)

And in relation to car parking at Brisbane airport, the ACCC stated the airport may have been:

> … earning monopoly rents for airport parking as a result of inefficiently delaying investment. Although Brisbane Airport has recently undertaken significant investment in multi-level car parking facilities, it is questionable why this investment was not undertaken sooner given a relative scarcity of car parking spaces at the airport over a significant period of time. The other monitored airports appear to have been more responsive to emerging capacity constraints … (ACCC 2011, p. 73)

Distinct from the ACCC's concerns about timing, BARA raised concerns with the transparency of airport capital expenditure programs and the consultation held with airlines. For example, in relation to capital expenditure at Melbourne airport, it stated that:

> … there has been a marked deterioration in the transparency of its capital investment programs … the current (2007–12) aeronautical capital budget has been over-spent by a very substantial amount. The airport operator only recently started to provide information to explain and to justify this expenditure … about half of the capital over-spend relates to 'changes in cost, scope and timing' of projects, while the other half relates to 'new projects'. (sub. 19, p. 23)

BARA concluded that it 'is unacceptable that an airport operator should proceed to spend significant additional amounts on aeronautical capital projects without engaging in detailed consultations with airlines' (sub. 19, p. 24).

Regarding Sydney airport, BARA suggested that:

> Aeronautical capital projects are nominated by SACL for 'approval' by airlines in a 'consultative' process, but if airlines disagree with the scale or design of a project SACL generally pursues its own commercial interests. Consultative changes to advisory … (sub. 19, p. 25)

Both Qantas (sub. 52) and Virgin Blue (sub. 54) made similar claims about various airports. For example, Qantas claimed that in 2008 during the global financial crisis,

Sydney airport proposed to delay some investment in aeronautical infrastructure, but neither Qantas nor BARA agreed with the proposal to defer construction of additional runway aprons (sub. 52, p. 32). Despite the agreement of Qantas and others to the necessary higher charges to fund the aprons, construction did not take place.

But airports provided an almost complete contrast in their submissions. For example, Adelaide Airport commented that:

> Airline agreement to major airport investment is a necessity to provide certainty to shareholders and financiers that it will earn an adequate return on the investment. The Airlines therefore effectively have a veto on any significant expansion project if they do not wish it to proceed. By the same token they are able to delay or modify a project should they see it as being constructed too early or not be priced reasonably, or even be at a perceived competitive advantage to another carrier. If there is no agreement by the airlines to support aeronautical expansion then it will not proceed. (sub. 12, p. 6)

Sydney Airport Corporation outlined its consultation processes:

> … [O]ngoing consultation on new investments is facilitated via the monthly Aeronautical Capital Investment Consultative Group (ACICG) meeting to which representatives of all airlines are invited. New aeronautical capital investments are presented and discussed. Furthermore, the commercial agreements struck with the airlines also contain contractual obligations for comprehensive consultation processes, including development and implementation of the new investments. (sub. 46, p. 31)

In particular, Sydney Airport Corporation highlighted the outcomes that its consultation processes had achieved. It noted that:

- the level of investment has been better attuned to economic circumstances, ensuring that airlines do not have to pay for under-utilised investments (for example, the investment program was re-prioritised following the GFC to reflect lower traffic volumes)
- the design of investments has been improved through collaboration
- the lack of a formal regulatory process has generally resulted in a shorter approval process and more timely subsequent delivery of investment in most cases. (sub. 46, p. 32)

Westralia Airports Corporation (operator of Perth airport) illustrates the point raised by a number of airports:

> The only observation that WAC would make in relation to timing of investment is our experience that, in the current environment, which relies on direct commercial negotiations as a precursor to investment, there is a tendency for major capacity to be delivered just in time, (or just after time where there is unexpected growth in demand). (sub. 41, p. 44)

Westralia claimed this 'just in time' investment had three causes; firstly, a desire by the airport and airlines not to pay for excess capacity; secondly, the challenge of balancing short-term airline concerns about profitability against the long lead times for necessary airport infrastructure; and thirdly, the unwillingness of some particular airlines to acknowledge the need for new infrastructure that they may not see the need for themselves (sub. 41, p. 44).

In particular, Westralia expressed concern about any expectation that airports have the agreement of all airlines before undertaking investment:

> It is inevitable that agreement will not be reached with some airlines, for a range of reasons. There comes a point in the process where it is necessary "to get on with it" based on the certainty/clarity achieved through agreement with the majority of airlines. WAC's conduct in these circumstances needs to be judged by the following considerations:
>
> - has WAC offered the same or similar opportunity to reach agreement to each airline; and
> - has WAC negotiated in good faith with each airline (provided the same information, offered to fully engage, demonstrated it will modify its position in the face of reasonable propositions, etc.)? (sub. 41, p. 45)

Investment funding issues

A number of participants raised concerns around the funding of new infrastructure at Australian airports, and in particular, the appropriate degree of 'pre-funding' by airlines during an asset's construction phase.

Illustrative of the case put by airlines, BARA noted the issues regarding the planned parallel runway at Brisbane Airport, at an estimated cost of around $1.3 billion (sub. 40, p. ii). The first phase of construction involves the laying and settling of the runway subsurface, for a period of around two to four years. The construction period is expected to take three to four years, making for a total construction period of seven to eight years.

Regarding the cost and funding arrangements proposed by Brisbane airport, BARA stated that it:

> … understands that the cost of this preliminary earthworks activity is estimated at many hundreds of millions of dollars and BAC has advised that it expects to receive its full weighted average cost of capital on that investment, despite airlines receiving no beneficial improvement in service quality until the opening of the runway some four to five years after the preliminary earthworks are completed. BAC has steadfastly refused to consider alternative funding arrangements to avoid pre-financing of the asset. (sub. 19, p. 23)

BARA argued that by putting in place a guaranteed pre-funding arrangement, Brisbane airport had minimum incentive to ensure the project is completed on time or within the proposed budget. Qantas also raised a number of concerns over pre-funding of aeronautical assets:

- Airlines, like airports, are capital-intensive businesses, but unlike airports are unable to pre-fund the purchase of airline assets from current passengers. Instead, airlines fund asset purchases via debt or equity, with cash flow drawn from current revenues. Thus, the ability of airports to pre-fund raises equity concerns in the industry.
- Airline pre-funding gives no guarantee of access to infrastructure in the future; in fact, airports may be increasing capacity to attract new airlines, which provides no benefit to current users.
- Construction of new aeronautical infrastructure often involved delays and interruptions in the use of existing infrastructure, lowering the quality of service provided by the airport during the construction phase.
- Airport pre-funding could be at odds with the dual till regulatory regime, which was designed to allow airports to access additional stable revenue sources, to facilitate aeronautical investment.
- Pre-funding represents a cross-subsidy from current users to future users (sub. 52, pp. 34–37).

However, the AAA argued that pre-funding was both equitable and efficient:

> … it is worth noting the scope within the current arrangements for airports to signal to users through airport charges the long-run incremental cost of providing the relevant infrastructure. This includes the costs associated with constructing *additional capacity* once those costs become reasonably predictable. For example, if demand growth gives rise to the need for investment in additional runways or terminals expansions, those costs are properly recoverable from today's users. (sub. 18, p. 19)

Drawing on the academic literature, the AAA went on to state:

> … the costs of pre−financing prudent investments that are required to meet future demand can and do form a legitimate element of efficient prices *today*. In contrast, if today's users are not required to pay for investments for which they are causally responsible until such time as, say, the new facility is commissioned, the outcomes can be perverse. (sub. 18, pp. 19-20)

Specifically, the AAA argued that the absence of pre-funding can result in:

- current prices being held at inefficiently low levels while the new facility is under construction, perversely accelerating congestion

- substantial price increases once the new capacity is commissioned, inefficiently restricting use of the more ample capacity once it is built.

The Commission's assessment of airport users' concerns

As discussed in chapter 4, efficiency encompasses both the consumer (demand) and airport (supply) sides of the industry. An efficient outcome is generally one in which all consumers who demand the services of an airport are able to do so at the prevailing price, while the airport is meeting the demand of consumers at least cost.

However, a number of the traditional features that would normally characterise a 'competitive market' may not be present in relation to airports. While these are discussed throughout the report, some relate to investment in particular.

First, there are significant barriers for new entrants to provide airport services in a location if an existing airport inefficiently delays investment. In a normal market, new entrants could be expected to provide a competitive alternative (and thereby dissipate any 'economic rent') by entering the market and expanding capacity as passenger demand grows, or capture market share by increasing the quality of infrastructure.

Second, the absence of new entrants means that an airport may not have the incentive to provide differentiated products to different airlines. In a competitive market, producers would provide different levels of product quality, with consumers purchasing those goods that match their willingness to pay. An airport may choose simply to offer one level of quality to its customers.

Third, airports may over-invest, either in excess capacity or excessive quality. This could occur where an airport with market power is price restrained by regulation, but is allowed to extract a sufficiently high rate of return on additional facilities once constructed (and pass through of the investment has increased prices), even if they are not strictly needed. Such over-provision of aeronautical capabilities can be as inefficient as under-provision.

In order to reach a judgement, the Commission has drawn on the evidence provided by participants about whether there is a systemic failure in the investment process at airports, recognising that there can be a range of outcomes that could prevail in a competitive market. As is often a feature in inquiries such as this, the complaints put to the Commission by airport users are refuted by airport operators, with much of the evidence before the Commission consisting of 'he said / she said' claims.

In practice, it is difficult to assess whether what is observed at an airport is an 'efficient' outcome. The primary difficulty is the lack of a quantifiable 'counter-factual'— that is, what would be the prevailing investment levels and timing, prices and rates of returns if there were multiple airports competing in the same location?

Assessing investment timing and scope

On the issue of the timing and scope of aeronautical investment, while there may be circumstances where aeronautical infrastructure has been delayed, at least in some cases these delays appear to have been based on a solid foundation — such as the global financial crisis in 2008 — and with the agreement of airport customers (chapter 9). In other cases, delays may not have been transparently explained to airlines. Similarly, the scope of some aeronautical investments can change during construction periods and airlines may not always be apprised of the reasons for this.

Moreover, airport operators must often negotiate with multiple airlines, many of whom are in competition with each other. This can result in a clear misalignment of incentives — what is good for one airline in particular may not be good for the airport (or the travelling public) as a whole. In particular, airlines may not have an incentive to agree to the timing or nature of new investments that expand capacity where it is an airport's intention to attract new airlines and routes. Additionally, the 'grandfathering' of airport landing slots from one season to the next ensures that airlines do not pay the full cost of congestion at an airport (since slots cannot be auctioned to the highest valuing user in each period), and that new entrants are effectively barred from accessing an airport in periods when it might be otherwise profitable to do so. In its submission, Queensland Airports Ltd highlighted how this plays out in practice (box 5.6).

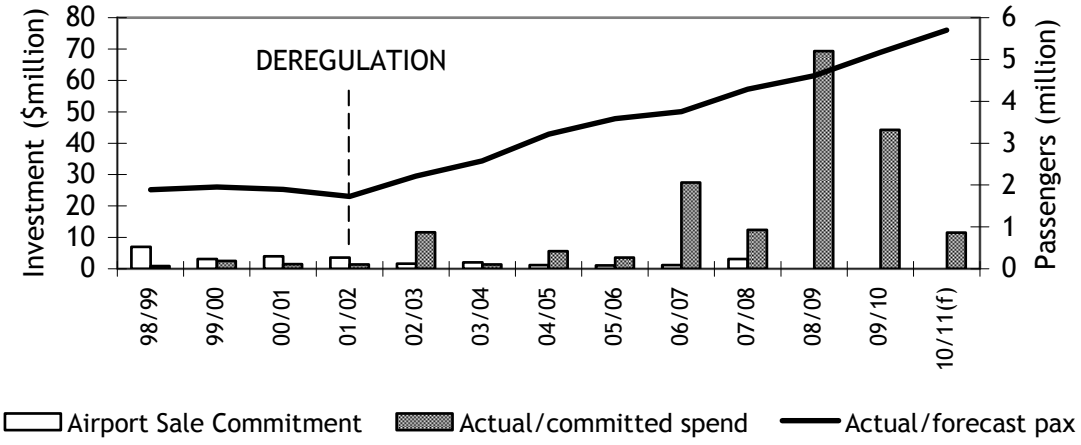
In their submission, Forsyth and Niemeier suggest that benchmarking is one way that the efficiency of airport investment can be tested; however, they go on to acknowledge that:

> … benchmarking does not handle major investments very well. One reason for this is that it is difficult to assess how much extra capacity is warranted, and whether it has been provided at minimum cost. This is a problem which bedevils both light-handed and price cap regulation. In spite of this, benchmarking is still useful, since it puts a dimension on what we do not know. Often regulators or inquiries will need to make an assessment of performance, even though they will have less access to information than they would wish for. (sub. 6, p. 11)

Box 5.6 **Negotiating with different airlines**

Queensland Airports Ltd (QAL — owner of Gold Coast airport) commented on the differing incentives that airlines have when negotiating with an airport operator, including on the expansion of capacity and the impact this has on attracting new airlines. It stated that:

> This figure illustrates the financial commitments for capital expenditure made by QAL for the first ten years of the airport lease from the time of privatisation in 1998. It can be seen that under the regulated regime capital expenditure was negligible. Agreement could not be reached with the legacy airlines, Qantas and Ansett, to upgrade the facilities as their high cost operations were loss making to a leisure destination such as the Gold Coast. The removal of regulation and the freeing-up of the leased terminal space created an environment conducive to commercial negotiations with more cost-effective LCCs. This partnership model paid dividends for all concerned i.e. the destination, the airlines and the airport. This success is illustrated by the passenger growth curve achieved since deregulation [shown below].



Source: Queensland Airports Ltd, sub. 67, p. 4.

Specifically, the authors suggest that, in order to determine whether the current regime sends the 'correct' investment signals to airport operators, ex-ante cost-benefit analysis is necessary:

> … there is a need for cost benefit analysis, to determine whether an investment should go ahead, and when it should go ahead. In an ex ante regulated context, a good regulator does a cost benefit analysis to determine whether the investments proposed by the regulated firm is worthwhile or not. In a situation of light-handed regulation, such as under the Australian system, the same process is needed … (sub. 6, p. 12)

In the Commission's view, this proposal is problematic. First, cost–benefit analysis is subject to a range of uncertainties, and often requires a range of assumptions to be made; small differences in which could lead to very different conclusions. For

example, the 'efficient' timing of additional capacity will be when the long-run benefit of that capacity is equal to the long-run incremental cost of the expansion. However, the extent of any benefit is likely to be contingent on assumptions about future passenger growth, while future costs might be dependent upon assumptions about debt and equity markets, construction and material costs, and the opportunity cost of vacant land.

Second, when considering investment in additional capacity, what represents an efficient outcome for a particular airline might not be consistent with overall airport efficiency, particularly given that (potential) future airport users may not be represented in negotiations for new investment. And given the likely difference in incentives faced by airports and airlines, the 'agreement' of all incumbent airlines is unlikely to be a necessary condition for an efficient outcome — airports must manage the competing demands of airline users who are themselves seeking to 'get ahead' of their competitors.

Third, the process of negotiating between airports and airlines over new investment proposals is likely to represent a form of 'iterative cost–benefit analysis'. Airports and airlines are also likely to be the best placed parties to undertake such negotiations, with the competitive tension between them (that is, the desire by airports to grow versus the desire by airlines to reduce costs and maximise the use of existing facilities) likely to most closely approximate an efficient outcome. It is not clear that a regulator would have a better information base with which to make such investment decisions.

Finally, if the decision to undertake new investment is finely balanced, the current regulatory arrangements (particularly lease obligations) appear to favour investment, in order to account for potential future growth in demand. Airport operators must, in essence, 'do the best they can' with the information they have, at each point in time. Cost–benefit analysis 'after the fact' — whether by an independent reviewer or regulator — is unlikely to provide much guidance for future investment decisions.

As discussed earlier, it is not possible to definitively conclude whether an aeronautical investment is occurring at the efficient time, or has been inefficiently delayed. But given all of this, it is not clear to the Commission that the current arrangements are failing to meet the objectives of the Government in achieving more efficient investment at airports.

DRAFT FINDING 5.3

Despite instances of delays to aeronautical investment, it does not appear that such delays have been unreasonable. Moreover, airport operators appear to consult with airlines and other airport users about nature and timing of individual investments at the airports for which they are responsible — although not always to the satisfaction of airlines — and the degree of consultation varies between airports.

Assessing investment funding

On the issue of pre-funding investment, while airports and airlines have presented opposing views, the observed outcome has been airports undertaking significant investment during the period since privatisation, and airlines continuing to grow passenger numbers. Experience suggests that whatever the preferred position of airports and airlines, some compromise has been reached so far.

For airports facing congestion of existing assets, the Government's pricing principles state that at airports with significant capacity constraints:

> … peak period pricing is allowed where necessary to efficiently manage demand and promote efficient investment in and use of airport infrastructure. (Costello 2007)

In practice, there is likely to be little difference in pricing outcomes for airlines between pre-funding for new investment, and the presence of congestion charging for existing infrastructure, provided such congestion charges are used by airports to alleviate capacity constraints through additional investment. Furthermore, in the Commission's view it is appropriate that those airlines contributing to airport congestion are charged in the periods that congestion occurs (i.e. in advance of new capacity being made available).

Pre-funding of aeronautical investments also allows price increases to be smoothed over a period of time. The alternative is for airports to fund investments (including holding costs) for the period of construction, necessitating a larger price increase as new capacity becomes available. Given the very long-life of airport assets, their construction period is a small total of their total life, and the extent of any cross-subsidy between present and future users is likely to be minimal.

The issues around the pre-funding of airport investment have been considered extensively in other countries, including in those with price regulation. Box 5.7 details the consideration of pre-funding for Heathrow Airport's Terminal 5 by the UK Civil Aviation Authority (CAA).

Box 5.7 **Funding Heathrow Terminal 5**

The Terminal 5 building at London's Heathrow Airport represented a sizeable increase in capacity. Constructed at a cost of around £4.2 billion, the need for the terminal was considered as early as 1982. Following extensive planning and consultation, approval for its construction was granted in 2001 with construction taking place between 2002 and 2008. It has a single airline tenant, exclusively serving British Airways.

During the period of construction, Heathrow was subject to price controls determined by the CAA (and continues to be subject to them). For the price control period 2002-08, the CAA was required to make a pricing decision that dealt with issues substantially the same as those arising with Brisbane Airport's third runway project. At the time of the decision there were objections to any pre-funding of the terminal, in part on the basis that at the time the aviation industry was already in a precarious state (following the 11 September attacks in the US).

In its final price determination, the CAA granted Heathrow Airport a price increase that included funding for Terminal 5 during its construction period and in advance of its operation. In its decision, the CAA stated:

> The CAA accepts that the investment encouraged by the revenue advancement can be thought to benefit future users at the expense of current users to a degree. However, the purpose of Terminal 5 is to alleviate terminal congestion and maintain service quality in the face of expected passenger growth at Heathrow. For large capacity additions it promotes the efficient, economic operation of airports and is in the interests of users to allow prices to adjust such that prices are relatively higher prior to the capacity coming on stream (when there is excess demand and congestion) and relatively lower when it is completed (when there is less excess demand). This is one further reason why the CAA does not accept that higher charges should be deferred until Terminal 5 is opened (p. 34).

Source: CAA 2003.

In the Commission's view, the needs of airports and airlines differs at each location and for each asset to such a degree that any prescriptive rules on the funding arrangements are likely to be impractical. Such matters should continue to be negotiated between airports and airlines on a case-by-case basis.

Annex on investment and pricing

The so-called 'building blocks' approach to pricing infrastructure assets — a feature of the aeronautical price-cap era — still plays a role in negotiations between airports and airlines. This annex examines the elements that make up the 'building blocks' model, and discusses the link between large-scale capital investments by airports, and the prices ultimately charged to their airline customers.

In smaller businesses there is a close relationship between the costs incurred in each financial period (such as wages, rent and stock costs) and the revenue earned. In contrast, an airport with large capital expenditures that occur over rolling financial periods (such as 5–8 years to build a runway) can earn revenue over the total life of the asset (a runway has a potential life of 100 years). In such cases, a methodology is needed to calculate the price of services that depend on that capital over the life of the asset.

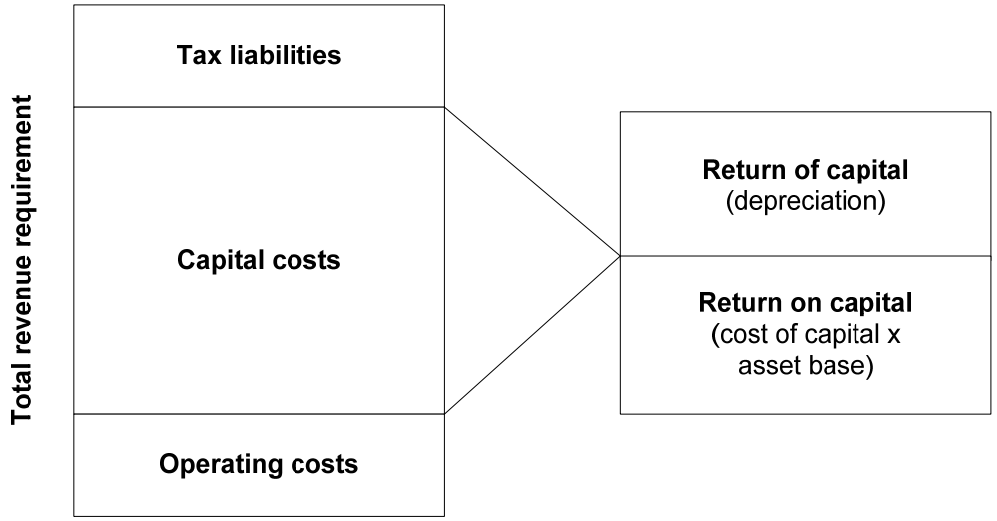
Following privatisation in 1997 and 1998, airports (excluding Sydney airport) 'inherited' the legacy aeronautical prices charged by the FAC, and were permitted to vary prices by CPI-X each year. In addition, airports were able to 'pass through' the costs of necessary new investment. For proposed new investments, the ACCC determined the price that could be charged (based on its determination of the appropriateness of the various input costs), effectively regulating the rate of return for new investments. Given the necessity for an airport to cover its cost of capital, the ACCC was the effective arbiter of whether new aeronautical investment occurred during the price-cap period. During the period, one way the ACCC calculated prices for new investment was using the building blocks model.

The 'building blocks' model

The goal of a business undertaking large infrastructure investments is to ensure that the present value of the revenue earned from its investment is at least equal to the present value of the costs of the investment. The so-called 'building blocks' approach attempts to 'build up' the expected costs of the business to determine the total revenue requirement.

Figure 5.3 shows a simplified building blocks model. Under this model, an estimation is made of the business' operating costs and tax liabilities over the relevant period. However, the majority of the revenue requirement derives from capital costs — the nominal value of the capital returned each year ('return of capital') and the profit earned on the investment ('rate of return' on capital).

Figure 5.3 **The 'building blocks' in a standard building blocks model**



Data source: ACCC (2010d).

As shown, the rate of return on capital is equal to the cost of capital multiplied by the value of the asset base.

Calculating the cost of capital

Airports comprise a portfolio of assets (terminals, runways, hangars and non-aeronautical infrastructure) and a range of liabilities. In order to fund investments (including new infrastructure), airports can raise funds from two sources — debt (banks and other creditors) and equity (owners). Accordingly, funds in general come from either the owners of a business (through retained earnings or raising new equity), or external lenders (such as through issuing bonds). In corporate financing, the Weighted Average Cost of Capital (WACC) is the minimum return a business must earn in order to make new investment sufficiently attractive to raise funds. The WACC is calculated across the business' portfolio of liabilities, and takes account of its split between debt and equity. In short, it is the business' cost of equity plus the cost of debt, weighted according to the proportion each contributes to the business' liabilities.

The WACC is used by businesses to find the present value of projects that would not change the overall riskiness of the business (Breasley and Myers 1996). For such investments the WACC represents the minimum return a business will use when deciding whether or not to undertake new investments — or put another way, a business that cannot generate the revenue that allows it to earn at least its WACC (plus operating and tax costs) is unlikely to be able to raise the necessary funds to undertake investment.

To determine its cost of equity, many businesses employ the Capital Asset Pricing Model (CAPM), which relates an individual business' cost to the market cost of equity. The cost of equity is defined as the 'risk-free rate of return' plus the business' own systemic risk (beta), multiplied by the market 'risk premium'.

The return on government bonds is often used as a proxy for the risk-free rate of return, while the market risk premium is often determined from historical share market returns (reflecting the risk of investing in the share market as a whole). The 'beta' describes how risky the business' returns are relative to the overall risk of the share market, so that a company with a beta of 0.6 would expect its value to rise by only 60 basis points for each 100 basis point rise in the market, and vice versa. The cost of equity is thus calculated as:

$$\textit{Cost of equity} = \textit{Risk-free rate of return} + \textit{Beta} * (\textit{Market Risk Premium})$$

The treatment of taxation, dividend imputation and gearing rates all affect the calculation of a business' WACC.

Small variations in the asset beta can produce meaningful differences in the WACC. Table 5.2 illustrates the different WACCs that are generated for a given bond rate and asset beta (assuming a market risk premium of around 7.85 per cent).

Table 5.2 **Illustrative impact of asset betas on the WACC[a]**

Bond rate / Asset betas	0.7	0.75	0.8
5.25%	10.8	11.1	11.5
5.50%	11.0	11.4	11.7
5.75%	11.3	11.7	12.0
6.00%	11.6	11.9	12.3

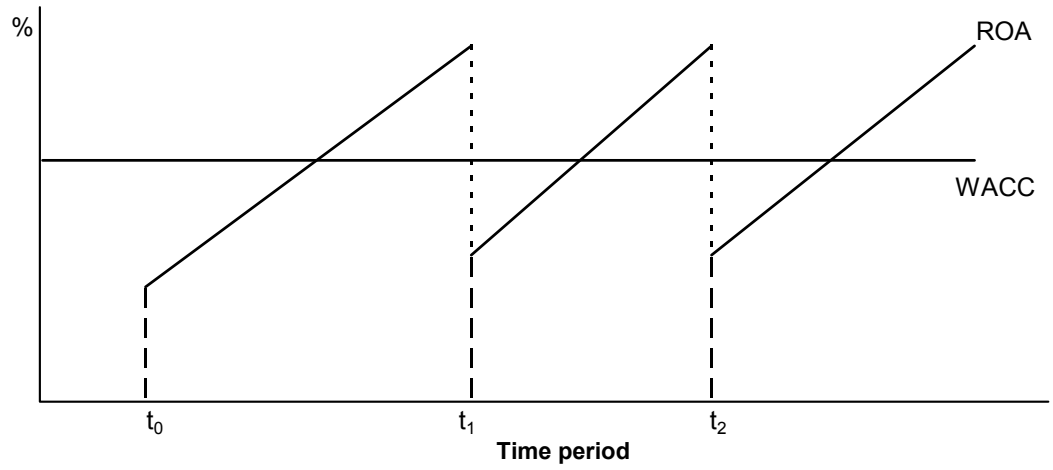
a Assumes a 30 per cent corporate tax rate, 50 per cent dividend imputation rate and 60 per cent gearing ratio.
Data source: Commission estimates.

Thus, for price-regulated industries, decisions by a regulator on the appropriate 'asset beta' can significantly affect the prices charged for those investments. However, there is no single 'correct' asset beta or market risk premium, and setting

parameters that result in a lower-than-required WACC (and thus lower prices as the cost of capital feeds into the building blocks model) can result in inadequate or delayed investment, as investors seek higher returns elsewhere. For a regulator targeting a particular rate of return that it deems to be 'appropriate', the risks of over- or under-shooting the cost of capital are not symmetrical. Figure 5.4 shows why this is the case.

While a business' WACC may remain relatively stable, its rate of return should vary across time. It is economically efficient for a business to charge lower prices when it has excess capacity, to attract demand for its infrastructure. In these periods, the rate of return will be lower. As capacity tightens or congestion arises, prices rise to temper demand, and to encourage new investment. As prices rise, so too does the rate of return. Then as a new investment expands capacity again, the rate of return falls, and so on.

Figure 5.4 **Stylised return on assets (ROA) across time**



So while rates of return may vary over time, a business must earn its WACC *on average* to make investment attractive. But if a regulator acts to curtail high rates of return, while ignoring periods of low returns, then the business will not earn the returns needed to attract investment funds. This movement by a regulator only against high returns is known as 'asymmetric truncation'.

For airports, many of their lumpy investments will be an 'all or nothing' venture. If a regulator only allows the airport operator to earn 80 per cent of the return it needs to attract investment funds, it is generally not possible to build only 80 per cent of the runway those funds were intended for.

The current approach

Chapter 6 discusses the pricing outcomes agreed by airports and airlines under the current regulatory system, while chapter 9 details the negotiation approach employed to arrive at such agreements.

Airlines submitted that the data obtained through the price monitoring reports was prone to manipulation through the more detailed aspects of the building block model. Qantas also pointed out the role of passenger forecasts in the building block model, and argued that the process encouraged airports to under-estimate future passenger volumes:

> All of the Tier 1 and Tier 2 airports adopt a building block methodology when setting prices for airport charges. In this methodology, airports forecast a required revenue line, which allows them to recover costs (operating costs and depreciation) as well as a return on assets. The airports use revenue and demand forecasts to calculate charges for airlines. Other regulated industries have adopted the same basic methodology. However, in other industries, which are subject to stricter price regulation, the forecasts of both costs and demand are subject to scrutiny by regulators. In the case of airports, they face no such scrutiny, and airlines must attempt to negotiate around the forecasts, often with little success. This creates an incentive for airports to under-estimate passenger forecasts. If the demand forecasts are too low, relative to actual passenger numbers, the prices charged to airlines are higher than necessary. Similarly, over estimation of costs would also lead to prices charged to airlines being too high.
>
> Within the current regulatory framework, there is no mechanism which adjusts for the over or under recovery of revenue. Therefore, airports have the incentive to pass the risks inherent in preparing forecasts on to airlines through under estimation of passenger forecasts and over-estimation of costs.

(Qantas went on to discuss other aspects of the modelling methodology, sub. 52, pp. 42–46.)

Virgin Blue also raised concerns with aspects of the building block model as they arose during negotiations (box 5.8).

The ACCC continues to be the regulator for a number of industries. For many of the price determinations made by the ACCC, industry participants and the regulator continue to debate such aspects as the correct gearing ratio for the businesses, the relevant market risk premiums, appropriate credit ratings and debt margins, the value of the regulated asset base, and the asset betas. The fact that this process is often drawn out, and requires extensive industry consultation (and potentially resulting in litigation), demonstrates that rather than being an 'objective' process for regulating prices, it is often much more 'art' than 'science'.

Box 5.8 Virgin Blue's views on the limitations of the building block model

In Virgin Blue's experience, airports can and often do manipulate the inputs into this model in order to gain the maximum revenue, resulting in increased aeronautical prices. This can occur in relation to the following inputs:

- **Asset betas**: Virgin Blue considers that airports apply a much higher asset beta than that which would properly reflect the level of risk associated with their business. The experience of airports and airlines over the last 10 years, in particular during the GFC, has shown that airports are largely insulated from external shock events with airlines instead bearing the risk.
- **Indexation of asset/cash flows (pre-funding)**: Airports have used indexation (CPI) to increase asset bases and increase depreciation charges under the recovery model. This is not a cash expense and has included the claim for depreciation of land. Furthermore, a number of airports apply for recovery and indexation to capital expenses as a cash flow prior to any asset being put into service to benefit the consumer. Virgin Blue considers that this pre-funding is inefficient and unreasonable.
- **Useful life of assets**: Airports use a variety of useful lives for assets and when changes are made, a weighted average is reported without any detail provided. Little visibility or consistency in reporting appears to exist. In Virgin Blue's experience, some airports have begun to apply very short asset lives to enable depreciation over a much shorter period that does not accurately reflect the useful life of assets.
- **Recovery of taxation**: Taxation expenses generated by the airports are generally included in operating expenses and recovered from the airlines and consumers through aeronautical charges.
- **Passenger forecasts**: Airports continually apply lower passenger forecasts during pricing negotiations than would be reasonably forecast in the light of historical passenger numbers and forecast demand. By using low traffic forecasts, airports can divide their return over a smaller number of passengers, increasing the per passenger aeronautical charges. For example, if an airport has calculated its revenue at $10 million per annum, if it applies a passenger forecast of 700,000 passengers, the aeronautical charge would be $14. 28 per passenger while if it applies a traffic forecast of 1 million passengers, it will be $10. As a result of applying an artificially low passenger forecast, overall airport revenues are higher. The excess revenue obtained through the even recovery of charges through underestimation of traffic flows is rarely returned to airlines. This excess revenue has been seen in the significant recent increases in airport revenues.

Source: Virgin Blue Airlines, sub, 54, p. 27.

Importantly, the removal of the price cap regime has allowed airports and airlines to agree on prices and service level agreements, rather than having a regulator supplant business investment decisions. In the end, while the detailed aspects of the building block model may inform negotiations, the parties agree on price, not the underlying variables. The model is a starting point, and may be used to 'test' the reasonableness of offers made during the back and forth of commercial negotiations. As such, the final price set may not emerge as a the result of the scientific application of formula, but rather a balance of issues (including the bargaining power brought to bear) during tough commercial negotiation. In effect,

the price contains more 'information' about the use of market power. Given this, it is appropriate to observe the final prices that emerge from negotiations (rather than any ambit claims that may be made relating to model parameters at various stages) when monitoring for market power purposes.

6 Airside and terminal: price and service outcomes

Key points

- The ACCC's monitoring reports provide historical data about the price, financial performance and specific measures of the quality of service at the monitored airports.
- There is no single 'price' for 'airport services' given the range of infrastructure and services provided at airports. This complicates price comparisons across different airports.
- While there is debate about the method of setting prices, participants in the industry view (the level of) prices as just one component of the overall negotiated outcome.
- When taken in the context of investment programs, the reported price increases at the monitored airports do not indicate the misuse of market power.
- Monitoring of the quality of airport service uses quantitative criteria and subjective surveys from a variety of respondents. Results are aggregated by the ACCC.
- Results from the surveys differ:
  - Ratings by government agencies were variable, with some results 'good', but several recorded as below 'satisfactory'.
  - Airline ratings lay in a band between 'good' and 'satisfactory', but Sydney (three times) and Perth (twice) Airports recorded 'poor' ratings.
  - Passenger ratings were within a similar band, but generally higher than airlines, with Melbourne, Perth and Brisbane Airports recording 'good' ratings.
  - The 'overall' (combined) ratings were also in the band between 'satisfactory' and 'good', with Brisbane Airport recording 'good' ratings. The overall ratings have mostly trended upwards in the last two years.
- The concerns raised by the ACCC in their recent monitoring reports appear to place greater emphasis on the airline quality of service surveys.

Following the privatisation of Australia's major airports, quality of service monitoring was introduced as a complement to price cap arrangements. Along with investment targets, this system was intended to guard against any incentive for airports to run down investments, and thus reduce service standards, in response to

regulatory price settings. The light-handed regulatory system that has been in place since the Commission's 2002 report largely comprises monitoring of both prices and quality of service at the major airports. This system is administered by the Australian Competition and Consumer Commission (ACCC), which issues annual price and quality of service monitoring reports based on information gathered from airports and airport users.

The reports provide historical data on the performance of monitored airports, including their prices, costs, profits, and specific measures of their quality of service. This chapter uses the historical data and reporting about prices and quality of service to judge if any misuse of market power by one or more of the monitored airports is evident.

6.1 Reported price outcomes

The 'price' charged by an airport does not reflect the provision of one simple good. Rather, it encompasses the provision of a range of infrastructure (such as runways, terminals, roads and baggage facilities) and services (such as ground handling, baggage handling and security services).

The observed prices charged by airports are determined following complex negotiations with airlines (the process of negotiation is discussed in chapter 9). While the building block model employed by the ACCC as part of the regulatory regime during the price cap period is no longer a regulatory requirement, the negotiating parties' familiarity with the approach has seen it form a 'starting point' for many of the current commercial negotiations. (It is also sometimes used by the parties as a 'check for reasonableness' of overall pricing.) Issues for the negotiation of prices include:

- the planned investment program for the term of the agreement, including the timing and quantum of investment, as well as the timing of payments (the issue of 'pre-funding')
- financial variables in the model, including asset betas (the relative level of risk compared with the market), depreciation of assets (affected by the method of depreciation and the useful life of the asset) and the treatment of taxation
- passenger forecasts, which go towards setting a price per passenger. These are subject to considerable debate, as conservative estimates can produce high charges per passenger, resulting in over-recovery of costs should passenger numbers exceed projections.

Individual aspects of the model are discussed in the annex to chapter 5.

Given the infrastructure required to deliver most airport services, the key driver of the overall price is the level of investment (chapter 5) undertaken at a particular airport:

> … the capital intensive nature of operating an airport means that interest costs/finance charges are generally the highest single expense of airports — often totalling 50–70% of total expenses. (Australian Airports Association, sub. 18, p. 25)

The schedule of prices that emerge from negotiations, typically expressed in either per passenger or 'maximum take-off weight (MTOW)' terms, are reported by the ACCC in their annual price monitoring reports.

ACCC price monitoring — methodology

As discussed in chapter 3, the ACCC is responsible[1] for monitoring the prices of specified aeronautical services and facilities (box 6.1). In addition to prices, the ACCC also monitors the overall revenue and costs of airports, as well as their operating margins and passenger volumes.

While the services and facilities are defined at law, charging practices differ between airports, resulting in different categories of charges, and varying levels of disaggregation of charges between airports in the monitoring reports. Among other things, typical measures reported include:

- domestic and international passenger and freight charges
- terminal charges
- security charges
- baggage handling charges
- general aviation charges
- aircraft parking charges.

The monitored airports are also required to provide the ACCC with annual regulatory accounting statements to allow general assessments of the financial performance of airports, which are reproduced in the monitoring reports. These data are used by the ACCC to report on revenue, costs (operating expenses) and profits (operating margins), as well as the value of assets owned by the airports and the earnings before interest, tax and amortisation (EBITA) on those assets.

[1] This responsibility arises under Part 7 of the Airports Act and Direction No. 29, issued under section 95ZF of the *Competition and Consumer Act 2010* (Cwlth).

Box 6.1 **Aeronautical services and facilities**

Aircraft-related services and facilities

These are defined to include:

- runways, taxiways, aprons, airside roads and airside grounds
- airfield and airside lighting
- aircraft parking sites
- ground handling (including equipment storage and refuelling)
- aircraft refuelling (including a system of fixed storage tanks, pipelines and hydrant distribution equipment)
- airside freight handling and staging areas essential for aircraft loading and unloading
- navigation on an airfield (including nose-in guidance systems and other visual navigation aids)
- airside safety and security services and facilities (including rescue and fire-fighting services and perimeter fencing)
- environmental hazard control
- services and facilities to ensure compliance with environmental laws
- sites and buildings used for light or emergency aircraft maintenance.

Passenger-related services and facilities

These are defined to include:

- public areas in terminals, public amenities, lifts, escalators and moving walkways
- necessary departure and holding lounges, and related facilities
- aerobridges and buses used in airside areas
- flight information and public-address systems
- facilities to enable the processing of passengers through customs, immigration and quarantine
- check-in counters and related facilities (including associated queuing areas)
- terminal access roads and facilities in landside areas (including lighting and covered walkways)
- security systems and services (including closed circuit surveillance systems)
- baggage make-up, handling and reclaiming facilities
- space and facilities, whether in landside or airside areas, that are necessary for the efficient handling of arriving and departing aircraft.

Source: Airports Regulations 1997 (Cwlth) 7.02A.

The data collected and methodology used by the ACCC for its price and financial monitoring are determined under the Airports Act, and where applicable, must be in accordance with Australian Accounting Standards. As such, the ACCC itself does not set the methodology for its price monitoring regime. Further, monitoring does not cover every aspect of a contract between airports and airlines, but only those where it has been deemed that airports have market power (chapter 4). The parties are free to negotiate prices for non-monitored services and facilities. Thus, the prices contained in the monitoring reports will not necessarily capture the entirety of the commercial relationship between negotiating parties.

The ACCC collates the information received and produces annual monitoring reports. The reports include a detailed chapter covering each monitored airport, an introductory chapter and an overview chapter, which present results across all the monitored airports. The ACCC invites comments from each airport on their own 'airport-specific' chapter. Beyond this analysis of the monitoring information, the reports also include a summary that draws conclusions about the use of market power.

The following section summarises key results from the ACCC's price monitoring.

ACCC price monitoring — results

In its submission to this inquiry, the ACCC reported that the overall results from the monitoring regime were that 'prices and airports' profitability have increased over the period in which monitoring has been in place …' (sub. 3, p. 4). The ACCC also provided a more detailed summary of its findings from the monitoring data (box 6.2).

Box 6.2 **The ACCC's price monitoring findings**

In its submission, the ACCC provided an overview of the results from its price monitoring regime for the period covering 2001-02 to 2009-10:

- There has been an upward trend in passenger numbers at all of the airports.
  - Increases in passenger numbers over this period were between 43.5 per cent (Sydney Airport) and 116.5 per cent (Perth Airport). Sydney Airport had the highest number of passengers over the whole period (at 34.9 million in 2009-10).
- There has been a strong upward trend in aeronautical revenue per passenger (a proxy for average prices).
  - Increases in aeronautical revenue per passenger between 2001-02 and 2009-10 were between 49 per cent (Sydney Airport) and 332 per cent (Adelaide Airport), with the second highest increase being 154 per cent at Brisbane Airport. Despite having the lowest percentage increase, Sydney Airport had the highest aeronautical revenue per passenger over this period (at $14.03 in 2009-10).
  - Importantly, in early 2001, the ACCC approved significant price increases at Sydney airport. Those prices were intended to recover the costs of providing aeronautical services at the airport. The effect of the increases was a 71 per cent increase in Sydney Airport's aeronautical revenue per passenger from 2000-01 to 2001-02. There has been no similar review of price levels and aeronautical costs at the other monitored airports.
  - It should also be noted that a significant proportion of Adelaide Airport's increase occurred following the opening of its new terminal and the introduction of charges associated with the recovery of its costs.
- The upward trends in passenger numbers and aeronautical revenue per passenger are reflected in increases in total aeronautical revenue of between 114 per cent (Sydney Airport) and 639 per cent (Adelaide Airport). The second highest increase was 327 per cent at Perth Airport.
- Aeronautical operating expenses per passenger increased by a lesser extent than revenues, reflecting increases in passenger numbers while costs remained to a large extent fixed.
  - Increases in aeronautical operating expenses per passenger over the whole period were between 18.7 per cent (Sydney Airport) and 86.7 per cent (Adelaide Airport). The second highest increase was 48.5 per cent at Brisbane Airport.
- These results contributed to strong upward trends in aeronautical operating margin per passenger at all airports. In 2009-10, margins ranged from $3.29 (Perth Airport) to $6.26 (Sydney Airport).
- Measures of rates of return across the airports do not provide economically meaningful information about the airports' profitability.
- The airports' approaches to valuing their aeronautical asset bases have differed. For example, Brisbane and Sydney airports' assets were valued at $1.3 billion and $2.6 billion respectively in 2009-10. Melbourne Airport's assets were valued at $833 million, while Adelaide and Perth airports' assets were at $373.3 million and $279.7 million respectively in 2009-10.

(continued next page)

Box 6.2 (continued)

- The airports' asset values are based on accounting data and the airports have a significant amount of discretion in valuing their assets for monitoring purposes.
- With the exception of Sydney Airport, a detailed review of the valuation of the airports' asset bases for regulatory purposes has not been undertaken.
- Sydney Airport's asset base was reviewed by the ACCC in 2001. Note, however, that the airport's asset base may include revaluations made by the airport since that time, which the ACCC has not assessed.

Source: ACCC (sub. 3, pp. 5–6).

A single measure of 'price'?

Given the number of possible variations within the observed data, there is no single 'price' for airport services. As the ACCC stated:

> … the price of using an airport cannot simply be measured by adding up the different charges in place at a given point in time because charges can be levied on different bases … airports might offer discounts for certain periods or to certain users, or there might be minimum and maximum charges in place which affect some users but not others.
>
> In addition, the price changes for particular airport users might vary depending on the composition of airport services they utilise, the times at which they use them and so on. For example, the costs to an airline of a domestic flight are likely to be different to those associated with an international one due to differing security and processing requirements. Similarly, changes in price structure by an airport might affect users in different ways … (ACCC 2011, p. 10)

In an attempt to overcome this difficulty, the ACCC reports the aeronautical revenue per passenger for each monitored airport as a proxy for a price index, as it 'relies on a consistently defined service definition and provides a measure of the cost to airlines expressed in terms of the most significant charging unit [passengers]' (ACCC 2011, p. 10).

There are several limitations to the use of revenue measures. By their nature, such observations reflect revenues only, and do not incorporate changes in either capital or operating costs. Revenue statistics alone also shed no light on the necessity or desirability of any increased charges, be it due to government-mandated security requirements, quality-improving investments agreed to (or suggested by) airlines, or 'gold-plated' investments that may not have been required at the time. Further, changes in total revenue may reflect a shift in the composition of the passenger base. For example, for a given number of passengers, an increase in the share of

international passengers (relative to domestic) would flow through to an increase in observed revenue per passenger, as they are more expensive to process. This increase in revenue could occur without any change in price levels.

Nonetheless, if taken in context (and when the limitations are appropriately considered), examination of trends in price data over time can provide broad insights into historical pricing conduct at individual airports. In particular, such trends can draw attention to 'outliers', or behaviour that may warrant further examination and explanation beyond pricing data.

Although the Commission has not conducted a forensic examination of the prices at each monitored airport (and cognisant of the drawbacks of focusing on any given variable, discussed below), for illustrative purposes the Commission has depicted trends in aeronautical revenue per passenger (figure 6.1) and international passenger charges (figure 6.2). (Comparisons across Australian airports, relative to overseas counterparts, on price and a range of other measures are examined in chapter 10.)

Trends in aeronautical revenue per passenger

It is important to choose the right period for examining whether price increases indicate a misuse of market power. It is widely recognised that there were significant and justified increases in price in the transition from a price-cap to a price-monitoring regulatory regime. For example, while it argued that a large portion of the increases amounted to a 'rent transfer' from airlines to airports, the Board of Airline Representatives of Australia (BARA) acknowledged that '[p]rice increases were necessary to fund future investment programs …' (sub. 19, p. 4). This reflected the fact that price-caps had constrained investment and that a price adjustment was needed to 'put airport operations on a sustainable longer term footing' (PC 2006, p. XV).

Brisbane Airport also suggested that the initial increases were required to reflect costs better:

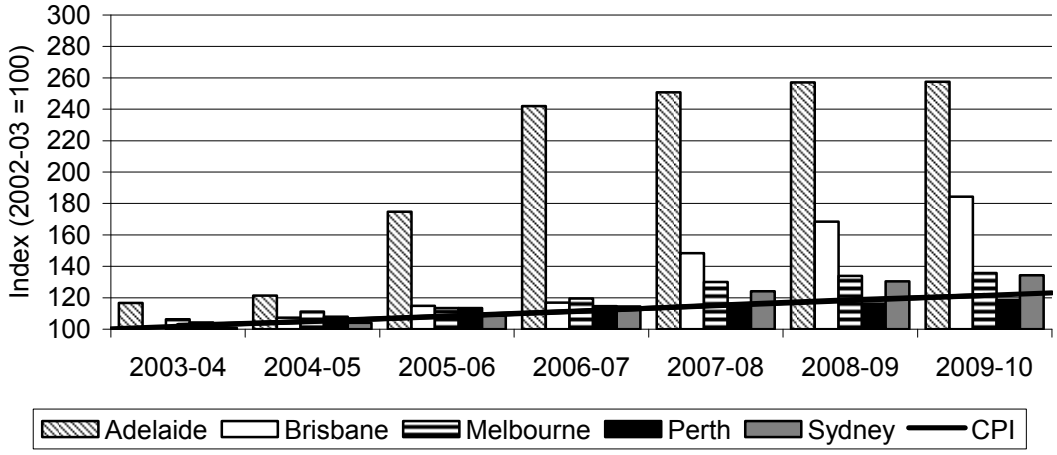
> It has been accepted by the Commission and the ACCC that the prices during the price cap period (1997/98–2001/02) were inefficiently low, and therefore BAC had the opportunity to increase prices to more cost reflective levels as part of the second regulatory period (2002/03 to 2006/07). The price path that BAC negotiated with the airlines at that time was below the charges that were justified based on the building block modelling and provided for annual CPI increases only. (sub. 40, p. 10)

As such, excluding these adjustments in prices by focusing on changes from 2002-03 allows an examination of the light-handed period for the five monitored airports. In particular, the Commission notes that increases in charges for Sydney

Airport immediately prior to privatisation were approved by the ACCC. Further, in order to examine behaviour since this time, it is appropriate to focus on changes in pricing over the period, rather than the quantum of prices per se.

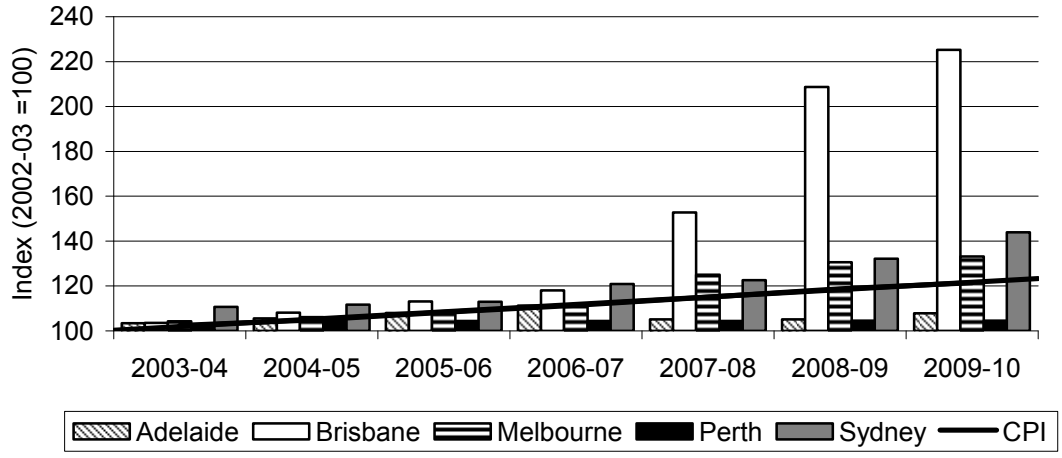
Accordingly, figure 6.1 shows the change in aeronautical revenue per passenger over the last seven years, using 2002-03 levels as the basis for comparison. The figure also shows changes in the consumer price index (CPI) since 2002-03, to allow a comparison with overall movements in prices across the economy.

Figure 6.1 **Change in aeronautical revenue per passenger**
2003-04 to 2009-10



Data source: ACCC monitoring reports (various years).

Figure 6.2 **Change in international passenger charges**
2003-04 to 2009-10



Data source: ACCC monitoring reports (various years).

Bearing in mind the noted limitations of the data, some observations can be drawn from figure 6.1 above:

- In terms of percentage change, the most significant outlier is Adelaide Airport, whose aeronautical revenue per passenger in 2009-10 was over two and a half times the 2002-03 level. However, this is unsurprising, given Adelaide Airport's substantial investment in a new terminal and its relatively low passenger base (roughly one quarter of Melbourne Airport's passenger base, and roughly one fifth of Sydney Airport's). Further, this increase came from a low initial level of revenue per passenger in 2002-03. Indeed, despite such a large percentage increase, Adelaide Airport's revenue per passenger in 2009-10 was not the highest amongst the monitored airports.
- The next most notable increases are from Brisbane Airport, for the period from 2007-08 to 2009-10. These increases appear to correlate with substantial investment in Brisbane's international terminal (discussed below and in chapter 5).
- Aeronautical revenues per passenger in both Sydney and Melbourne Airports were roughly 35 per cent higher in 2009-10 than in 2002-03. Taken alone, these figures would not suggest misuse of market power, as — on an annual average basis — they are not markedly above the increase in CPI over the same period (4.4 per cent as against annual average CPI of 2.8 per cent over the period), and also reflect new investment programs by both airports.
- At 18.5 per cent over the period, the change in aeronautical revenue per passenger at Perth Airport is below the increase in CPI. However, following a recent rapid and unpredicted increase in demand, Perth Airport advised that its redevelopment plans '… involve investment of over $500 million in aeronautical infrastructure from 2011 to 2014' (sub. 41, p. 22). Such an investment program may see an increase in revenue per passenger over the coming years. (At the time of their initial submission to this inquiry, Perth Airport's negotiations for new agreements were ongoing.)

Trends in international passenger charges

Figure 6.2 examines the change in international passenger charges over the same period noted above. Given that it is not clear that the charge identified covers the same services across airports, the Commission has not sought to compare the level of charges. Further, these charges do not reflect the total price paid to move an international passenger through an airport — for example, separate charges are often levied for security screening of passengers and checked baggage.

Rather, using international passenger charges illustrates the movement over time at each individual airport of one major category of charge in one sector of their

business, and (as with aeronautical revenue per passenger) identifies trends that may require further explanation. In this case:

- The most notable increases over the period are at Brisbane Airport, where the international passenger charge in 2009-10 was more than double (225 per cent) the 2002-03 level. The bulk of this increase occurred between 2007-08 and 2009-10. Brisbane Airport advised the ACCC that they attributed this increase to investment to expand the international terminal (noted in chapter 5).
- Sydney Airport's charges increased in the last three years of observations, resulting in charges over 40 per cent higher than in 2002-03. This timing coincides with investment in Sydney Airport's international terminal, based on an agreement reached with BARA in October 2007 (sub. 46, p. 37).
- Melbourne Airport's charges rose by roughly 30 per cent over the period (compared with the CPI, which had increased by roughly 20 per cent), against a backdrop of increased investment during the light-handed regulatory regime (chapter 5).
- Adelaide Airport's increase is notably modest, at less than 10 per cent greater than 2002-03 levels, and below 2005-06 levels. However, focusing on international passenger charges does not include Adelaide Airport's 'passenger facilitation charge', introduced in February 2006 to recover costs from the opening of its new terminal.[2] While not necessarily a direct comparison, inclusion of this charge (and relevant security charges throughout the period) would show a 48 per cent increase in charges since 2002-03. Such an increase is more in line with the trends displayed in aeronautical revenue per passenger.
- Perth Airport's charges were less than 5 per cent higher than 2002-03 levels, and have only marginally increased since remaining constant from 2004-05 to 2007-08. As noted above, Perth Airport has embarked on a substantial investment program, which may have an effect on future prices.

Participants' views on prices

In addition to the data available in the ACCC monitoring report, several inquiry participants submitted their views and analysis regarding prices at the monitored (and in some cases, other) airports. Unsurprisingly, airports generally submitted that their charges were reasonable and not indicative of any misuse of market power (box 6.3).

2 At the time, the new passenger facilitation charge also included the consolidation of other charges, such as security charges (which have since been reintroduced).

Conversely, airlines raised several issues that they felt pointed to 'excessive' pricing by airports. For example, Virgin Blue submitted that 'since 2006, airport aeronautical charges have significantly increased in absolute terms' (sub. 54, p. 19), and went on to suggest that it:

> … considers that airports are able to, and do, engage in monopoly pricing by:
>
> - manipulating the inputs into their calculation of rates of return in order to obtain unreasonable and inefficiently high prices (and hence returns);
> - failing to take into consideration trade-offs in capital and operating expenditure and in some cases double recovering costs;
> - unreasonably passing all costs onto airlines and shifting investment risk to airlines;
> - passing on costs associated with inefficient investments and project mismanagement; and
> - classifying services as aeronautical or non-aeronautical to maximise profits. (sub. 54, p. 19)

Rather than complaints about simple price levels, much of the airlines' commentary focused on the process used to reach, and raise prices. In general, the commercial negotiation model results in major changes in prices occurring through negotiations for new contracts. That said, prices are not static during the life of a contract. Rather, they follow negotiated 'price paths' during the term of the agreement. For example, Virgin Blue submitted that there were three main mechanisms for increasing price during a contract:

> - through increases in the asset base as a result of capital projects being completed which in turn increas[es] the value of the asset base;
> - through annual increases in the operating expenditure of the airport, including in relation to repair and maintenance, staffing costs, utility costs and taxation; and
> - through annual increases to the value of the asset base in line with CPI or another measure selected by the airport as occurs at all Tier 1 airports and some Tier 2 airports.
>
> Separate from this contractual price path some airports pass on to airlines other unplanned costs through increases in aeronautical charges. (sub. 54, p. 20)

Box 6.3 **Airports' submissions on prices**

Adelaide airport submitted that while it did not have, nor exercise, market power, its price level appeared higher than other Australian airports, as its new common-user terminal means that all of its revenue is reported (DTL revenues are not), and that it has a lower traffic base to recover fixed costs from (sub. 12, p. 8).

Brisbane Airport argued that historical price increases needed to be read in the context of the privatisation process:

> … the ACCC price monitoring reports often quote a high figure for the increase in aeronautical revenue per passenger since 2001/02. … BAC believes this is misleading as it includes the adjustment from the inefficiently low prices inherited from the FAC to prices that more accurately reflected the cost of service provision. (sub. 40, p. 9)

Melbourne Airport reported findings from the Leigh Fisher benchmarking study (sub. 29, Attachment 1), particularly that it was the lowest in the sample of nine airports from Australia and New Zealand, that its prices 'compare favourably' against the wider sample of 58 airports, and that:

> … Australian airports are generally the most efficient in cost and staff productivity terms and derive the lowest levels of revenue from their airline users. Within a 12 airport international sample, they may be regarded as representing industry best practice. (sub. 29, p. 80)

Perth Airport also drew on the Leigh Fisher study, noting that it was the second lowest in the sample of nine airports, and argued that:

> There is no evidence that WAC has set or raised prices for aeronautical services above efficient cost. Price increases over the last 5 years have been modest with WAC's margin per passenger remaining relatively constant. (sub. 41, pp. 47–48)

Sydney Airport suggested that, over the monitored period, its prices had 'generally increased more slowly than inflation', and where increases were evident, this was due to increased costs and new services or safety and security requirements:

> The evolution of the charges reflects the impact of various factors including inflation (on asset values and operating costs), the recovery of $1.2 billion of new aeronautical investments (between July 2002 and June 2010) and increased operating costs arising from increased traffic volumes — offset by the increased traffic.
>
> Headline charges have increased slightly faster than this, as a result of … [n]ew services, such as GPPCA [Ground Power and Pre-Conditioned Air] and CUTE [Common User Terminal Equipment]. In both of these cases, the airport is providing a new service which is replacing an activity previously undertaken directly by the airlines. The overall cost to the airlines has been reduced, even though the airport charges have been increased. The shifting of these costs therefore improved overall economic efficiency. (sub. 46, p. 44)

Sources: Submissions by monitored airports (submissions 12, 29, 40, 41 and 46).

Further, Qantas used the example of Melbourne Airport to raise concerns about cost overruns for new infrastructure being passed on to airlines in future negotiating rounds:

> Melbourne's pricing structure does not allow them to trigger an increased passenger charge during the term of a pricing agreement. However Melbourne Airport's intention is that the full cost of this infrastructure will form part of the cost base for the next agreement, due to commence in 2012. As Melbourne Airport has justified much of this expenditure on the basis of increases in passenger growth, this variance in spend should not produce a significant rise in charges per passenger. However, if the airport has been 'building to the peak', then the expenditure will not be proportionate to the increase in passenger numbers, and significant charge increases will result. (sub. 52, pp. 33–34)

In relation to international airlines, BARA's comments (summarised in box 6.4) also centred on the 'commercial conduct' of airlines, and gave its assessment on the performance of each of the monitored airports. In submitting that 'the quality of the commercial agreement is broader than price', BARA also noted that it:

> … expects that each airport operator will abide by the terms of its commercial contracts. … Each airport operator's conduct needs to be assessed against its overall commercial framework and not just the annual changes in aeronautical prices. (sub. 19, p. 30)

Box 6.4 **BARA's submissions on charges at monitored airports**

In responding to the issues paper, the Board of Airline Representatives of Australia (BARA) offered the following comments relating to charges at the monitored airports in Australia:

> Whether the airport operators have increased charges greater than justified depends on the definition of 'costs'. If the benchmark used is their actual investment in aeronautical services and facilities, then current prices far exceed those that would prevail in even weakly competitive markets at Adelaide, Brisbane, Melbourne and Perth airports. However, prices are currently set around the 2005-06 LIS valuations, which far exceed actual levels of investment.
>
> For BAC, APAM and WAC [Brisbane, Melbourne and Perth airports], the real test of their commercial conduct is occurring with the pricing of new large planned investment programs. As described earlier, BARA has reached a commercially acceptable agreement with WAC. Whether similar agreements can be achieved at other airports is yet to be determined.
>
> BARA considers that SACL [Sydney airport] routinely abuses its market power. First, as found by the ACCC, SACL is resorting to reducing service standards in an attempt to earn at least average rates of return, given its lower average growth in traffic volumes. Second, the new international terminal at Sydney Airport presents operational problems for some airlines due to design problems. These problems exist because SACL put its own non-aeronautical interests before efficient passenger services. As such, the abuse of market power here results in higher non-aeronautical returns rather than aeronautical. Third, SACL has sought to impose a range of unjustified new and/or increased charges. Lastly, SACL's Conditions of Use document falls well short of a balanced commercial agreement.

Source: BARA (sub. 19, pp. 29–30).

Indeed, airports saw the model of 'price paths', based on the negotiated outcome over the life of the agreements, as providing certainty for the parties and acting as a constraint on the ability of airports to unilaterally increase charges:

> [Adelaide Airport] has in place formal pricing agreements for aircraft services which have been negotiated with and agreed to by all of its major airline customers. The agreements are for a period of 5 years … Prices are negotiated based on a cost based price calculated using the ACCC approved building block model. Prices are only escalated during the period of the agreement by CPI adjustments each year. …
>
> These agreements effectively constrain AAL's ability to vary prices at will. (Adelaide Airport, sub. 12, p. 5)

Overall, participants in the industry view price as one outcome of the commercial negotiation process, rather than an indicator that is, on its own, decisive evidence of misuse of market power. Broader issues of commercial negotiation are discussed in chapter 9.

Conclusions from price monitoring

The data obtained from the ACCC's monitoring program show that price increases over the full monitored period have been substantial at most of the airports. However, whether such price increases constitute any misuse of market power is less clear, particularly when taken in the context of investment programs, and given some of the drawbacks of relying solely on monitoring data.

The lack of a definitive conclusion from price monitoring does not mean that the monitoring program itself is ineffective. At a minimum, the findings of the price monitoring program must be considered alongside quality of service monitoring (discussed in the following section) and other factors that contribute to an assessment of the overall effectiveness of the monitoring program (chapter 7).

DRAFT FINDING 6.1

Price monitoring data since 2002-03 show substantial total price increases at most of the monitored airports. However, taken in context, these increases do not indicate systemic misuse of market power.

6.2 Reported quality of service outcomes

The ACCC has monitored quality of service at Australia's major airports since 1997. Monitoring was originally introduced as part of the privatisation process and was intended to detect any misuse of market power through reducing quality

standards (while prices were capped). Following the Commission's 2002 report, a number of objective criteria were added to the monitoring program in addition to the existing (subjective) surveys of airport users. In 2006, as part of the response to the second Commission review, the price and quality of service monitoring reports were combined, and reporting from the Australian Government's three border agencies (the Australian Customs and Border Protection Service ('Customs'), the Australian Quarantine and Inspection Service, and the Department of Immigration and Citizenship) was combined into a single survey response, coordinated by Customs.

Although included in the same monitoring reports as the price and financial data, quality of service monitoring poses some unique challenges. In particular, the subjectivity of survey responses means that quality of service results are not as amenable to objective quantification as price data. Further, as noted in chapter 3, factors beyond the control of the airport itself (such as the staffing of check-in counters) can have a pervasive influence on the perceived 'airport' quality of service. Such issues are not new to this inquiry, and the current methodology used by the ACCC reflects its awareness of these limitations.

ACCC quality of service monitoring — methodology

The Airports Regulations 1997 (Cwlth) specifies the particular aspects of the quality of services monitored and evaluated by the ACCC. As with the price monitoring program, these are broadly divided into passenger-related and aircraft-related services and facilities (box 6.5). The selection of particular 'aspects' of quality of service is designed to focus on the services and facilities that are provided by, or that could be influenced by, airport operators.

While these aspects are specified in regulation, in contrast to the price monitoring regime, the ACCC has the ability to determine the criteria that these services and facilities are measured against, and thus the information that is collected. For example, in relation to 'gate lounges', one criteria the ACCC uses to measure quality is the number of departing passengers per seat in gate lounges (during peak hours). In general, the criteria are aimed at evaluating the capacity utilisation of facilities, as well as their availability and general standard.

Box 6.5 Services and facilities covered by quality of service monitoring

Passenger-related services and facilities

These are defined to include:

Access

- airport access facilities (taxi facilities, kerbside space for pick-up and drop-off)
- car parking service facilities
- baggage trolleys

Departure

- check-in services and facilities
- security inspection
- outbound baggage system

Arrival

- baggage make-up, handling and reclaiming services and facilities

Departure and arrival

- facilities to enable the processing of passengers through customs, immigration and quarantine

Information and signage

- flight information, general signage and public-address systems

Terminal facilities

- public areas in terminals and public amenities (washrooms and garbage bins), lifts, escalators and moving walkways
- gate lounges and seating other than in gate lounges.

Aircraft-related services and facilities

These are defined to include:

- ground handling services and facilities
- aerobridge usage
- runways, taxiways and aprons
- aircraft parking facilities and bays
- airside freight handling, storage areas and cargo facilities.

Source: Airports Regulations 1997 (Cwlth) 8.01A.

Broadly, the ACCC relies on two types of criteria:

- *objective* (or quantitative) criteria, consist of more readily observable quantitative data such as 'the number of passengers per baggage trolley (during peak hour)' used as one measure of the quality of service for 'baggage trolleys'.
- *subjective* criteria consist of perceptions from airport users. The ACCC obtains these through surveys of passengers, airlines, and government (border) agencies. These surveys ask respondents to rate the performance of an airport in relation to a given indicator on a scale of 1 to 5 (Very Poor, Poor, Satisfactory, Good and Excellent, respectively).

Airports provide objective data and conduct passenger surveys themselves, while the ACCC conducts the airline and border agency surveys.

These criteria are not necessarily examined in isolation, and sometimes require reporting of more than one measure. For example, some of the indicators used to measure the quality of service for 'baggage' are:

- baggage reclaim — waiting time (from passenger surveys)
- average throughput of outbound baggage system, during peak hour (a quantitative criteria)
- baggage facilities — availability and standard (from airline surveys).

Conversely, the assessment for some services or facilities relies on only one input, for example, airline survey reporting on the availability and standard of runways.

In addition to these specific observations, the ACCC also aggregates the survey ratings (and objective criteria) to produce overall passenger and airline ratings of the airports, and ranks the airports accordingly. In past monitoring reports, the ACCC has noted the methodology it uses to construct the overall rating:

> The overall airport ratings for quality of service were calculated by taking the average rating of each category of indicator (more specifically, passenger, airline and ACS [Australian Customs Service] whole of government survey ratings, and objective indicators) available for each airport and weighting these scores by the number of observations in each category. The objective indicators were converted to the same 1–5 rating scale used in the other surveys. This was achieved by taking the average of the results obtained for various indicators across airports and constructing quartiles in order to rate the performance for the various objective indicators. (ACCC 2009b, p. 28)

In its submission to this inquiry, the ACCC stated that it did not add judgments regarding the relative importance of the surveys beyond the statistical method mentioned above. Further, the ACCC suggested that its exact method of aggregation was unlikely to affect the position of airports within the rankings:

> The ratings and rankings are constructed by compiling information provided by the airports, airlines and border agencies, as described above. The ACCC does not include its own analysis in that process, nor does the ACCC apply any weightings to the information.
>
> The methodology for deriving the airports' overall ratings is applied consistently across all of the airports. The airports' rankings are therefore an indication of their relative quality of service outcomes. The ranking is unlikely to be sensitive to alternative methods of aggregation. (sub. 13, p. 18)

In addition to the annual publication of its results in the monitoring reports, the ACCC also published a guideline to its quality of service monitoring (ACCC 2008b) that details the criteria for each monitored aspect.

ACCC quality of service monitoring — results

In its submission to this inquiry, the ACCC summarised the results of the quality of service monitoring program from 2001-02 to 2009-10 (box 6.6), broadly concluding that 'quality of service monitoring has not revealed decisive increases in customer ratings' (sub. 3, p. 4).

The ACCC publishes a range of information for each monitored airport, disaggregated by terminal and covering each of the aspects and criteria noted above. The graphs presented for each variable at each airport typically compare results over a number of years (for example, from 2005-06 to 2009-10 in the most recent monitoring report).

Box 6.6 The ACCC's quality of service monitoring findings

The ACCC's submission summarised its quality of service monitoring findings:

- On a rating scale ranging from very poor to excellent, the overall ratings of the airports were largely satisfactory.
  - Brisbane Airport was the only airport to achieve an overall rating of good over the whole period.
- Passengers consistently rated the airports as good or satisfactory, however the airlines and border agencies also provide services that can influence passengers' perceptions.
- Airlines' ratings of the airports' services were, on average, lower than passengers' over the same period.
  - Adelaide, Brisbane and Melbourne airports were consistently rated as satisfactory while Perth and Sydney airports both achieved ratings of below satisfactory.
- Border agency ratings ranged between poor and good.

Source: ACCC (sub. 3, p. 6).

The figures below summarise results from the last five monitoring reports for the overall rating (figure 6.3), average passenger survey rating (figure 6.4), average airline survey rating (figure 6.5) and average border agencies' rating (figure 6.6).

Broadly, the results show that:

- The overall ratings sit within a band between 'satisfactory' and 'good', with most airports experiencing a minor 'dip' in 2007-08, followed by small increases in the next two years.
- Passengers tended to report higher ratings for the airports, with Melbourne, Perth and Brisbane airports recording 'good' ratings.
- Conversely, airlines tended to give lower ratings, with Sydney (three times) and Perth airports (twice) recording 'poor' ratings.
- The border agencies' ratings show substantially more variation than the other surveys, with Adelaide airport experiencing a large 'jump' in ratings (as the new terminal came on line), leading to a large gap between it and the other airports (although Brisbane airport 'caught up' in 2009-10).

The ACCC attributes the notable difference between passenger and airline ratings, to passengers' lack of awareness over the delineation between services provided or influenced by the airport, and those provided by others:

> While airports provide much of the services and facilities at the airports, the airlines and border protection agencies also provide services that may influence the passenger experience. Therefore, airlines' and border agencies' ratings of the airports can vary significantly from passengers' perceptions and provide another indicator of the airports' quality of service. (ACCC 2011, p. 36)

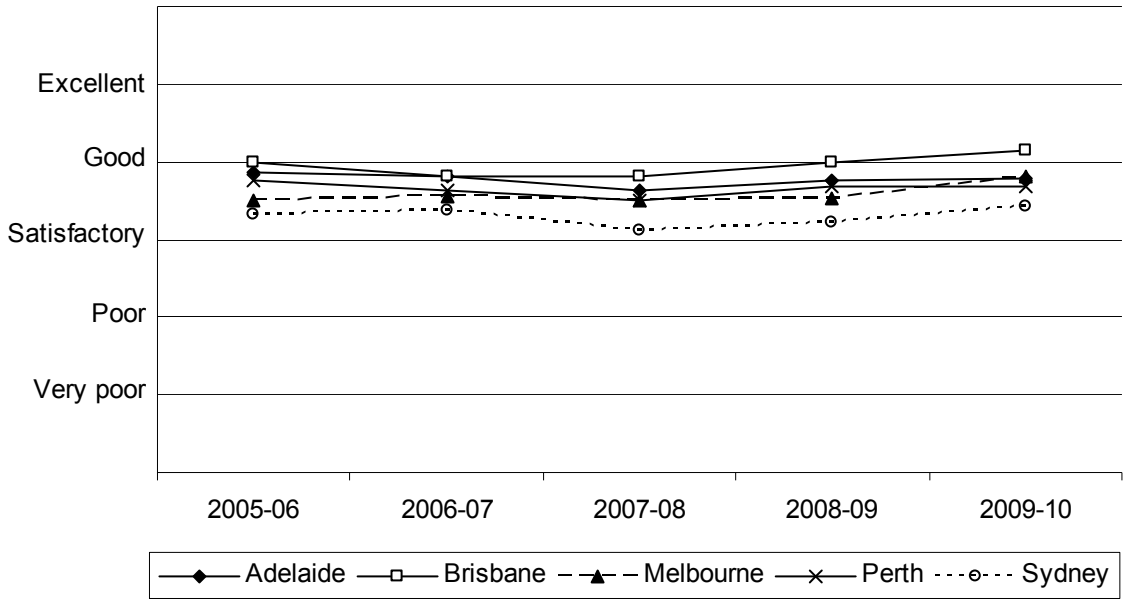
As with the price monitoring data above, the value of the quality of service data is its ability to identify persistent trends that may warrant further examination. In this context, the ACCC's most recent monitoring report appears to have relied on the lower ratings from the airline survey (despite increases in the previous year) to draw attention to Sydney and Perth airports.

In relation to Sydney, the ACCC's summary focused on the airline survey, particularly below satisfactory results in the international terminal, and considered that despite recent investment in the international terminal, there was not a 'significant improvement' in results. The ACCC concluded that:

> … the monitoring results raise questions about whether or not Sydney Airport has undertaken sufficient investment in services provided to airlines.
>
> The monitoring results, when considered within the context of the airport's market power, point to Sydney Airport earning monopoly rents from services provided to airlines. (ACCC 2011, p. x)

Figure 6.3 **Overall ratings of airport quality of service**[a]

2005-06 to 2009-10

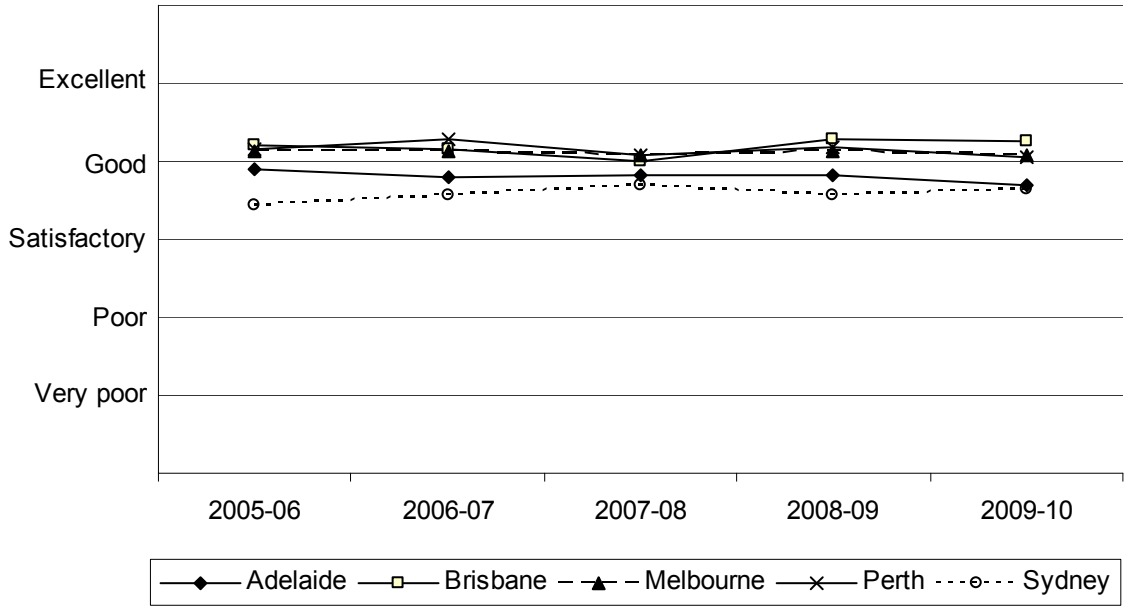


a An average based on a range of quality of service indicators, aggregated by the ACCC.

Data source: ACCC 2011, p. 34.

Figure 6.4 **Average of passenger survey ratings of airports**[a]

2005-06 to 2009-10

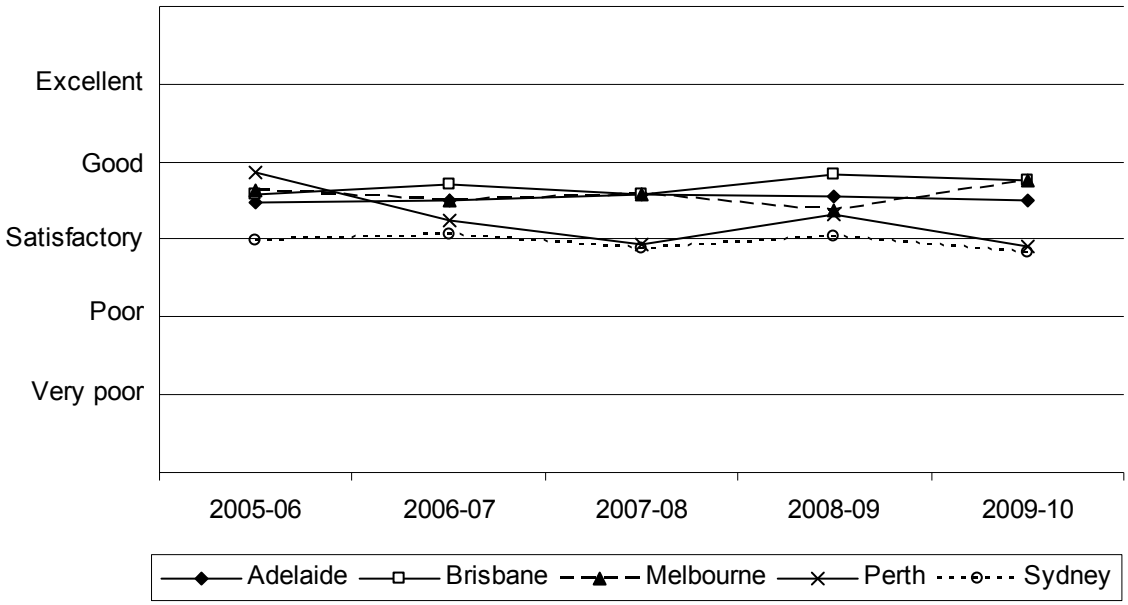


a An average based on a range of quality of service indicators, aggregated by the ACCC.

Data source: ACCC 2011, p. 35.

Figure 6.5 **Average of airline survey ratings of airports**[a]

2005-06 to 2009-10

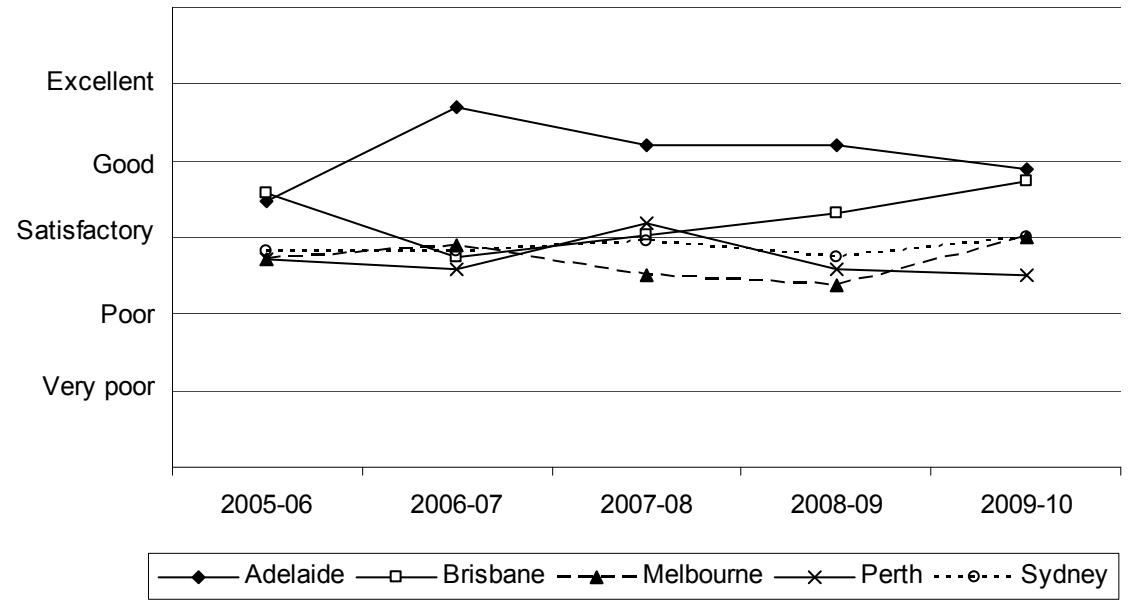


a An average based on a range of quality of service indicators, aggregated by the ACCC.

Data source: ACCC 2011, p. 36.

Figure 6.6 **Average of border agencies' survey ratings**[a]

2005-06 to 2009-10



a An average based on a range of quality of service indicators, aggregated by the ACCC.

Data source: ACCC 2011, p. 37.

In relation to Perth, the ACCC considered broader issues, including recently undertaken and announced investment in both the domestic and international terminals, to conclude that it was unlikely that these quality of service results indicated a misuse of market power (ACCC 2011, p. x).

Interestingly, these conclusions (based on the airline surveys) differ from the ACCC discussion of the overall ratings of both airports in the body of the monitoring report, which instead pointed to recent improvements for Sydney airport:

> Sydney Airport's overall rating for quality of service fell to a reporting period low in 2007-08. However, in the last two years, the overall quality of service rating improved at Sydney Airport to be just above 2005-06 levels. (ACCC 2011, p. 43)

And the ACCC noted a similar trend in Perth airport:

> Despite a decline in Perth Airport's overall rating for quality of service in 2006-07 and 2007-08, ratings in more recent periods almost returned to 2005-06 levels. (ACCC 2011, p. 42)

In addition to these headline results, the ACCC also reported that some airports received 'below satisfactory' ratings for specific services or facilities — for example, in relation to aerobridges and check-in desks at Sydney's international terminal (ACCC 2011, p. 46).

Participants' views on quality of service levels

In addition to the monitoring results, participants in this inquiry also commented on the quality of service at the monitored airports (box 6.7).

Broadly, there was relatively little commentary regarding *levels* of the quality of service at the major airports. Instead, commentary either drew on the ACCC's findings, or focused on the methodology, coverage and necessity of the surveys themselves (chapter 7).

Of the airlines, those that did comment focused on Sydney Airport, particularly the international terminal. In its submission, Sydney Airport focused on the range of surveys, quantitative research and consultative committees (such as its Airline Operators' Committee, collaborative service level committees and its Service Quality Improvement Program) it uses to monitor and improve service quality standards. In particular, in relation to the collaborative service level committees, Sydney Airport submitted that:

> Its success demonstrates that Sydney Airport and airlines can freely negotiate and agree on the service levels that are appropriate to them without the intervention of third party regulators. It is a flexible tool that can respond to the particular requirements of

airlines, noting that competing airlines, whether full service or low cost, will have some common requirements and some areas of product differentiation. …

These are innovative instruments that show the willingness and the ability of Sydney Airport to negotiate service commitments that are tailored to the specific requirements of an individual airline. (sub. 46, pp. 40–41)

While the existence of such processes may indicate Sydney Airport's willingness to address service quality issues, it is nonetheless apparent that some participants (and through them, the ACCC) remain unsatisfied with the quality of service outcomes that they perceive.

Box 6.7 **Participants comments on quality of service levels**

Airlines focused their quality of service on Sydney airport, particularly in relation to its international terminal:

– Sydney airport has indeed increased profits by permitting service quality levels to fall below that which could be expected in a competitive environment over a sustained period.

– This fact appears under the key points of the ACCC's airport monitoring report 2009-10 which lead the government to bring forward a planned review of the current regulatory model. (International Air Transport Association, sub. 9, p. 9)

[Sydney Airport], on the on the other hand, has had to resort to declining service standards to boost its profitability. In BARA's opinion, this also extends to reducing the quality of the international terminal, as SACL has put its own commercial interests before efficient passenger services. (BARA, sub. 19, p. 20)

Brisbane airport argued that there was no concern regarding its quality of service:

… Brisbane Airport has been the highest rating airport for Quality of Service for the last seven years under the ACCC's monitoring. … There has been no dispute with the airlines in relation to Quality of Service at any time since the airport was privatised in 1997. (sub. 40, p. iii)

While Perth airport admitted that its quality standards may suffer at peak times:

While the overall quality of service being provided at Perth Airport is rated as good, the level of service in the peak operating periods is often far from ideal. Perth Airport experiences a number of significant peak demand periods, particularly the very significant wave of early morning departures due to the confluence of the fly-in fly-out operations and the East Coast services all seeking to depart in a two-hour window. (sub. 41, p. 30)

Conclusions from quality of service monitoring

Recent quality of service monitoring results for both overall and passenger ratings have remained in a band between 'satisfactory' and 'good'. These ratings alone do not indicate any persistent trends that could raise concerns about the misuse of market power.

However, airlines' ratings are notably lower, including some 'below satisfactory' results. The concerns raised by the ACCC in its most recent monitoring report appear to place greater emphasis on the airlines' ratings.

As with the price monitoring data, the quality of service ratings need to be considered in context (as was the case with Perth airport), and also need to be interpreted in light of the limitations of the monitoring program, discussed in the following chapter.

DRAFT FINDING 6.2

Recent quality of service monitoring for the overall and passenger survey results alone do not indicate any persistent trends that would suggest the misuse of market power.

DRAFT FINDING 6.3

Quality of service ratings from airline surveys are notably lower, including ratings of 'poor' for both Sydney and Perth airports. Concerns raised by the ACCC appear to place greater emphasis on the airline surveys.

7 Airside and terminal: effectiveness of monitoring

Key points

- The objective of the monitoring program is to identify and highlight potential areas of misuse of market power that warrant further investigation.
- Compliance costs for the monitoring program are low:
  - In relation to price monitoring, the correlation of reporting requirements with Corporations Act standards reduces compliance costs.
  - The flexibility that airport operators have in surveying passengers also reduces costs.
  - Airports report that, regardless of any regulatory requirement, internal surveying of passenger perspectives of quality of service is commercially justified.
- There is substantial debate regarding particular measures used in monitoring:
  - Examples raised point to the need to consider results in context, and to update the objective measures used.
  - The absence of information on borrowing costs *appears* to be a gap in the system. However, due to complexity and compliance cost issues, it is not clear that the inclusion of such information is warranted overall.
- Airports raised issues with the reporting of monitoring results:
  - The reliance on airlines' quality of service surveys is problematic given methodological issues and the prospect for regulatory gaming.
- While care needs to be taken in the 'headline' reporting of monitoring results, absolute proof is not required before raising a concern.
- The inclusion of (airline operated) domestic terminal leases in the quality of service monitoring program is not justified on market power grounds.
- Including government agency surveys in the quality of service monitoring program does not contribute to its effectiveness in detecting potential misuses of market power.
- Overall, while there is scope for improvement, the monitoring program appears to have been effective.

The terms of reference for this study ask the Commission to consider 'the effectiveness of the monitoring regime conducted by the Australian Competition and Consumer Commission (ACCC), including the methodology used and the adequacy of the information collected'.

The effectiveness, and usefulness, of the monitoring data was raised by many participants in their submissions to this inquiry. Notably, the ACCC itself questioned the effectiveness of the monitoring program as a regulatory tool:

> … there are limitations to the degree of conclusiveness of evidence that the current monitoring regime can be expected to provide in relation to the exercise of market power. The ACCC considers that further rounds of monitoring are unlikely to provide greater clarity or certainty in this respect. (sub. 3, p. 4)

The effectiveness of a monitoring program is judged by the extent to which it achieves its objectives, and the efficiency with which it does so. This chapter examines the relevant objectives for the price and quality of service monitoring regime, and discusses the costs of administering and complying with the program, specific components of the monitoring program, and its implementation.

7.1 Objectives of monitoring

As discussed in chapter 3, the price and quality of service monitoring programs are part of the overall economic regulation of airports. Their objectives must therefore be considered in the context of their particular role in this regime. As the ACCC noted, the monitoring program serves as a 'first step' in determining if potential abuses of market power might have occurred, and that should then be investigated further:

> The Government's intention in adopting the monitoring regime was twofold: to enhance market transparency to assist the competitive process without the need for heavy-handed controls, and to inform the Government as to whether further price regulation or re-regulation was required. (sub. 3, p. 4)

This view was shared by the Department of Infrastructure and Transport, which also highlighted the role of monitoring in deterring abuses of market power:

> The broad objective of price monitoring is to assist the competitive process by allowing airport customers and the community to scrutinise prices and market outcomes and to provide evidence to support claims of unjustifiable price increases. Scrutiny of the potential receipt of monopoly rents by airports, along with the threat of re-regulation, is an appropriate deterrent to the abuse of market power. (sub. 43, p. 14)

Broadly, airlines agreed with this characterisation of the objective:

> The ACCC's reporting and analysis is an important component in ensuring the information collected as part of the prices monitoring regime is used effectively in identifying and highlighting potential problems with airport operators. (BARA, sub. 19, p. 5)

In its 2002 and 2006 inquiries (PC 2002a, 2006), the Commission considered that the role of monitoring was to facilitate commercial negotiation in the industry and at the same time constrain the misuse of market power by contributing to a (credible) threat of re-regulation if such misuse is detected.

Given the above, and taking account of the framework for the overall economic regulatory regime for airports, the Commission considers that, for the purposes of this inquiry, the objective of the monitoring program is to serve as a 'look out', to draw attention to potential misuse of market power that may warrant further investigation, or the application of additional regulations over and above the existing light-handed regime. Accordingly, the following assessment of the effectiveness of the monitoring program will be judged against its ability to meet this objective. The appropriate role for monitoring in the future economic regulatory regime for airports is discussed in chapter 11.

Is the role of quality of service monitoring still relevant?

While the role of price monitoring as part of a light-handed regulatory regime is generally accepted,[1] several airports questioned the necessity of quality of service monitoring in the absence of price caps. For example, Melbourne airport argued that:

> [t]he rationale for the original introduction of quality of service monitoring reflected a concern that, under the former regulatory regime of price capping, an airport operator could reduce the quality of its services as a means of increasing its profit margin. Once price caps were removed in 2002, however, this rationale in effect disappeared.
>
> In the present situation where airports are not price controlled, airports have every commercial incentive to offer airlines the quality of service they desire for themselves and their passengers. Given that airlines are able to negotiate and mutually agree a reasonable price for providing service at the airline's desired standard, it is reasonable to present that there is no longer a regulatory need for quality of service monitoring. (sub. 29, p. 7)

Indeed, every monitored airport submitted that it felt quality of service monitoring by the regulator was not necessary as internal monitoring was required for their own commercial reasons (box 7.1).

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1 Although there is debate over which airports should be covered (chapter 4).

Box 7.1 **Airports' self-monitoring of quality of service**

The five monitored airports submitted that customer service and broader commercial imperatives, rather than regulation, motivates airports to conduct quality of service monitoring of their own.

Adelaide airport:

> AAL believes that quality of service monitoring by a regulator is unnecessary. As the airport is a commercial provider of services, quality of service is of fundamental importance to airport management and as such is closely monitored and actively acted upon. (sub. 12, p. 8)

Brisbane airport:

> BAC considers the Quality of Service monitoring an important aspect of its business behaviour, and would undertake a similar level of monitoring were it not required by the ACCC. The outcomes from the monitoring are used by BAC to assist in forward planning. (sub. 40, p. 38)

Melbourne airport:

> Melbourne Airport wishes to emphasise that quality of service monitoring is important and, even if there was not a regulatory requirement for monitoring it, Melbourne Airport would continue to undertake quality of service monitoring. This is consistent with the airport's customer service focus and its desire to ensure that it is meeting customer expectations as agreed through commercial negotiation. (sub. 29, p. 7)

Perth airport:

> … Perth Airport currently surveys passengers in relation to service quality as part of our business improvement processes and would support Government guidelines that provided for WAC to publish information on the results of these surveys. …
>
> Since 2004, WAC [Westralia Airports Corporation] has conducted quality of service monitoring using customer service surveying programs provided by third party providers. Up until 2009, WAC used the 'BAA QSM' [Quality of Service Monitor] program and in 2010 changed to the Airports Council International (ACI) Airport Service Quality Programme (ASQ). (sub. 41, pp. 8, 28)

Sydney airport:

> Sydney Airport participates in international benchmarking research known as the Airport Service Quality (ASQ) program. This program is facilitated by Airports Council International (ACI) and a total of 154 airports participated in the main ASQ Survey in 2010. This research program invites passengers to rate their levels of satisfaction with some 37 elements of the airport experience at T1 [Terminal 1] and 32 areas at T2 [Terminal 2]. Passengers rate both overall service level (which is also separately reported for business and leisure passengers) and specific facilities and services including car park facilities; check-in, customs and security processes; departure gate areas; washrooms; flight information screens; WiFi facilities; and food and beverage and retail offerings. (sub. 46, pp. 38–9)

Specifically in relation to quality of service monitoring, the ACCC has previously stated that its rationale was to:

- Act as a useful complement to price monitoring — helping to ensure that airport operators are not improving profitability through running down assets or reducing service standards.
- Identify if airports are investing appropriately — for example, by upgrading infrastructure or investing in new facilities to improve levels of service or facilitate increased demand. (ACCC 2008b, p. 3)

While BARA argued that, in addition to identifying potential abuses of market power, quality of service monitoring also served a wider role:

> … as international airports also represent 'high profile' infrastructure assets that are often the first impression overseas visitors have of Australia, some independent and publicly available information on the service quality of price monitored airports is warranted, both for the regulatory regime and in a broader public policy sense. (sub. 19, p. 41)

Overall, the Commission considers that some level of quality of service monitoring has been a necessary complement to price monitoring, serving to 'complete the picture' by reporting on the standard of services paid for by airport charges. As such, if price monitoring is to continue, then it is appropriate that quality of service monitoring be retained. This is not to say that the present quality of service monitoring must necessarily replicate its current form and methodology — a matter examined below.

The Commission notes the airports' view that some form of quality of service monitoring is commercially justified. The Commission also understands that, consistent with these views, all the monitored airports, except Brisbane (which rates well under the ACCC's monitoring) are, of their own volition, part of the ACI's Airport Service Quality program. The fact that monitoring would still be conducted in a deregulated environment suggests that the larger share of any unnecessary *regulatory* burden would stem from the specific form and methodology of the monitoring, rather than the existence of the monitoring itself.

7.2 Administrative and compliance costs

The ACCC argued that, given it did not see that monitoring constrained the use of market power by airports:

> … it represents an unnecessary burden on airport businesses. Price monitoring is not a costless activity. The *Airports Act 1996* requires the major airports to prepare and submit to the ACCC audited accounts and information about quality of service matters. The ACCC also bears the cost of preparing and publishing the annual airport monitoring reports. (sub. 3, p. 19)

The Commission agrees that compliance costs are a relevant consideration when assessing the net benefit (or cost) of any regulation that must be weighed against the perceived benefit of the goal the regulation aims to achieve. Accordingly, in its issues paper, the Commission sought participants' input regarding their compliance costs arising from the monitoring regime.

Brisbane Airport Corporation (BAC) provided a detailed response to this request:

> Compliance with the obligations under the price monitoring regime does impose costs on BAC, and the other regulated airport operators. These costs fall into a number of categories, including:
>
> - Maintaining additional accounts;
> - Completing the annual regulatory accounts and price monitoring templates for the ACCC;
> - Responding to ACCC queries and draft reports; and
> - Undertaking quality of service surveys.
>
> Although it is difficult to quantify the cost of these activities as compared with the costs that would be required under an unregulated structure, our analysis indicates the costs amount to approximately $150,000–$200,000 per annum, including internal staff, quality of service surveys and audit costs. (sub. 40, p. 23)

In general, most airports reported that the compliance costs from the monitoring regime, in its current form were low. For example, while Adelaide Airport did not believe they should continue to be covered, it noted that it 'has found the continuation of price and quality of service monitoring not to be onerous or overly expensive to comply with' (sub. 12, p. 2).

Melbourne Airport felt that the direct costs of financial monitoring were not 'material issues', due to their alignment with other requirements:

> Airports incur additional expense in preparing the separate financial accounts and statements required for the purposes of Part 7 of the Airports Act. Because those reports and statements follow the accounting standards and requirements of the Corporations Act, this additional expense is less than it would be if different standards and requirements were prescribed. …
>
> The direct costs of complying with the ACCC's financial monitoring requirements and the nature of the information required to be made available to the ACCC do not, of themselves, present material issues to Melbourne Airport. (sub. 29, p. 82)

The Australian Airports Association (AAA) also submitted that overall financial costs of monitoring are 'relatively modest' (sub. 18, p. 72) and also noted that:

> … [a]irports incur additional expense in preparing the separate financial accounts and statements required for the purposes of Part 7 of the Airports Act. It is thus important that, if separate financial reporting in respect of aircraft related and passenger-related services and

> facilities is to continue, the present correlation of that reporting with Corporations Act standards and requirements should be maintained. (sub. 18, p. 24)

While alignment with Corporations Act standards may inhibit the ability of monitoring results to delve into issues of specific concern to airport regulation, this is offset by the reduced compliance costs for the regulated businesses.

The Commission has previously examined the regulatory burden of quality monitoring as part of its *Annual Review of Regulatory Burdens on Business: Social and Economic Infrastructure Services* report (PC 2009). The review noted that the flexibility of the program reduced the compliance costs for airports:

> At present, airport operators are able choose the lowest cost means of surveying their passengers to provide the required information. Requiring airport operators to utilise similar methodologies in preparing their passenger surveys would enable more consistent comparisons across airports in this area, but it would require more prescriptive regulation and may impose additional costs on airport operators. (PC 2009, p. 274)

Regarding administration costs, the Commission understands that while the annual cost to the ACCC is not trivial, it is not significant.

In sum, the Commission considers that the administrative and compliance costs from the monitoring program are, on the whole, not significant. As such, the hurdle for quality monitoring to produce a net benefit is low.

DRAFT FINDING 7.1

In part due to the alignment of price monitoring requirements with the Corporations Act, and the flexibility afforded under the quality of service monitoring, compliance costs for the monitoring regime are low.

7.3 Specific components of monitoring

Choice of measures in price monitoring

As noted above, part of the reason for low compliance costs is the alignment of monitored financial variables with other requirements. As the AAA noted, any changes to the choice of variable could increase compliance costs:

> … An important element in containing cost (and in ensuring that regulation does not intrude beyond scope) is to ensure that the range of services to which the financial reporting and price monitoring applies is no greater than it should be. (sub 18, p. 24)

The AAA went on to note some limitations of several of the measures used by the ACCC, particularly when they are considered in isolation:

> … All of these measures must be interpreted with care. … Most notably:
>
> (a) revenues do not reveal anything about overall financial performance in isolation from the relevant costs (including costs of capital) and vice versa;
>
> (b) margins cannot reasonably purport to represent overall profits unless they include all relevant costs, including the cost of capital; and
>
> (c) measures that include returns on non−aeronautical investments such as shopping centres provide no insight into whether market power is being exercised. …
>
> There is little (if anything) that a consideration of aeronautical revenue per passenger (average prices) or operating margins can reveal about airports' financial performance in isolation from a full consideration of airport costs, including interest costs and other financial costs. Indeed, the capital intensive nature of operating an airport means that interest costs/finance charges are generally the highest single expense of airports — often totalling 50–70% of total expenses. The ACCC's tendency to ignore this fact risks providing a misleading picture of how airports operate and of the financial returns they generate. (sub. 18, p. 25)

Adelaide airport provided an example of how focus on a particular measure, across a particular period, could be misleading (box 7.2).

One particular issue is the cost of capital, which is not measured in price monitoring. As the Department of Infrastructure and Transport pointed out:

> [monitoring] delivers a picture of how well airports manage their operational costs and revenues, but does not provide the same focus on total airport costs, including the costs of borrowing, and how these translate into prices. The Department believes that the Productivity Commission could examine how these elements could be included in the price monitoring by the ACCC to gain a more comprehensive picture of airport costs and revenues. (sub. 43, pp. 14–15)

Given the capital intensive nature of airports, prima facie, this is an omission that could impede a proper understanding of the performance of a monitored airport.

The Commission notes that changes in the level of tangible assets are examined for each airport in the form of asset values (and the rates of return on them). The regulatory accounts provided by the airports, and reported as appendixes in the monitoring reports, also typically include entries for interest paid in that year.

Box 7.2 **Choice of variable and time period — Adelaide airport**

Adelaide Airport raised concerns about the ACCC's use of revenue per passenger, and the particular time period that they felt, when applied to Adelaide airport, could be 'misleading':

> … the ACCC uses measures which are capable of misleading the readers of the report as to whether the airport's pricing is as a result of the exercise of market power.
>
> For example, in its 2009−10 report the ACCC stated
>
> "In the most recent period, aeronautical revenue per passenger (a proxy for prices) increased only slightly to $11.72.
>
> - Over the entire reporting period, aeronautical revenue per passenger increased by 47.5 per cent from $7.95 in 2005−06, while passenger numbers increased by less than half this rate (22.9 per cent)."
>
> This statement is misleading because:
>
> - 2005-06 is a somewhat misleading base year to use for this analysis as Adelaide's New Terminal (T1) was not operational for the majority of that year; hence the cost and revenue structures were completely different for that period. Between 2007 and 2010, revenue per passenger increased by only 3.5%.
> - The construction of Terminal 1 in 2005-06, and the large increase in debt and asset values as a result, had a significant impact on the financial risk profile of the Airport asset and the revenue return on the asset.
> - AAL's recovery of the capital cost of Terminal 1 following its construction is fully compliant with negotiated agreements with the Airlines and ACCC guidance.
>
> Despite the ACCC being advised of the above, the statement was still published without qualification in the key points section.
>
> The ACCC report for 2009−10 compared prices over a 5 year period commencing 2005/06. AAL opened its new terminal in February 2006 together with the commencement of a new charge, the Passenger Facilitation Charge (PFC). As the full effects of the introduction of the PFC did not occur until 2006/07, income comparisons are not meaningful using the 2005/06 base.
>
> The PFC consists of a recovery of capital expenditure and cost of capital (75%) and the recovery of incremental operating costs (25%). The ACCC under 4.1.2 Aeronautical revenue per passenger in the report note the increase in revenue but do not recognise the capital portion and in calculating the "margin" include only operating costs. This has the effect of the report reader being led to believe that AAL's "margin" grew disproportionally to aeronautical revenue.

Source: Adelaide Airport Limited (sub. 12, p. 7).

However, as the ACCC noted, the cost data available in the monitoring reports do not represent the whole picture:

> … the historical accounting data contained in the airports' regulatory accounts may not represent a reliable measure of the efficient long-run costs of providing aeronautical services. It follows that a comparison of aeronautical revenue and profit data with the available cost information is only a partial indicator of the 'reasonableness' of the airports' returns.

> As such, a comprehensive evaluation, which is beyond the scope of monitoring, would be required to measure the airports' economic returns on aeronautical services and determine conclusively whether or not the airports are earning monopoly profits. (ACCC 2011, p. xi)

Indeed, the Commission is aware that it is possible to arrange corporate structures, accounting practices and tax affairs so that reported borrowing costs bear little relation to the underlying economic cost of acquiring finance.[2] Conversely, attempting to prescribe specific measures of borrowing costs solely for the monitoring reports risks increasing compliance costs, and may not arrive at a 'perfect' measure. Moreover, a mix in type (debt or equity) and sources (different capital markets, on- or off-market transactions, retained earnings) of funding complicates the issue further.

Nonetheless, if useful measures were readily available, the addition of borrowing costs *could* improve price monitoring.

Information request: The Commission seeks participants' views on the appropriateness of including capital costs, such as the cost of borrowing, in the ACCC's price monitoring program. Are there reliable measures that can be collected with relatively low compliance costs? If so, which is the best measure?

Objective measures for quality for service

While most concerns focused on the subjectivity of survey results (see below), airports also criticised the reporting of objective measures of the quality of services. As noted above, these measures consist of observable data that can be expressed in a variety of ways, for example as a total number over the course of a year (eg total number of bags handled by baggage handling equipment — international) or expressed as a ratio, sometimes in relation to peak hour loads (eg number of passengers per flight information screen).

As with other issues in relation the monitoring methodology, airports raised concerns regarding the inferences drawn from the data, particularly when the data were examined in isolation. In particular, Sydney Airport raised the example of flight information display screens:

2 As noted in chapter 5, the ACCC monitors airports' rates of return, calculated as earnings before interest, tax and amortisation (EBITA) over tangible non-current aeronautical assets. This measure improves comparisons between airports, as it is not subject to management discretion over the treatment of interest, tax or depreciation, nor expectations around future earnings growth.

> [t]he ACCC's quantitative measures can also be somewhat crude and unhelpful. For example, the ACCC reported that the number of flight information display screens (FIDS) at Sydney Airport was reduced in 2006-07:
>
> *Since 2003-04 the number of FID screens within the international terminal has decreased from 1050 screens to 697 screens in 2006-07.*
>
> However, what the ACCC did not acknowledge, and its calculations took no account of, was that this reduction was due to an *upgrade* from small, older CRT televisions to larger and clearer digital LCD screens. While the ACCC passenger survey showed an improvement for flight information display screens, the crude quantitative measure produced a perverse outcome that reported that passenger facilities had been reduced. The ACCC gave prominence in its commentary to the crude quantitative measure. It is possible (but uncertain due to a complete lack of transparency which the Productivity Commission could remedy) that the lower number of FIDS screens (rather than the improved quality) is reflected in the ACCC's calculation of the overall service quality. (sub. 46, p. 78)

This example highlights the need to consider any measures in context. Indeed, directly after the commentary on the number of screens, the ACCC appears to recognise this context as it reported the results of the passenger survey on the topic:

> Despite the reduction in these facilities, passengers have rated FID screens and signage and wayfinding as between satisfactory and good with a slight increase to just below good in 2006–07. (ACCC 2008a, p. 242)

While the effect that this one particular measure on the overall service quality rating may be of some concern, the role of monitoring data is to identify trends or issues that may require further investigation. This example is one case where further investigation of the context of the measures would be likely to show little or no concerns relating to the misuse of market power.

The above example also highlights the need to update methodology. To an extent, quality of service monitoring may 'automatically' update as the adjustment of customer expectations filters through to their survey responses. Specifically, while cutting edge technology may not be expected as a component of basic service delivery, technology that is seen as commonplace may be regarded as simply satisfactory as consumer priorities change. For example, while the number of payphones available in the terminal may not be a high priority for passengers in 2011, the availability of internet access, or measures that facilitate faster check-in (such automated kiosks or online check-in) would have taken on a higher priority than it did a decade before. (As with other services and facilities, care needs to be taken to assess only those provided by the airport, as distinct from airlines.)

Although the surveys may reflect these changes, set objective criteria would not. As such, to maintain the effectiveness of the monitoring regime, it is appropriate that the specific measures used for objective criteria are updated periodically to account

for technology changes and changed market conditions. (Apart from minor administrative changes in 2009, the aspects monitored and information required by the ACCC were last reviewed in 2007-08, culminating in quality of service guidelines issued in October 2008.)

Classification of assets

Qantas argued that one indication of market power not currently covered by the monitoring reports is (the exercising of) the ability of airports to extract additional revenues from airlines. Qantas submitted that this was primarily achieved through charging for assets classified as 'non-aeronautical' (which are not monitored):

> Airports are earning excess revenues due to the split of aeronautical and nonaeronautical assets. Assets which are aeronautical are fully funded through airport charges, and so any additional revenue earned by airports from those assets should either be used to offset aeronautical charges or result in a fairer allocation of costs. Airports are also finding additional mechanisms by which they can extract revenues from assets which are essential to the provision of airline services.
>
> Examples of this conduct include:
>
> - Assets which are fully paid for by the aeronautical till being used to generate additional revenues and are not offsetting the aeronautical charges (essentially generating revenues at almost no cost);
> - Charging for services not rendered or charging for services already paid for (for example aircraft parking); and
> - Imposing fees on other businesses which provide services to airlines. (sub. 52, p. 47)

Qantas went on to provide examples of each of the above, and Sydney Airport responded to some of these examples in a supplementary submission (box 7.3). (It should be noted that the examples provided relate to the overall level of revenue transferred between airline and airport, not the level of any particular price agreed to between the parties.)

Box 7.3 Excess returns: Qantas examples and Sydney Airport responses

Aeronautical assets generating non-aeronautical revenues

Aerobridges are classified as 100 per cent aeronautical in pricing agreements and funding by airlines. However, airports are making additional returns by advertising on aerobridges and not using this income to offset the cost to airlines or consumers. (Qantas, sub. 52, p. 47)

Payment for services not rendered

On weekdays QantasLink is experiencing an average of seven arrivals and seven departures where apron space is not available at [Sydney Airport's] Terminal 2 and the aircraft turnaround needs to take place at Terminal 3 (on the Qantas Group Domestic Terminal Lease). As these flights are planned for Terminal 2, passengers arrive and depart through Terminal 2 and are then bussed to their aircraft at Terminal 3.

The Qantas Group receives no reduction in the cost of using Terminal 2 despite having to use the parking positions at Terminal 3. (Qantas, sub. 52, p. 47)

Sydney Airport argued that this usage reflected QantasLink's operating habits:

Qantas is receiving access to all the services that it pays for under the T2 agreement …

Qantas' use of the T3 apron reflects both its operational preference for the T3 aprons rather than alternative domestic apron areas east of T2, and its inefficient use of the T2 apron (the average aircraft parking time for QantasLink is substantially higher than the 45 minutes allowance included in the negotiation of the T2 agreement). (sub. 79, p. 3)

Charging for services already paid for

Apron space at terminals is an aeronautical asset and paid for from the allowable revenue along with all other aeronautical assets. In addition some airports charge an aircraft parking fee, which does not offset passenger aeronautical charges. (Qantas, sub. 52, p. 47)

Sydney Airport disagreed, and stated that the charges were net of each other:

Whilst Sydney Airport does charge an apron parking fee, the international passenger service charges are calculated net of the forecast apron parking revenues (as they were in the ACCC Decision in May 2001). Hence, Sydney Airport does not charge twice for the same service. (sub. 79, p. 3)

Imposing charges on other businesses

… lease charges for Air Services Australia (ASA) and Bureau of Meteorology (BOM) infrastructure at airports are also passed through to airlines and the revenues are not offset against aeronautical charges (though is included as aeronautical revenue in ACCC accounts). (Qantas, sub. 52, p. 48)

Sydney Airport stated that the charges were only included for regulatory reasons:

These services are not included within the negotiation of the international passenger services charge or domestic runway charge, but have always been separately negotiated (as they were in the ACCC Decision in May 2001). Accordingly there is no need to offset any revenues against [aeronautical charges] because the assets and costs associated with these services are excluded from the calculation of these charges.

… in accordance with the Productivity Commission's decision in 2006, the revenues, costs and assets relating to these assets are reported as aeronautical within the ACCC monitoring reports. (sub. 79, p. 4)

The matter of imposing fees on other businesses is examined for fuel levies in chapter 13. Regarding charges for services not rendered, the Commission considers that this is a matter appropriately dealt with as part of the contract between the private entities, or specifically through rebates in service level agreements (discussed in chapter 9), not a matter that should be included in a public monitoring report.

Finally, in relation to offsetting revenues between classes of asset, this effectively amounts to a move back towards to a sort of 'single till' regulatory system (or a 'hybrid till' as advocated by Qantas). As the Commission has previously concluded, such a move is unlikely to generate efficient outcomes:

> … mandating the transfer of non-aeronautical rents is likely to discourage development by the airport of both aeronautical and non-aeronautical services, generating large efficiency losses in the long run. Indeed, reversion to a regulated single till, even on a partial basis, could stifle the risk-taking, innovation and development of the airport site that are regarded as major benefits of privatisation … (PC 2002a, p. XXXIII)

The Commission also notes that the ACCC's guidelines for the reporting of price monitoring and financial details (ACCC 2009a, p. 10) stipulate 'account item allocation principles', which direct that items should be allocated on a causation basis. Further, the guidelines include a requirement that airports' financial information is audited to ensure it complies with the Airports Act and Regulations. As part of this process, the auditor is expected to report their opinion to the ACCC on whether:

> … appropriate systems and records are in place to enable the Airport Operator to comply with this Guideline and, in particular, the Guideline's requirements for disaggregation of aeronautical and non-aeronautical activities with any concerns which the Auditor has with the systems put in place being detailed … (ACCC 2009a, p. 13)

In addition to this requirement, airport operators are also required to keep detailed documentation on their rules for allocating expenses between aeronautical and non-aeronautical services, which the ACCC may review.

As such, it appears that the current monitoring regime allows ample opportunity for the regulator to review the cost allocation of assets in reporting, to ensure that they are in accordance with regulatory requirements.

Beyond the regulatory requirements, commercial negotiation between the parties is free to cover a range of issues, monitored or otherwise. As such, the Commission considers that the degree to which different categories of revenue are offset against

each other is a matter for commercial negotiation, rather than regulatory intervention.

7.4 Reporting and interpretation of monitoring results

Reliance on quality of service survey responses

Several airports were concerned that the measures of service quality used in the ACCC's monitoring reports were subjective, may be affected by bias and could be unreliable given small sample sizes.

In particular, airports argued that any interpretation of quality measures should take account of the commercial incentives for airlines to give low ratings on airport performance. Sydney Airport Corporation (SACL) emphasised this conflict of interest (box 7.4).

Heavy reliance on surveys that could be 'gamed' by participants (especially if there is a small sample size) could encourage further 'gaming' of the regulatory system as a whole. As the Commission noted in 2006, such 'gaming' can divert managerial resources, and undermine the development of genuine commercial relationships. The ACCC is aware of such issues, and takes steps that it believes reduce the risk of such gaming:

> … airline surveys and [Australian Customs Service] 'whole-of-government' surveys are to be reviewed and submitted by the relevant airline's and government agency's head office respectively. The ACCC considers that this will allow for the results to account for commercial negotiations and reduce the potential for bias. Where an airline or government agency gives a rating of below satisfactory, they must support this with commentary detailing the complaint and steps they have taken to inform the airport operator of their complaint. (ACCC 2008b, pp. 8–9)

However, it is not clear why assigning the responsibility to airline head offices — the strategic core of any corporation — would resolve the bias.

Box 7.4 Sydney Airport's concerns with airline surveys

The ACCC recognises the potential incentive for airlines to deliberately under-report quality for the airports. Nevertheless the ACCC makes extensive use of anonymous surveys that seek to record the opinions of airlines concerning the quality of service provided to them by airport operators. This presents two conflicts of interest, as follows:

- The airlines may have a commercial motivation to present negative views in order to influence the outcome of charges negotiations and/or regulatory reviews
- The airlines are motivated to optimise their own (short term) costs incurred in their delivery of the joint service, even where this does not optimise the (long term) joint costs of providing the service. For example, it is easier for the airlines to roster check-in staff if there is surplus check-in infrastructure. As a result, they may mark-down an airport which provides sufficient but not excessive capacity. Optimisation of the joint costs, on the other hand, will suggest that capacity is provided to meet but not exceed demand. In this respect the airlines are not customers of the airport but partners of the airport — the current surveys, which treat airlines as customers and airports as suppliers, are destructive of mutually beneficial partnerships.

This inherent conflict of interest is compounded by a lack of transparency. For example, when undertaking airline surveys the ACCC does not specify:

- Whether or not all airlines using a particular airport were asked to participate in the survey and, if so, how many responded. Until 2005-06 this information was disclosed by the ACCC, but is not disclosed any more. This is important both because the number of airlines using airports varies and the response rate may or may not be representative.
- Which particular airlines responded to the survey? This information is important because it is important to know how significant a user of the airport an airline is. For example, if only smaller airlines responded to the survey, the results could be seen as being less reliable than had a mix of smaller and larger airlines responded.
- Whether or not a weighting is applied to a particular airlines responses based on how frequently that airline uses the airport. For example, a large airline could fly in excess of 100,000 passengers every week to numerous international, domestic and regional destinations. In contrast, a smaller airline might fly once a week to one destination and carry as few as 35 passengers per flight. The results would clearly be less reliable if the opinions of both airlines were identically weighted.

Source: Sydney Airport Corporation (sub. 46, p. 79).

SACL also provided two reports by GA Research and the Statistical Consulting Centre of the University of Melbourne that raised other concerns about airline surveys — the (lack of) transparency of the methodology, the sample sizes used and their aggregation (sub. 46, appendix B and C, respectively). For example, in relation to the aggregated ratings, the Statistical Consulting Centre noted:

> The ACCC report notes that AirServices Australia data was collected for four of the five airports — Adelaide was not included. It should be clearly explained how this was dealt with in creating the aggregated quality of service scores. (Sydney Airport Corporation, sub. 46, appendix C, p. 32)

Melbourne Airport was also concerned with the sample sizes of the airline surveys:

> Accurately measuring airline perceptions poses a number of methodological issues, in particular the disparate sample size between passengers and airlines. Whilst Melbourne Airport surveys thousands of passengers every year, the ACCC in its annual report relies on the survey responses of less than a quarter of the airport's 25 international airlines and 4 domestic carriers. Beyond statistical deficiencies of this kind, it is inevitable that such a small sample size is capable of being influenced by the bias of a particular individual who may not in fact reflect the views of the airline concerned. (sub. 29, p. 25)

Another more general difficulty in interpreting the quality of survey responses is the weight to give to passengers' versus airlines' views, especially since these may sometimes diverge. Each has its own value.

On the one hand, as direct customers with ongoing commercial relationships, airlines possess a degree of knowledge perhaps second only to the airports themselves. Given the issues with reliance on airline surveys described above, there is scope for improvement in pursuing monitoring methods that can more reliably discern an airline's real views on quality of service, while minimising the risk of regulatory gaming and other survey issues. Chapter 11 discusses potential methods for obtaining quality of service measures for future regulation.

Passenger views are equally, if not more, important. Survey ratings for passengers and airlines may diverge because different respondents place different levels of importance on different services. For example, Melbourne Airport noted that it was in its own interest to monitor not only aeronautical assets, but also passenger quality of service, as this influenced passenger spending at the airport's facilities:

> The ACCC suggests that an airport could use its market power — at least in the short term — to increase its profit by driving quality for passengers down. This, however, ignores two factors: one, that the airport has service level agreements with airlines that would not permit this; and two, that high levels of customer satisfaction drive greater turnover of discretionary expenditure in airports, which is profitable. (sub. 29, p. 47)

As David Starkie noted, the passengers' perceptions of quality of service are at least as important as the airlines', if not more so:

> The ACCC appears rather dismissive of some investment because it was spent on food and beverage facilities etc and not on check−in desks, baggage reclaim and the like … But this is perhaps to lose sight of the fact that the former is an equally valid component in the airports quality of service offering. The fact that it is geared to the passenger rather than the airline should not matter. …
>
> The final consumer in this case is the passenger (together with shippers of freight, parcels and a few other sundry 'end-users') and it is, arguably, their views that are the more important. A view to the contrary carries the implication that relationships between firms in the aviation supply chain are better handled through regulation than

> by recourse to commercial negotiation and contract and that it is the state of such inter−firm relationships rather than the experience of the passenger et al. that should drive airports policy. (sub. 44, pp. 2, 4–5)

Notwithstanding the flaws in the survey methodology used for quality of service monitoring (particularly the evidence from airline surveys), the use of survey results as *one* component of monitoring is appropriate so long as it provides a context for other data obtained, and contributes to the overall evaluation of results. While the Commission appreciates that confidentially (and legal) issues may prevent full transparency, particularly regarding individual survey responses, it nonetheless considers that the use of this information should be transparent to those involved, to both encourage confidence and improve the certainty surrounding the regulatory system.

This issue is related to another concern raised by airports — the 'escalation of claims' from the observed data to the conclusions drawn.

Escalation of claims

One specific concern raised with the monitoring regime related not to the reporting requirements or methodology, but rather to the care taken by the ACCC in reporting the results. In general, while airports had little issue with the data presented in the 'airport-specific' chapters of the monitoring reports, they argued that the summary reporting of conclusions in the front of the report, was not carefully qualified. For example, Melbourne Airport noted that its:

> … concerns with the ACCC approach is not in relation to the data collected or the results of the data as shown in the tables in the ACCC report but in relation to unqualified and, in some cases unsubstantiated, statements by the ACCC in relation to the monitoring results. This has important consequences in terms of how comments are utilised by third parties such as consumers and the media. In turn, this can mislead the public and other stakeholders. … The ACCC's key observations and interpretations are listed in 'Key points' sections within its report. In the 'Key points' the ACCC's statements are made on an unqualified basis. However, elsewhere in the report, important qualifications are made. (Melbourne Airport, sub. 29, p. 85, p. 87)

This issue was sometimes exacerbated by reporting in the media, to an extent that the AAA felt had the potential to 'mislead' the public (box 7.5).

The Commission appreciates that summary documents, by their very nature, require brevity and are not the place for detailed, and sometimes technical, caveats. That said, the Commission considers that some of the airports' concerns in this area may be valid. While the individual airport chapters of the ACCC's monitoring report represent the survey results carefully, summaries seem to explicitly draw from

airline surveys as a, or sometimes the main, basis for the conclusions reached. For example, in raising concerns regarding Sydney airport, the ACCC's 2009-10 monitoring report noted:

> **In their survey responses**, airlines have consistently identified Sydney Airport as the least responsive of the airports with respect to service delivery and quality over a sustained period. In particular, its international terminal was **rated below satisfactory on average by the airlines,** while prices and profits increased.
>
> Further, despite Sydney Airport recently undertaking an upgrade of its international terminal, the monitoring results do not indicate a significant improvement in the service provided to airlines. Therefore, the monitoring results raise questions about whether or not Sydney Airport has undertaken sufficient investment in services provided to airlines.
>
> The monitoring results, when considered within the context of the airport's market power, point to Sydney Airport earning monopoly rents from services provided to airlines. (ACCC 2011, p. x) [emphasis added]

Moreover, the ACCC's conclusions draw more heavily from the airline surveys than the (more positive) passenger surveys. As noted in chapter 6, the ACCC attributes the passenger surveys generally higher ratings to passengers' lack of awareness of the mix of providers involved. One implication from this observation is that were passengers better informed, their survey ratings could be more closely aligned with the (lower) airline ratings. However, the opposite could be equally true, as Perth Airport noted:

> Some LCC practices at Perth adversely affect the customer experience in ways that are not obvious to the passenger, and which are often perceived as poor service by Perth Airport. For example, LCC ground handlers, which may be resource constrained, prioritise loading check baggage for the departing service over delivering bags to reclaim for the arrived passengers, resulting in passengers experiencing an unexplained extended wait for checked bags, which is perceived as due to 'Perth Airport'. (sub. 41, p. 31)

These concerns would be remedied by careful and qualified interpretation of airlines' survey responses in the summaries of monitoring reports. That would give confidence to decision makers (that is, Ministers) that the recommended actions would benefit the community, and should be pursued. A more transparent approach also provides some degree of certainty to the regulated industry, which can be of particular importance to potential investors.

Box 7.5 **The escalation of claims — Sydney Airport**

The Australian Airports Association raised concerns about the ACCC's interpretation of financial measures, and argued that such reporting had the 'potential to mislead'. The AAA submitted the following example to illustrate its point, highlighting the change in tone in various components of the ACCC's communication of the results:

> … the ACCC's 2009/10 report included a number of important qualifications, most notably that:
>
> > *'[T]he monitoring results **do not provide conclusive evidence as to whether or not the airports are earning monopoly rents**. A more detailed evaluation of the airports' performance, which is beyond the scope of monitoring and would include comparison with an economically efficient benchmark, would be required to make more definitive findings …*
> >
> > *[T]he overall ratings for quality of **service do not provide the most reliable indicator of whether or not an airport has provided quality of service at an efficient level**. Importantly, passengers' perceptions of airports' quality of service can be influenced by the services also provided by airlines and border agencies.' [Emphasis added]*
>
> However, these vital caveats were missing from the ACCC's summary of 'Key points' that appears on the first page of its report in which it stated that:
>
> > *'Sydney Airport has the highest aeronautical revenue per passenger and the lowest overall rating by airlines, border protection agencies and passengers for quality of service in 2009 - 10 … Over several years airlines have raised concerns about unsatisfactory levels of service at Sydney Airport. Over the same period, prices and profitability continued to increase. The monitoring results, when considered within the context of the airport's market power as well as the incentives and ability to use that market power, point to Sydney Airport earning monopoly rents from services provided to airlines*
>
> … And, when the ACCC moves beyond written press releases to 'live' commentary in the electronic media, the chance of an airport's position being fairly dealt with is further diminished as exemplified in the following exchange on ABC radio 702 on 8 February 2011:
>
> > ***ABC:** Look, Mr Samuel, the reality of it is being this is the only airport in Sydney, privately owned by Macquarie, what's wrong with them making as much money out of it as they can until we have the guts to open up a second airport?*
> >
> > ***Graeme Samuel:** Well it's not for us to comment about whether or not a second airport, I've had a few people try and get me to say we should have a second airport and I won't do that of course. All that we're doing is we're monitoring these airports and providing these reports on an annual basis which in every case reflects the fact that the airports do have monopolies and if they have got monopolies then as far as airlines charges are concerned they'll be high and they are increasing. As far as car parking charges are concerned they'll be very high and they are increasing and then in the case of Sydney Airport, as far as its quality of service is concerned, it will be very low — unsatisfactory — that's what happens when you have a monopoly.*

Source: Australian Airports Association (sub. 18, pp. 26–7).

Some airports went beyond advocating a more careful approach in qualifying conclusions, to suggest that the ACCC should not be able to make critical comments without 'compelling evidence':

> Given the real costs that can arise from unreasonable criticism, a good policy process (and natural justice) requires compelling evidence before critical comments are made, and not mere suspicion — the caveats used in the recent ACCC reports are not sufficient. (Sydney Airport, sub. 46, p. 70)

The Commission disagrees. As noted above, it considers the objective of the monitoring regime is to serve as an 'early warning' system to identify any potential misuse of market power that may warrant further examination. Therefore, the role of the monitoring regime is not analogous to a criminal court. As such it need not 'prove' offences beyond a reasonable doubt. Instead, all that is needed is a sound basis for concern that a misuse of market power may be present. Monitoring then serves as a trigger for a range of other processes, whose evidentiary burdens should increase in line with the consequences at stake (chapter 11).

7.5 Coverage of quality of service monitoring

Should domestic terminal leases be included?

Several participants were concerned that domestic terminal leases (DTLs) — terminals operated by airlines rather than airports — were excluded from quality of service monitoring. For example, Brisbane Airport argued that:

> … there is scope to improve the level of consistency across a range of appropriate measures to facilitate more accurate and meaningful comparisons over time and across airports. One element of this is the current differentiation of service quality monitoring requirements between Domestic Terminal Leases (DTLs) and common user facilities. The current exclusion of service quality monitoring at DTL facilities means that an airport's overall quality of service assessment is not a true measure of the overall passenger's service experience, nor does it present an accurate assessment across all airports given the differing extent of common user facilities in each individual airport. (Brisbane Airport, sub. 40, p. 38)

And the Department of Infrastructure and Transport noted that 'the Government sees value in going beyond [market power] to provide a more transparent and meaningful picture of airport performance over time for the travelling public' (sub. 43, p. 15). The Department went on to argue that, as a result of the exclusion of DTLs:

> … the current ACCC survey methodology does not cover 40 to 50 per cent of total domestic passengers, and the Department believes a comprehensive monitoring regime

> that includes terminals leased by Qantas and Virgin Blue would provide stakeholders with a more definitive view of airport overall performance. (sub. 43, p. 16)

Airports also confirmed that substantial traffic was processed through the DTLs. For example, Melbourne Airport submitted that the Qantas terminal processes some 12 million passengers, or 45 per cent of all passengers each year (sub. 29, p. 44). Perth Airport noted that 67 per cent of all domestic services in 2009-10 were through the leased Qantas terminal, and that this relationship can affect passengers' perceptions of the airport:

> During the period from 2007, the Qantas Terminal came under as much, and possibly more, pressure as the WAC operated facilities. Passengers and the public rarely understand these specific ownership/control circumstances and typically ascribe their experience in the Qantas Terminal or on the Qantas apron to 'Perth Airport'. (sub. 41, p. 31)

While the exclusion of DTLs may appear to miss one aspect of passengers' experiences of flying, their exclusion is justified given that the objective of service quality monitoring is to detect the misuse of market power rather than to gauge all aspects of passengers' experiences. If passengers are unsatisfied with the quality of service they receive through a terminal that exclusively, and visibly, carries one airline's brand, they are likely to recall that brand when making decisions the next time they fly. Thus, if an airline allows the quality of service at its DTL to deteriorate below the level expected by its passengers, this will influence consumers' decisions to transfer their business to a competitor airline (be it at another DTL or in a common user terminal). As passengers exercise this choice, airlines that wish to maintain their market share must adjust their price or quality in attempt to lure customers back. In this way, market signals operate to ensure that an 'efficient' level of quality is delivered at DTLs. Qantas submitted that it was due to the ability of passengers to exercise choice that they believed that DTLs should not be included in the quality of service monitoring regime:

> It is … up to customers to determine whether an airline has fairly priced its service at a terminal. If the customer does not consider that this is the case, they can exercise choice and not fly with that airline.
>
> … There would be no benefit for Qantas, or for that matter any other airline operating a terminal, to allow service levels to deteriorate. If that did occur passengers have the choice to fly with another airline that operates from a different terminal. (sub. 77, pp. 7–8)

Given the above, the Commission sees no economic policy reason for the mandatory inclusion of DTLs in a regulatory regime designed to constrain market power. Of course, airlines are free to publish their own quality of service surveys should they wish to highlight the results as part of 'advertising' their brand. In this

respect, the Commission notes that, at the time of the National Aviation Policy White Paper, the Government favoured self-reporting for DTLs:

> The Government considers this is an area where the industry should provide a coordinated response through self-reporting. The Government will be encouraging relevant airlines and airports to work together to ensure these terminals are covered in the expanded quality of service monitoring regime being developed by the industry. (DITRDLG 2009, p. 177)

In line with the position expressed in the White Paper, the Commission considers that, should the government believe that information on quality at DTLs is valuable for 'tourism' based reasons, this should be pursued not through mandating requirements upon private companies, but rather by allowing the industry to develop measures itself. Alternatively, the government may wish to work with the industry, and fund research agencies, to develop and publish measures relating to the performance of the DTLs from a 'passenger experience' perspective for informational purposes. However, it should be noted that the differences between airports present issues for benchmarking (chapters 6 and 10), particularly with small sample sizes (only four of the monitored airports have DTLs). Given this, the Commission considers that mandating monitoring of DTLs for comparative purposes should be viewed with caution.

Should government agencies be included?

In its 2006 Inquiry, the Commission recommended that, as part of examining opportunities to improve quality of service monitoring, the ACCC should examine 'whether it remains necessary to report survey responses from the Australian Customs Service …' (PC 2006, p. 120). The Commission also noted that, instead of Customs providing survey responses:

> … airport performance in enabling provision of these services could continue to be monitored by passenger satisfaction surveys — and by quantitative indicators (such as the number of inspection desks available) … (PC 2006, p. 119)

As part of the response to that inquiry, the ACCC's examination resulted in Customs coordinating a broader survey response from itself, the Department of Immigration and Citizenship and the Australian Quarantine Inspection Service. These agencies are required to complete a questionnaire on a range of issues.[3]

In the context of this inquiry, the Commission maintains its previous view that surveys of government agencies are not a necessary part of the monitoring regime.

[3] Previously, the surveys consisted of Customs commentary that airports alleged was 'unsubstantiated' and constituted gaming of the system. Other agencies were not consulted.

There is unlikely to be any 'bargaining power' imbalance between an individual airport and a government agency. Further, there is little or no scope for an airport to exercise any market power it may have, as these agencies typically access airports under statutory rights. In effect, this means that the Australian Government has recourse to other more specific, and more direct, means to ensure the provision of adequate facilities for its agencies.[4] And, as the Commission previously noted, relevant passenger concerns in this area can be monitored through other mechanisms.

As such, the maintenance of the government agency survey in the monitoring regime appears to simply create administrative costs, both for the agencies surveyed and the ACCC, while serving little regulatory purpose.

This is not to say that information obtained from the border agencies is not valuable from a 'passenger experience' perspective. In this context, consultation with the border agencies could be included as part of any research report prepared by the Government, as mentioned above. Further, it is appropriate that ongoing reviews of the border agencies consider the adequacy of services provided at Australia's airports, and include steps to remedy any identified deficiencies.

7.6 Conclusion

There were differing views from the government agencies involved regarding the effectiveness of the monitoring regime. The Department of Infrastructure and Transport believed it was effective, at least in part:

> The provision of transparent regular information on pricing and the quality of airport services remains critical to the success of the current model of economic regulation. It ensures airlines and other customers of the five largest airports have information on airport's relative performance. … The current ACCC price monitoring regime addresses part of the overall objective, as it focuses strongly on seeking evidence of improper use of market power by analysis of aeronautical revenues, costs and margins. (sub. 43, p. 14)

In contrast, the ACCC argued that its effectiveness was limited:

> Price monitoring can be an appropriate way to provide transparency and inform stakeholders of any adverse effects following deregulation or other market reforms, until such time as a longer term approach can be determined. The ACCC considers that monitoring has been helpful in identifying areas of concern, and that its continuation is unlikely to bring greater clarity in this regard. (sub. 3, p. 19)

[4] For example, airport owners are required to provide 'suitable' office and storage space to the 'satisfaction' of Customs under the *Customs Act 1901* (Cwlth). These powers are in addition to the general constitutional powers to acquire land 'on just terms'.

As noted above, the Commission considers that the objective of the monitoring program should be to raise concerns regarding potential misuse of market power, pointing to cases where further explanation or investigation may be required. Specifically, its role is not to muster a body of evidence substantial enough to 'convict' airports on its own. Considered in this context, whilst not without flaws, overall the monitoring program has been effective. As the ACCC noted, it has performed a role of 'identifying areas of concern', and has done so without incurring substantial compliance costs.

That said, the current approach to monitoring leaves some scope for improvement, particularly in relation to the method of collecting, and interpreting quality of service information. Specifically, government agency surveys appear to contribute little to the objective of monitoring, while there are substantial concerns with the reliance on airline surveys to determine regulatory conclusions. Further, periodic updating of the objective measures would be appropriate. Despite these concerns, quality of service monitoring performs a valuable role in providing context to information obtained through price and financial monitoring.

In relation to price monitoring, while the Commission considers there is potential for improvement in relation to some of the classification and range of data collected, it is also aware of the balance that must be struck between improved consistency and specificity of the data, and the resulting additional compliance costs.

8 Airport car parking and land access

Key points

- There is a range of ground transport options to access airports, although there are few rail links:
  - The main form of access to airports is by private vehicle; mostly 'pick-up and drop-off', followed by parking on- and off-airport.
  - Any substantial increase in on-airport car parking prices would lead to substitution to other modes of transport. The type of transport and the degree to which passengers 'switch' will vary between airports.
- Car parking prices at airports reflect the cost of the service, the convenience and amenity associated with facilities, demand management strategies and the opportunity cost of the land.
- Airports have invested in car parking facilities, reflecting the growing demand for such services. Concerns that Brisbane Airport may have inefficiently delayed investment are difficult to substantiate, especially given the problems of access to finance during the global financial crisis.
- Access fees paid by ground transport operators do not appear excessive. They may be in excess of costs for reasons of reducing congestion in the limited forecourt areas and rationing of scarce resource to those ground transport providers willing to pay for premium access. However, information about terms and conditions of access — such as the impact of congestion and security management strategies — is less transparent.
- When a variety of indicators are examined within a broader context, there is no evidence of the misuse of market power by the five monitored airports. Nor is there evidence to support the claim that Melbourne Airport charges monopoly car park prices by impeding access to competitors.

Airline passengers and other airport users require access to the airport and its terminals. Unless arriving as a transit passenger or at a rail terminal, users will access airports by private vehicle, taxi, hire car, bus, rental car or bicycle. Users arriving in a private vehicle may drop-off or pick-up passengers or park on a short- or long-term basis.

Access roads are on land that is leased and controlled by the airport. Consequently, the airport is the sole supplier and has the ability to set the terms and conditions of access to landside vehicle facilities (such as roads and forecourt areas) and services (such as car parks[1] and taxi waiting areas) (PC 2002a).

This chapter examines whether the five monitored airports have market power in parking services and ground transport access, and, if so whether they have substantially misused that power. The chapter focuses on four key areas:

- competitiveness of the ground transport market to the airport
- outcomes in car parking prices and revenues
- investment in car parking facilities
- prices and conditions for ground transport access.

8.1 Market power in landside access

Without the discipline of competition, a firm with significant market power has the ability to increase prices and make excessive profits. Market power may also manifest itself as lower quality, reduced variety of services and less innovation compared to a competitive market. However, there are circumstances in which it is efficient for prices to be above the competitive market level (such as congestion and locational pricing). From a policy perspective, market power is a matter of concern when it results in higher prices and reduced supply — leading to a loss in economic efficiency (chapter 4).

Airports have the potential to increase the price of car parking above competitive levels and the ability to control the cost and conditions of entering the airport for modes of transport that compete with on-airport parking. 'Excessive' access fees for other transport modes — such as coaches/buses, taxis and limousine hire companies — raise the cost and price of those alternatives. Similarly, airports could locate bus set down areas further away from the terminal, reducing their convenience. These actions would reduce the attractiveness of these transport modes for airport access, and result in some airport users switching to on-airport parking. In this case, airports would make excess profits compared with a more competitive market outcome.

As discussed in chapter 3, the Australian Competition and Consumer Commission (ACCC) currently monitors prices, costs and profits of car parking services as well

[1] At some airports, airlines also offer car parking facilities and services — these are generally high-end premium services such as valet parking.

as the quality of service of airport access facilities and car parking facilities at Adelaide, Brisbane, Melbourne, Perth and Sydney airports. These airports are required to supply a range of information to fulfil these obligations (box 8.1). Car parking prices and ground service quality have been monitored by the ACCC continuously since 1997.

Box 8.1 Information requirements for ACCC monitoring of airport for car parking and land access

For each type of car park, the five specified airports are required to supply:

- the number of days the car parking facilities are open
- the number of car parking spaces provided
- total annual throughput
- revenue generated from parking and the basis for charges (hourly, daily or weekly)
- car parking charges by price point, charge per unit, number of sales for each price point
- car parking cost allocations and total costs including depreciation
- landside access revenue and costs from limousines, hire cars, buses, taxis and rail
- schedule of landside assets.

The ACCC also monitors service quality using survey data (including a survey of passengers). Responses from passengers (using a scale of 1=very poor to 5=excellent) provide qualitative indicators on:

- availability of car parking facilities
- standard of car parking spaces
- time taken to enter car park
- facilities for kerbside taxi pick-up and drop-off
- congestion at kerbside taxi pick-up and drop-off
- standard of facilities for taxis
- time waiting for taxis.

Source: ACCC (2008b).

In March 2010, the ACCC released its 2008-09 *Airport monitoring report* suggesting that car parking prices at some airports were likely to reflect monopoly profits (ACCC 2010a). In light of these concerns, the Australian Government announced that it would bring forward the scheduled 2012 review of the economic regulation of airports.

The ACCC subsequently restated its concerns, in relation to car parking, in its 2009-10 *Airport monitoring report*, claiming:

- Melbourne Airport 'seems to impose' excessive levies on, and limit the service offered to, competitors such as off-airport parking providers and private bus operators
- Brisbane Airport might possibly have earned monopoly profits for airport parking by 'inefficiently' delaying investment in a multi-level car park (ACCC 2011).

The ACCC appears less concerned with Adelaide and Perth Airports, which currently do not impose fees on off-airport parking operators, but has some reservations about Sydney Airport's incentives to moderate any price increases.

8.2 The ground transport market is broader than on-airport parking

In assessing the market power of airports in this area, it is important to define the scope of the market. A common way of defining the relevant market for a good or service is whether there is a degree of potential substitution by consumers between:

- different suppliers of the same or similar products or services
- different products or services that satisfy the same or similar purpose for the consumer (ESC 2009).

If the market is defined narrowly as 'car parking services for private vehicles at the airport', airport operators are generally sole suppliers of these services, with the exception of some high-end valet parking offered by airlines.

However, if the market definition is widened to include *different products or services that satisfy the same or similar purpose for the consumer,* the market becomes 'ground transport services to the airport'. A range of factors influence airport users' choice of transport (box 8.2).

Box 8.2 **Consumer demand for ground transport**

The demand for any particular mode of ground transport to the airport will depend on a range of factors, including:

- cost of the service
- availability, cost and associated convenience of substitutes services
- time taken to travel to the airport
- convenience
- reliability of the transport option
- nature of the trip (business, leisure or employment)
- number of people travelling together
- household income.

After weighing up these factors and others, consumers will choose the most appropriate transport mode. Based on individual preferences, airport users will rank the transport options differently.

In choosing the mode of transport to the airport, reliability of the service to reach the airport on time is paramount to passengers. Research commissioned by Melbourne Airport found that:

> … airport customers need to feel in control and to have certainty in getting to their flight on time in order to consider any particular model of ground transport. Other factors such as price, convenience and distance to the terminal are secondary and tend to be considered only after the customer is comfortable that the preferred mode will get them to their flight on time. (sub. 29, p. 56)

The mode selected may also differ according to the nature of the trip. Business travellers, for example, may not directly pay for the cost of the transport to the airport. They will, therefore, be less sensitive to the cost. However, 'budget' leisure travellers are likely to be more price sensitive — with the cost of travel to the airport having a greater bearing on their choice. In addition, Melbourne Airport research found passengers travelling to the airport may use multiple modes, making it difficult to generalise user behaviour:

> … particular users can evidence different behaviour according to the context eg they may use a taxi for business trips and the long term car park for family trips. (sub. 29, attachment 2, p. 9)

Sydney Airport research also supported this finding:

> … most airport users (whether or not they used the car park) were aware of several different access modes and, on average, used 2.7 different access modes during the preceding 12 months. (sub. 46, p. 61)

In addition to driving a private vehicle and parking at the airport, ground transport services to the airport include:

- driving and using drop-off/pick-up facilities
- driving and using off-site parking combined with a shuttle bus
- driving a rental car (and returning to the provider)
- taxi
- hire car or limousine
- bus
- rail
- cycling.

The ability of an airport to use its market power depends on whether there are effective substitutes to driving and parking at the airport. As the degree of substitution between transport modes is not known, the following discussion is a qualitative assessment of the level of competition among ground transport modes to an airport.

Private vehicle

Private vehicle is the most popular option for journeys to and from the airport, but this mode is substantially less important for trips to Sydney airport compared with other major airports (chapter 2). To access the airport, users can drive using a private vehicle in combination with either kerbside facilities, or on- and off-airport parking services.

Kerbside access

Kerbside terminal/forecourt access is free for the general public and provides similar convenience to driving and parking short-term, but with the added benefit of being even closer to the terminal. In addition to kerbside drop-off and collection, Perth airport has 15 minutes free parking in its short-term parking facilities. Sydney airport has a passenger collection bay near Terminal 2 (instead of kerbside facilities) with 10 minutes free parking.[2]

[2] While not one of the five price and service quality monitored airports, Canberra airport also provides 10 minutes free parking in the on-airport car parking facilities.

Pick-up and drop-off is the main form of access to the airport using a private vehicle. Melbourne and Brisbane airports estimate that 35 and 58 per cent of airport users, respectively, use the drop-off and pick-up facilities. The Tourism and Transport Forum (TTF) estimate that 46 per cent of passengers use the kerbside facilities at Perth airport. In contrast, at Sydney airport — where private vehicle access to the airport is substantially lower than other major airports — only 17 per cent of passengers use the drop-off and pick-up facilities (table 8.1).

Table 8.1 **Transport mode share at selected capital city airports — all airport users (per cent)**

Airport	*Private vehicle*			*Taxi*	*Rental car*	*Bus*	*Rail*	*Private coach*
	kerbside	*on-airport parking*	*off-airport parking*					
Adelaide	na	16	na	27	5	4	-	2
Brisbane[a]	58	16	2	9	na	na	9	5
Melbourne[b]	35	27	15	14	na	9	-	-
Perth	46	35	1	12	4	2	-	-
Sydney[c]	17	22	na	33	6	2	9	10

[a] Limousine services account for 1 per cent of transport to the airport. [b] Taxi and limousine services combined. [c] Data estimated from Sydney Airport Ground Plan based passengers and 'meeter/greeter' modal usage. Off-airport parking may be included in on-airport parking data. **na** Not available. – Nil.

Sources: Adelaide Airport, sub. 12; Brisbane Airport, sub. 40; Melbourne Airport, sub 29; Tourism and Transport Forum, sub. 53, attachment; Sydney Airport (2006).

The use of mobile phones has made using this option increasingly more practical. 'Meeters and greeters' can drive to the neighbouring airport suburbs and wait for a call from the passenger before arriving at the terminal pick-up area.

Any substantial increase in the price of airport parking is likely to increase the use of drop-off and pick-up facilities. However, increased use of these kerbside facilities is contrary to many airports' objective of reducing terminal kerbside or forecourt congestion. This fact may provide some constraint on airport operators increasing parking prices, in particular for short-term parking — the closest substitute to drop-off and pick-up. Cognisant of this, Melbourne Airport stated:

> … there is direct substitutability between services and particularly between private vehicle kerbside pick-up/drop-off and private vehicle access combined with short term car parking … short term rates applied by Melbourne Airport are consistent with its objective of reducing congestion of the constrained kerbside space in front of the terminal complex. (sub. 29, p. 118)

Melbourne Airport is also examining the establishment of a waiting area outside the terminal precinct where 'meeters and greeters' can await a telephone call from their

arriving passenger prior to entering the forecourt to collect them. This is expected to significantly reduce congestion created by vehicles recirculating through the precinct and provide greater convenience to those collecting passengers from the airport (sub. 70, p. 8).

On-airport parking

At Perth airport, around 35 per cent of passengers drive and park at one of the on-airport car parks — the highest proportion among the five monitored airports (table 8.1). The difference at Perth airport may reflect the relatively high proportion of 'fly-in fly-out' passengers who use the long-term parking facilities. Westralia Airport Corporation (Perth Airport) noted:

> Another substantial contributing factor to the high demand for long-term car parking is the substantial fly-in fly-out market segment that is away from Perth typically from seven to ten days at a time regularly throughout the year. (sub. 41, p. 79)

Melbourne Airport estimated that approximately 27 per cent of airport users park their car at the airport (sub. 29). The greater reliance on airport parking at Melbourne airport may, in part, reflect its location. Melbourne airport is over 30 kilometres from the geographic centre of Melbourne — which is in the south-east whereas the airport is in the north-west. Many people have limited reason to travel to the airport area other than to access the airport which, combined with the limited availability and/or reduced convenience of alternative options (such as rail and bus), provides some explanation for the comparatively high use of on-airport parking.

Around 16 per cent of airport users in Brisbane (sub. 40) and Adelaide (sub. 12) airports use the car parking facilities and 22 per cent of passengers at Sydney Airport (table 8.1). Brisbane Airport noted:

> There is often a perception that a large proportion of passengers utilise the on airport car parks. However, KPMG's analysis suggests that less than one in five passengers use the on-airport car parks [at Brisbane Airport]. (sub. 40, p. 26)

Analysis of on-airport car parking prices and investment is provided in sections 8.3 and 8.4.

Off-airport parking

While not a perfect substitute, an alternative to driving and parking at the airport is driving and using off-airport car parking. Off-airport parking operations, which are usually located in the suburbs surrounding airports, offer long-term parking (one day or more) with a shuttle bus to the airport. They provide competition for

long-term parking at airports (particularly the more remote on-airport facilities). Currently, this mode represents 15 per cent of the transport market to the airport for Melbourne. Off-airport parking represents a very small segment of the ground transport market to Brisbane and Perth airports. Data are not available for Adelaide and Sydney.

Off-airport car parking represents a competitive alternative to parking at the airport. In terms of price, off-airport parking charges are typically slightly below those at long-term parking facilities at the airport (table 8.2). The lower price could reflect the lower cost of providing the service and the less convenient nature of the service (that is, having to arrive earlier, potentially leave car keys with the operator and having to catch a shuttle bus — although some long-term parking facilities at the airport also use shuttle buses).

Table 8.2 **Cost of transport options to monitored airports**

	Kerbside	*Off-airport parking*	*On-airport parking*		*Taxi*[a]	*Rail*[b]
			short-term	*long-term*		
	$	$ per day	$ per day	$ per day	$	$
Adelaide	free	21–30	30	25	32	na
Brisbane	free	16–25	40	40	68	28
Melbourne	free	9–35	52	29	108	na
Perth	free	20–30	36	16	48	na
Sydney	free	20–100[c]	52	25	76	25

[a] Return taxi fare from/to the Central Business District (CBD). [b] Return rail fare. [c] For up to three days parking.

Sources: Adelaide Airport, sub. 12, p. 10; Brisbane Airport, sub. 40, appendix A, p. 4; Melbourne Airport sub. 29, attachment 2, p. 22; Perth Airport, sub. 41, p. 91; Sydney Airport, sub. 46, appendix E, p. 23; various airports' website parking calculator; www.taxifare.com.au as at 4 July 2011.

In terms of availability, off-airport providers supply a significant proportion of the combined number of car parking spaces directly targeted at passengers using the airport. For Melbourne there are 14 off-airport car parking facilities in the immediate vicinity of the airport with a parking capacity of over 10 000 — representing approximately one-third of the combined total of on- and off-airport car parks. Similarly, seven off-airport operators near Brisbane airport provide a parking capacity of around 4000 (sub. 62, p. 4) — around 40 per cent of total parking capacity. Off-airport car park providers near Sydney airport supply around 15 per cent (1800) of the combined parking capacity (sub. 46, appendix E, p. 22).

Therefore, increases in airport parking prices, especially long-term parking, is likely to induce some passengers who park on-airport to change to off-airport parking.

While off-airport parking is a small share of its market, Brisbane Airport claimed that competition has had an impact on its parking pricing:

> … pricing decisions at the International Terminal car park have been impacted by these off-airport car park operators. The throughput at the International multi level car park (MLCP) decreased in 2009/10. Subsequently, BAC [Brisbane Airport] decreased the prices at the International MLCP to $99 for seven days, which is comparable to the off-airport car park options. (sub. 40, p. 26)

Substitution between on- and off-airport parking is also likely to be material at Melbourne airport given the location of the airport relative to the residential population, the higher cost of other alternatives (such as taxis) and the greater inconvenience of buses. There is also likely to be some degree of substitution at Sydney airport, although the number of off-airport parking spaces is a considerably smaller proportion of overall capacity.

The off-airport parking market appears to be much smaller around Perth and Adelaide airports, reducing substitution to this option.

Information request: The Commission seeks more information on the nature of the off-airport parking market, particularly in Perth and Adelaide.

Taxis

After private vehicles, taxis are generally the next most frequent mode of transport to the major five Australian airports. Taking a taxi is likely to be an attractive option for certain types of passengers, including:

- business travellers
- time-sensitive travellers who place a premium on the added convenience of being dropped off and picked up right outside the terminal
- passengers that prefer not to drive
- passengers who do not own a car, or are uncomfortable leaving a car at the airport
- passengers who live close to the airport.

Like kerbside access, taxis provide a higher level of convenience to driving and parking, but with the added benefit of being even closer to the terminal. Taxi services are generally a more costly option for one person than parking for one day (either on- or off-airport) or catching a bus or using rail. Taxi fares, however, will vary considerably depending on the origin/destination when travelling to/from the

airport. As the individual cost is so variable, a 'reference fare' — the return taxi fare between the airport and the central business district (CBD) — is used for this analysis (table 8.2).

In Adelaide, where around one-quarter of airport users arrive by taxi, the cost of a fare is similar to parking at either on- or off-airport parking for one day. Taxi fares are cheaper than driving and parking for longer stays at Adelaide airport.

In Sydney, around one-third of passengers travel to/from the airport via taxi. The competition between taxis and driving and parking is probably higher in Sydney — where 60 per cent of passenger travel is to or from locations within a 25 kilometre radius (sub. 46, appendix E). Added to this, over 30 per cent of Sydney airport passengers are travelling for business — a segment of the market that is more likely to use taxis. While the cost of a taxi fare is substantially more than the cost of parking for one day, business passengers are often not as sensitive to the cost of travel. For 'trips' longer than one day, the cost of taxi access relative to that of driving and parking a private vehicle at the airport diminishes.

The use of taxis is appreciably lower in Brisbane (9 per cent), Melbourne (14 per cent) and Perth (12 per cent) (table 8.2) — reflecting higher fares, the composition of those travelling (business, leisure) and the length of stay away from the departing city. Any substantial increase in the price of airport parking is likely to have a smaller impact on taxi usage in these cities compared to Adelaide and Sydney.

Mass transport

Use of mass transport is material in Sydney, Melbourne and Brisbane. In Sydney, 21 per cent of airport passengers make use of either the rail link (9 per cent), public buses (2 per cent) or private coaches/shuttle buses (10 per cent). In Melbourne, 9 per cent use bus services and in Brisbane around 14 per cent of passengers catch either the bus (5 per cent) or train (9 per cent) to the airport.

Bus and rail are generally less convenient than most other modes of transport to the airport except from the CBD. This lower amenity is not always reflected in the cost of the services. Return rail fares to Sydney and Brisbane airports, for example, are around $25 (return). At Sydney Airport, one day parking charges in the remote long-term facility are similar to the rail fares. In Brisbane, parking fees for one day are somewhat more ($40). When passengers are away for longer, the cost competitiveness of rail transport increases relative to parking. However, passengers will weigh up the reduced cost with other factors before choosing to travel via rail (box 8.2).

An increase in the price of airport parking is likely to only lead to a marginal increase the use of mass transit as these options are not widely available or the services offered do not satisfy consumer preferences at the prevailing price.

The TTF placed some of the reliance on private vehicles and taxis on the 'failure by state governments to develop sufficient and appropriate public transport to our airports' (sub. 53, p. 7). The TTF highlighted that 'public' transport, in other countries, is a greater proportion of the ground transport market when:

- it is high frequency
- it has direct airport to CBD access
- there is a strong 'brand'
- there are 'journey time' advantages (table 8.3).

Airports have some influence over the cost and convenience of the alternatives to using airport provided car parking (section 8.5). However, factors affecting whether a service is provided (such as a rail link) and the quality of alternative access modes (the frequency of services or level of congestion on surrounding roads) generally rest with governments. These factors affect the scope of the market for ground transport to airports. (Provision and quality of land transport facilities that provide access to major airports are examined in chapter 12.)

Table 8.3 **Public transport access to selected international airports**

Country/Region	*Airport*	*Public transport mode share*
		%
UK	Heathrow	38
	Gatwick	36
	Stansted	47
Europe	Oslo	62
	Geneva	45
Asia	Hong Kong	60
	Tokyo	60

Source: Tourism and Transport Forum, sub. 53.

Australians mostly access airports using private vehicles and in doing so largely opt for free kerbside pick-up and drop-off. Beyond that they can choose to park and fly using off-airport car parks at a lower price for a less convenient product, or park on-airport in either long-term car parks or the most convenient and expensive short-term car parks adjacent to the terminals. Substitution between the modes of transport limits, to some degree, airports' ability to increase the price of on-airport car parking above competitive levels.

8.3 Car parking prices reflect more than cost of supply

Airports charge customers different rates depending on the length of stay and the type of car parking facility used (table 8.4).

Table 8.4 **Airport car parking prices as at 30 June 2011 ($)**

Airport	*Short-term car parking*[a]				*Long-term car parking*[b]	
	1 hour	*4 hours*	*8 hours*	*24 hours*	*1 day*	*7 days*
Adelaide	4.00	14.00	26.00	30.00	25.00	70.00
Brisbane	16.00	40.00	40.00	40.00	40.00	150.00
Melbourne	12.00	36.00	52.00	52.00	29.00	77.00
Perth	5.60	11.00	15.00	36.00	16.00	88.00
Sydney	15.00	52.00	52.00	52.00	25.00	122.00

[a] Brisbane, Perth and Sydney airports' short-term and long-term car parking prices are based on the domestic terminal car park at each airport. [b] Melbourne airport's long-term car parking prices are based on the long-term uncovered car park located at a distance from the terminal precinct.

Sources: Airport websites.

However, the complex and variable configurations of airport parking makes seemingly simple price comparisons across airports difficult (box 8.3). A comparison, for example, between Adelaide airport's parking charge of $4 for the first hour with $15 at Sydney airport is not necessarily useful.

Cost of construction

As a starting point, the price of car parking must reflect the cost of providing the service. The investment required for a multi-storey car park with covered walk ways to the terminal is much higher than an open-air car park. The Commission understands that the cost of construction of an open-air car park is approximately $2000 per parking bay, while the cost of a multi-storey car park is around 10 times

this amount. The higher cost of construction is often reflected in the price. Melbourne Airport, for example, charged $77 per week to park in the open-air long-term parking facility as at 30 June 2011, and $139 per week at the multi-level undercover parking facility close to the terminal (Melbourne Airport 2011).

Box 8.3 **Car parking options at five capital city airports**

All airports offer car parking facilities and services for airport users, providing short- and long-term parking with various attributes — covered, open-air, close to the terminal or some distance away (with shuttle bus services). The configuration of the facilities is influenced by whether the airport terminal has separate terminals for domestic and international flights or is a multi-use terminal (domestic and international combined).

- Adelaide airport has two car parks: short- and long-term parking facilities. As Adelaide airport has a multi-use terminal, these facilities are used by domestic and international passengers. Short-term parking is located immediately outside the terminal. Long-term parking facilities are located some distance from the terminal with a free shuttle bus service to the terminal. As of June 2011, temporary parking arrangements are in place during construction of more parking facilities.
- Brisbane airport offers separate facilitates for domestic and international passengers. Due to construction of a new multi-level car park, there are two temporary short-term open-air car parks — both located in walking distance to the domestic terminal. It also has undercover as well as open-air long-term parking, both within walking distance to the terminal. A separate facility provides short- and long-term undercover parking for international terminal users.
- Melbourne airport has combined parking facilities for domestic and international terminal users, including short-term (undercover), 'express', business, multi-level long-term (all within walking distance), and more remote long-term open-air parking with a free shuttle bus.
- Perth airport provides short-term and long-term parking at the domestic and international terminals. It also provides an additional premium undercover parking service close to the domestic terminal and a car park for general aviation passengers.
- Sydney airport has a multi-storey car park adjacent to the domestic terminals that provides short-term and valet parking for domestic terminal users. In addition, there is a remote ground-level car park that provides long-term parking for users of the domestic terminal (with shuttle bus). Combined short-term and long-term multi-level car parking is located within walking distance of the international terminal.

Sources: ACCC (2011); airport websites.

Car park capacity is also built to meet peak demand on the busiest days of the year as visitors hold the expectation that they can get a car park at any time. This imposes a high opportunity cost of intermittent usage, since when the airport is not

as busy — 'there will be lots of empty spaces not producing revenue' (Sydney Airport, sub. 46, appendix E, p. 4). Similarly Melbourne Airport submitted:

> … [it] provides car parking for peak periods (specifically in relation to the 4 holiday peak demand period) which means that, in providing an appropriate level of amenity to users, the airport incurs additional capital costs. (sub. 29, p. 91)

Amenity of car parking services

Melbourne Airport noted that capital investment is only one element of price:

> … The prices for Melbourne Airport car parking services reflect the proximity of the individual car parks to the terminal as well as service levels. They also take into consideration the capital investment made in relation to each car park and the amenity/service levels associated with each product. (sub. 29, p. 34)

The price paid by users also reflects the amenity provided. For example, Brisbane airport's long-term parking is undercover and within walking distance of the terminal precinct. That facility provides greater services and convenience than the long-term open-air parking facilities at Melbourne airport, which are some distance from the terminal (passengers generally rely on a courtesy bus service to reach the terminal). This may go some way to explaining why Brisbane Airport's long-term parking fee is $40 for one day compared with Melbourne Airport's charge of $29 (table 8.4). Sydney Airport noted that parking charges reflect the convenience associated with the car park:

> … passengers continue to have the option to park long term in the domestic and international multi-storey car parks, for a higher price reflecting the greater convenience of being immediately adjacent to the terminal. (sub. 40, p. 46)

Demand management strategies

Prices are also used by airports to encourage passengers to use certain car parking facilities over others. This is particularly the case in short-term parking which is targeted at users staying at the airport for a 'brief' visit. Consequently, prices in short-term parking rise as the length of the stay increases but once a certain length of stay is reached prices increase substantially or 'jump'. The aim of this pricing strategy is to discourage longer-term parkers from taking up limited short-term spaces. At Sydney airport, for example, the cost of a three-hour stay in the short-term car park is $26, while it is $52 for four hours or more (as at 30 June 2011). Similarly, at Brisbane airport, car parking fees increase from $25 to $40 when the length of stay increases from four to five hours (as at 30 June 2011). These price jumps encourage longer-term parkers to move to the long-term

facilities. Perth Airport acknowledged using prices to 'incentivise' customers to shift from one product to another:

> The only area where WAC [Perth Airport] has used car park prices to condition product choice is in the one to two day overnight parking segment. The rate for 24 hours of parking in the short-term bays is high relative to the long-term parking areas. WAC selected this price to encourage these customers into long-term parking areas to release short-term car parks proximate to the terminal for pick up and drop-off customers. This price is not an abuse of market power, as a cheaper alternative is available, and if a passenger chooses to pay this price, they do so despite the availability of a substitute. (sub. 41, p. 85)

Sticker shock

Some airport users may be surprised by the cost of parking on return to their car — especially those not using the most appropriate parking facilities for their length of stay. The prevalence of this 'sticker shock' is greater with less frequent users of the airport, 'meeters and greeters' and passengers of low cost carriers that drive and park at the airport (box 8.4). Airports make parking cost information available to help alleviate 'sticker shock'. Some airports and airlines offer pre-paid online car parking at a discount. Sydney Airport noted:

> There are several ways that visitors can pay to park at the airport, including payment on exit or pre-payment via the internet (E-Park) or through airlines when booking flights. … Currently, discounts for booking online are only available for longer-term parking at the international car park (sub. 46, attachment E, p. 8).

Paying a premium for location

While most major Australian airports have invested in car parking facilities (section 8.4), there are physical constraints on the number of car parking spaces that can be built immediately in front of the terminal. Consequently, the price of some car parking will include a premium above the cost of providing these facilities (so called 'locational rents') to reflect that land in close proximity to the terminal is highly valued by users (not just 'parkers').

Locational rents come about through limited supply of services or facilities where there are no artificial constraints on that supply (that is, airports are not artificially restricting the supply of parking). The size of locational rents depends on the degree of scarcity of the land (Forsyth 2004). This is in contrast to monopoly profits that result from a misuse of market power — where the airport's intent is to artificially restrict the supply of, or delay investment in, parking bays in order to support higher prices.

Box 8.4 Cost of travel and parking: Sydney to Melbourne

With the emergence of low cost fares to tourist destinations, more people are flying to holiday destinations at much lower prices than before. Some passengers do not factor in the full cost of travel and may be surprised at the cost of parking relative to the cost of airfares — particularly if they have not made the most appropriate parking choices.

In 2010, the average cost of an internet discount one way fare between Sydney and Melbourne was approximately $80 (or $160 return). Assuming a traveller enters Sydney airport's car park around 6:00 pm on Friday night and departs at approximately 3:00 pm on Sunday afternoon, the following is an indication of the cost of parking relative to cost of a discount airfare:

Air fare (return)	$160
Remote long-term car park (unshaded)	$62
Remote long-term car park (shaded)	$77
Short-term park car park	$104
Valet car park	$172

Sources: Sydney Airport website car park calculator as at 5 July 2011; BITRE (2010c).

In practice, the distinction between locational rents and monopoly profits is not easy to make. From the perspective of the consumer, the distinction does not matter — only the price paid. From an economic perspective, however, locational rents do not have any efficiency implications. As explained by Forsyth (2004):

> Locational rents are consistent with efficient pricing; they represent the opportunity cost of space or land which is in scarce supply. Monopoly rents, on the other hand, come about because the owner has set price above an efficient level, thereby creating a dead weight loss. (p. 52)

The ACCC acknowledged that locational rents or the opportunity cost of the land may play a role in car park pricing at airports:

> The major airports' market power in car parking arises because the land adjacent to these airports is highly valued for various activities that are related to the operations of the airport. (sub. 3, p. 27)

The ACCC recognised that Sydney Airport may be facing physical constraints to providing more parking spaces, and as such the prices there may reflect locational rents:

> It is unclear if Sydney Airport has reached capacity limits for car parking that is close to the airport terminals. If the airport cannot technically provide more spaces, the margins received by Sydney Airport for car parking may be more reflective of locational advantages. Further, it is expected that the opportunity cost of land — that is,

> the value of the next best alternative use of the land—at Sydney Airport is higher than at the other airports. (ACCC 2011, p. xii)

Sydney Airport commissioned an analysis of the opportunity cost of the land on which the international car parking facilities are located. This study found that the implied rate of return on the international car park land is lower than the return on a commercial office building. This building would be expected to have similar locational rents as it is located on the airport at the northern edge of the international car park. This would imply that the parking prices at Sydney airport international parking facilities do not reflect the full locational rents. Consistent with this, the study contended that, if the airport had earned the same return on its car parking land as the office building, it would have earned 16 per cent more car parking revenue than currently.

Relevant benchmarks

Airport submissions — see Adelaide Airport (sub. 12), Brisbane Airport (sub. 40), Melbourne Airport (sub. 29), Perth Airport (sub. 41), Sydney Airport (sub. 46) — have drawn the Commission's attention to the price of on-airport parking relative to CBD parking — arguing that the price paid is reasonable in comparison. Melbourne Airport noted:

> The services provided by airport car parking sites have a high amenity value in the same way that car parking at CBD locations has high amenity value and embody a commensurate locational rent. (sub. 29, p. 34)

Similarly Sydney Airport stated:

> Sydney Airport's car park prices are competitive with off-airport car parks, are cheap relative to CBD car parks … (sub. 46, p. 62)

And Brisbane Airport outlined:

> Prices at CBD car parks in Brisbane, which also enjoy a locational advantage, have been increasing at a faster rate than the car parking charges at Brisbane Airport. Furthermore, parking at Brisbane Airport is now cheaper than parking at any of the privately owned car parks in the Brisbane CBD. (sub. 40, p. ii)

CBD car parking prices tend to be higher in comparison to airport parking charges. Furthermore, a recent international survey of CBD parking found that daily median car parking rates in Melbourne and Sydney are among the highest in the world (table 8.5).

Table 8.5 **International comparison CBD parking prices, 2010**

Daily mean prices

Rank	*City*	*$US/day*
1	Oslo	89.04
2	Copenhagen	73.11
3	Melbourne	69.53
4	Sydney	67.42
5	London (City)	65.97
6	Tokyo	62.00
7	London (Westend)	57.73
8	Vienna	57.51
9	Amsterdam	57.51
10	Geneva	46.98

Source: Colliers International (2011).

While airports are generally the only provider of on-airport parking, they have similarities to CBD parking operators in that they are not run at a loss to attract business. Melbourne Airport highlighted this:

> The businesses of commercial car parks in the CBD are similar to car parking services provided at the airport in that, in both cases, the businesses can be operated on a stand-alone basis. This contrasts with shopping centre and entertainment centre car parks which may be subsidised by other business activities in the centre. (sub. 29, attachment 2, p. 37)

In addition, CBD parking prices, like airports, are also likely to reflect a locational advantage as they are both situated on scarce land that is close to an 'attraction'. However, the locational element will vary between the CBD and the airport, as the degree of scarcity will vary between locations. A direct comparison of prices between the airport and CBD parking, in a particular city, is not necessarily instructive. The ACCC argued:

> … that CBD car parking rates are not comparable to airport charges. For example, the size of location rents depends on how scarce space is, which would differ between the CBD and airport land. (sub. 3, p. 35)

The Commission supports the view that the size of the locational rents will vary between the CBD and airport land and, consequently, has not used direct comparisons of respective price levels in reaching its findings in relation to car park prices.

Does revenue reflect the misuse of market power?

In the 2009-10 monitoring report, the ACCC raised concerns about total car parking revenue at Melbourne airport:

> Melbourne Airport reported the highest car parking revenue as a share of total airport revenue of 20.7 per cent … Information provided to the ACCC indicates that car parking prices at Melbourne Airport are of particular concern. (ACCC 2011, p. 57)

In an attachment to the Melbourne Airport submission, PwC argued against the ACCC claim of excessive car parking prices by stating:

> … [it] is not supported by analysis in the ACCC report and is not supported by an analysis of the basic data in relation to car parking … (sub. 29, attachment 2, p. 14)

Melbourne Airport (sub. 29) maintained that its geographic location, combined with the dispersed nature of the population, means that a larger proportion of users drive and park at the airport compared with most other monitored airports — this has lead to higher revenue associated with car parking than other monitored airports. Using another financial indicator that takes into account the total capacity of the parking facilities, Melbourne Airport's revenue yield per car parking bay per day is estimated to be around $13 — substantially below the yields achieved at Sydney and Brisbane airports (table 8.6).

Table 8.6 **Revenue yields per car park bay — monitored airports, 2009-10**

	Adelaide	*Brisbane*	*Melbourne*	*Perth*	*Sydney*
Car parking revenue ($m)	14	58	104	33	95
Car parking bays[a]	3 085	9 610	22 412	11 526	12 148
Revenue yield, per parking bay/per day ($)	12.20	16.60	12.70	7.90	21.50

[a] Includes staff car parking.

Source: Melbourne Airport, sub. 29, attachment 2.

Furthermore, Starkie (sub. 44) highlighted a 'degree of disconnect' in the ACCC's analysis with respect to other airport revenue streams. He noted that airports are multi-product businesses that take into account revenue from all aspects of the business in setting prices. In the case of Melbourne Airport, it has the highest revenue sourced from car parking charges but the lowest aeronautical revenue per passenger:

> Airports are multi-product industries … one might expect airports to take into account the demand characteristics of different revenue streams when determining prices for any particular one. According to ACCC, parking prices at Melbourne Airport are of particular concern but it has the lowest aeronautical revenue per passenger. (sub. 44, pp. 4-5)

At a minimum, car parking prices at airports reflect the fixed and variable costs of the service, the inbuilt over-capacity inherent in catering to peak demand and the opportunity cost of the land. Added to this is the imperative to ensure that passengers are guaranteed the convenience and amenity associated with a short-term car park when needed, and the necessity to enable demand management strategies to use price as a mechanism to shift long-term car parkers away from scarce short-term places.

8.4 Car park investment

In the five years to 30 June 2010, there has been substantial new investment in car parking spaces on all airports except Sydney (table 8.7). Over this period, car parking spaces at Perth airport grew from around 4000 to over 10 000. Similarly, at Melbourne airport the number of spaces grew from approximately 15 000 to 20 000. Melbourne airport has the most number of on-airport car parking spaces among the five major airports. At Sydney airport, parking capacity has remained static around 10 000 over the five years to 30 June 2010.

Table 8.7 **Number of car parking spaces**[a]

As at 30 June

	2006	*2007*	*2008*	*2009*	*2010*	*%Δ*[b]
Adelaide	1 280	1 279	1 593	1 769	1 828	43
Brisbane	5 988	5 893	6 746	7 185	7 126	19
Melbourne	14 821	15 228	17 836	20 198	20 029	35
Perth	3 756	4 121	7 815	9 488	10 215	172
Sydney	9 830	9 613	9 595	10 499	9 822	0

a Excludes staff car parking **b** Percentage change from 30 June 2006 to 30 June 2010.

Source: ACCC (2011).

The nature of the growth in car parking (that is, short-term or long-term, international or domestic) varies between airports (table 8.8). At Perth airport, for example, the growth in car parking capacity has been in long-term parking at the international terminal with the number of parking bays increasing from around 1500 at 30 June 2006 to 6000 as at 30 June 2010. Whereas at Melbourne airport, the number of short-term car parking bays increased from around 3700 to 7500 in the five years to 30 June 2010.

In some cases, there has been a decline in the number of parking spaces of a particular type. While the total number of car parking spaces at Perth domestic airport increased from around 1000 (all short-term) to almost 2500 (short-term and long-term), the number of short-term parking space fell by over 300. This reconfiguration of the nature of parking facilities may reflect the increasing proportion of fly-in fly-out passengers using Perth airport. At Sydney airport, the number of long-term car parking spaces declined (by approximately 400) as they were converted to additional space for bus parking. (However, Sydney has added around 350 parking spaces in the international car park since 2006.)

Table 8.8 **Number of car parking spaces, by parking facility**
As at 30 June

	2006	*2007*	*2008*	*2009*	*2010*	*%Δ*[a]
Adelaide						
Short-term	860	829	829	829	834	-3
Long-term	420	450	764	940	994	137
Brisbane						
Short-term & long-term (international)	950	951	1 740	1 740	1 740	83
Short-term (domestic)	938	842	858	810	976	4
Long-term (domestic)	4 100	4 100	4 148	4 635	4 410	8
Melbourne						
Short-term	3 744	3 315	3 244	7 698	7 529	101
Long-term	11 077	11 913	14 592	12 500	12 500	13
Perth						
Short-term (international)	1 207	1 207	1 377	1 377	1 719	42
Long-term (international)	1 542	1 907	3 997	5 670	6 055	293
Short-term (domestic)	1 007	1 007	663	663	663	-34
Long-term (domestic)	nr	nr	1 778	1 778	1 778	-
Sydney						
Short-term (international)	1 817	1 374	1 356	2 234	2 170	19
Short-term (domestic)	3 420	3 662	3 662	3 688	3 458	1
Long-term	4 593	4 577	4 577	4 577	4 194	-9

[a] percentage change from 30 June 2006 to 2010.

Source: ACCC (2011).

Sustaining growth in private vehicle access to airports will require expansion of existing car parking facilities or the development of new on-site car parking. For many airports there is land available to further develop car parking facilities, especially long-term parking facilities. A number of airports are in the process of increasing the supply of car parks. Brisbane airport, for example, is currently constructing a multi-level car park at the domestic terminal. When finalised this will increase the total parking capacity to over 10 000 (sub. 40, p. 25). Similarly, Adelaide Airport commenced construction of a new multi-level short-term car park

in February 2011. This facility, due for completion in mid-2012, will 'double the size of the existing short-term car park' (Adelaide Airport 2011). Sydney Airport informed the Commission that it has plans to increase its car parking capacity in the near future:

> Approval to construct a second eight storey car park at the International Terminal is currently being sought from the Australian Government. This project, which will provide approximately 2,300 spaces, has a Major Development Plan (MDP) approval but requires approval for a minor variation to the MDP before construction can commence. If approval to the minor variation is granted by the Minister for Infrastructure and Transport, the car park will be substantially completed by May 2012 and fully operational by mid-2012.
>
> A proposal to expand the domestic multi-storey car park and provide an additional 900 spaces has been developed. The current status of this project is that discussions with the Department of Infrastructure and Transport are underway as to whether a MDP is required. Subject to receiving all approvals, the current completion date for the project is 2013. (sub. 81, p. 1)

Use of market power to delay in car park investment

The ACCC claimed that Brisbane airport may have been earning monopoly rents for airport parking as a result of 'inefficiently delaying investment' (ACCC 2011). While it does acknowledge Brisbane airport's recent 'considerable' investment in multi-level car parking facilities, the ACCC questioned why this investment was not undertaken sooner (sub. 3, p. 27). In response, Brisbane Airport outlined in its submission to this inquiry that the global financial crisis (GFC) combined with its existing investment program made it difficult to obtain finance during this period:

> ACCC's allegation that BAC [Brisbane Airport] may have deliberately deferred investment in domestic car parking capacity to enable it to put up prices is incorrect, and ignores the recent debt crisis that has held back investment around the world. BAC was already investing in an international terminal expansion ($320 million) and major new roads to the airport ($220 million) in 2007 when debt markets around the world collapsed. (sub. 40, p. iii).

A discussion of the effect of the GFC on the financing and timing of car park investment at Brisbane airport is not included in the 2009-10 monitoring report.

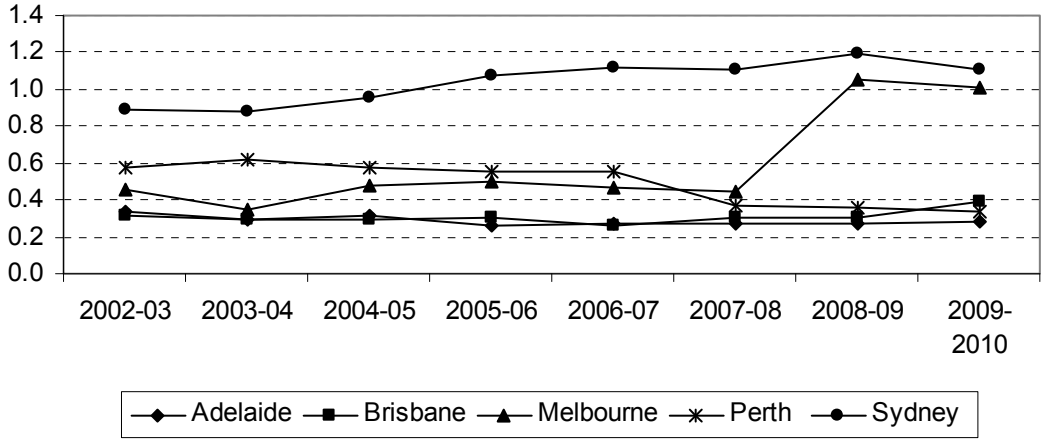
It is unclear if Brisbane Airport was aware of the claim and the need to provide supporting reasons or provided such reasoning but the ACCC chose not to include the discussion in the monitoring report. As the ACCC invites comment from each airport on their 'own chapter', it is quite possible that Brisbane Airport was not provided an opportunity to rebut this claim as it was not raised in the 'Brisbane Airport' chapter. Instead, the claim was made in the summary and overview chapter

on airport car parking. This issue of 'escalation of claims' in the ACCC monitoring report is discussed in chapter 7.

Setting aside the effect of the GFC, it is difficult to substantiate the ACCC's claim of investment delay based on the data provided in the monitoring report. The ACCC bases its claim on a comparison of data between airports concluding that investment in car parking at Brisbane Airport should have been undertaken sooner 'given a relative scarcity of car parking spaces at the airport'.

The ACCC is correct in its claim that Brisbane Airport have provided fewer car parking spaces as a ratio of average daily throughput — a measure of capacity utilisation — relative to Melbourne and Sydney airports (figure 8.1). For every car parking bay, for example, an average of 2.6 cars park in each bay (per day) at Brisbane airport's short-term domestic parking facilities compared to one car in Melbourne and Sydney airports during 2009-10. While Brisbane airport does have a higher number of cars parking in each bay relative to Melbourne and Sydney airport, it is in a similar range to Adelaide (3.6 cars per bay) and Perth (3.0 car per bay) airports during 2009-10.

Figure 8.1 **Car parking spaces as a ratio of average daily throughput**
Short-term parking[a]



a In Brisbane, Perth and Sydney short-term parking refers to domestic short-term parking.

Source: ACCC (2011).

However, it is not apparent why Brisbane airport should have a similar ratio to Melbourne and Sydney airport and not Adelaide and Perth airport (or be similar to any particular airport) as the nature of demand for on-airport parking may vary between airports (box 8.2). The average length of stay in the short-term car park, for example, will affect the optimal ratio of car parking spaces to throughput. If the

average user of the short-term parking facilities stays for only one to two hours that parking bay will be available more often than if the average user stays for seven to eight hours. From this, it is not necessarily valid to compare the indicator — car parking spaces as a ratio of average daily throughput — across airports to derive conclusions about relative scarcity, particularly without consideration of the context at individual airports.

As outlined in chapter 6, this type of partial indicator is better used to provide broad insights into changes over time at individual airports. In particular, such trends can draw attention to 'outliers' or changes that may warrant further examination and explanation beyond the immediate data. An examination of the data for Brisbane Airport, however, shows no sign of any changes over time, providing no basis for further investigation based on this indicator (figure 8.1). In contrast, the ACCC noted that Melbourne Airport in 2008-09 'more than doubled capacity' of the short-term parking thereby providing an explanation for the large spike in the observed ratio for Melbourne Airport (figure 8.1). In the case of Adelaide Airport, the ACCC noted that it seemed to have been 'slow to invest in parking capacity' but provided contextual commentary to supplement the analysis:

> Adelaide Airport noted in commentary to the monitoring results that it is clear and widely accepted that the car park is now too busy, particularly during peak periods. Moreover, the airport stated the existing car parking facilities are frequently operating beyond capacity, resulting in adverse publicity for Adelaide Airport. In response to these capacity constraints, Adelaide Airport stated it adjusted its short-term car parking prices to encourage more efficient use of airport parking—in particular to encourage patrons to utilise the long-term car park (ACCC 2011, p. 64).

As noted above, no such commentary for Brisbane Airport was provided and the reasons for this are not clear to the Commission.

DRAFT FINDING 8.3

Airports generally have invested in car parking facilities in response to the growing demand for such services. Concerns that Brisbane Airport may have inefficiently delayed investment are difficult to substantiate especially given the problems of access to finance during the global financial crisis.

Mass transport as a complement to airport car parking investment

In addition to investing in car parking facilities a number of airports have lobbied state governments for more mass transport options — which if successful would reduce the profitability of on-airport parking. Sydney Airport stated:

> Sydney Airport has repeatedly advocated for better public transport (which would increase competition but better serve broader consumer and airport interests). None of these factors are consistent with the exercise of market power. (sub. 46, p. XX)

Brisbane Airport funds a staff bus, terminal shuttle and the Airport Village bus to facilitate the operation of public bus services within the airport boundaries (sub. 42, p. 27). Similarly, Perth Airport is also 'engaged with the State Government to create public transport options' to the airport (sub. 41, p. 9).

Melbourne Airport claimed to 'recognise the benefits of having rail access and has provided for potential rail access in successive Master Plans' (sub. 29, p. 41). With demand forecasts indicating that rail access could be feasible, the airport has stated its commitment to work with the 'state government and relevant local governments to conduct a feasibility study on the possibility of a rail link' (sub. 29, p. 41). The Victorian government has announced it would undertake a feasibility study for a rail link between the airport and CBD (Victorian Government 2011).

Adelaide Airport has been successful in increasing public transport services to the airport:

> Prior to the construction of the new terminal, Adelaide Airport had no direct public transport services. AAL [Adelaide Airport] lobbied hard with the State Government to introduce public bus services which have subsequently been introduced and are now frequent and well patronised. (sub. 12, p. 11)

8.5 Ground transport access fees and conditions

As noted above, airports also have some influence over the cost and convenience of the alternative transport modes to using airport provided car parking. 'Excessive' access fees for other transport modes would raise the cost and price of such services. As noted by the ACCC:

> Market power issues in airport car parking arise because airports can control access to airport land by off-airport parking operators and other transport modes as a bottleneck. This monopoly position allows the airports to earn additional revenue resulting from prices that are higher than those reflecting location. (sub. 3, p. 26)

The Commission noted in its 2002 review that the market power in car parking services would be constrained 'as long as landside access for competing operators (of other travel modes, such as taxis, and competing off-site parking services) is available on reasonable terms and conditions' (PC 2002a, p. 162). This section examines the access fees for ground transport operators.

Access fees

The imposition and level of access fees on transport operators using the central parking, forecourt or transport lanes at the five major airports varies considerably (table 8.9). For some modes of transport there is no charge across all airports, such as kerbside access for private vehicles and public buses. For other modes, some airports levy an access fee while others do not. In addition, when fees are charged, they tend to vary from airport to airport.

Table 8.9 **Ground transport access fees at the five monitored airports**

		Bus				
	Taxi[a]	*Small*	*Medium*	*Large*	*Public bus*	*Limousine/ hire car*
	$	$	$	4	$	$
Adelaide[b]	2.00	–	2.00	2.00	–	na
Brisbane	3.00	na	9.50	11.50	–	na
Melbourne[c]	1.32	4.00[d]	6.00	12.00	–	3.00[e]
Perth	2.00	no charge	no charge	no charge	–	2.20
Sydney[f]	3.50	5.00[g]	7.00[h]	12.00[h]	–	4.50[i]

[a] Access fee per pick up; [b] Adelaide: no access fees are imposed on off-airport providers accessing the airport via mini-bus; [c] Small bus: up to 10 seats, medium sized bus: 11–24 seats, large sized bus: 24 plus. Rates listed are 'agreed' rates. Casual rates are higher: $7.50 for small and medium sized bus and $15 for large buses. Casual users also required to have $1000 deposit and pay one month in advance for anticipated usage; [d] A small bus with a trailer: $6 access fee; [e] Per 20 minutes (domestic) and 75 minutes (international); [f] Small bus: up to 14 seats, medium sized bus: 15–29 seats, large sized bus: 30 plus; [g] Per 30 minutes; [h] Per 40 minutes; [i] Per 30 minutes. **na** not available. – Nil.

Sources: ACCC (2011); Brisbane Airport, sub. 40, attachment A, p. 18; Bus Industry Confederation of Australia, sub. 45, p. 3; Sydney Airport (2011).

All airports levy an access fee for taxi pick-up. The fees range from $1.32 per pick up at Melbourne airport to $3.50 at Sydney airport. The airports argue that these fees cover the cost of services provided such shaded taxi holding bays, refuelling stations, canteen facilities, toilets and showers, prayer rooms, ticketing payment systems (including electronic systems), concierge services and pick-up bays. Brisbane Airport noted:

> … BAC [Brisbane Airport] has invested significant funds in taxi-related facilities as part of the CPA [Central Parking Area], including shaded holding areas, a canteen, prayer room and amenities. (sub. 40, Appendix A, p. 37)

And Sydney Airport highlighted:

> … substantial costs are also incurred providing the relevant facilities. The airport must maintain access roads and provide taxi holding bays and set-down and pick-up points, as well as other infrastructure. (sub. 46, appendix E, p. 62)

Adelaide Airport noted that only 20 per cent (40 cents) of the taxi access fee is retained to fund capital investment with the remainder of the charge used to provide concierge services and fund taxi driver education through the South Australian Taxi Board (sub. 12, p. 2).

Some airports have also redesigned forecourt areas to support taxi services. In this regard, Perth Airport submitted that it:

> … has undertaken significant investment in its facilities to support taxi services. The domestic terminal forecourt redesign, completed in 2010 at a cost of $13 million, separates taxis and private vehicles at the front of the domestic terminal, significantly improving taxi service efficiency. (sub. 46, p. 88)

Access fees for bus providers vary. Perth Airport does not charge fees for bus access. Adelaide Airport charges $2 for medium and large buses to access the terminal but does not impose any fees on public buses or off-airport providers accessing the airport via mini-bus. Brisbane, Melbourne and Sydney airports charge private bus operators with the cost of access around $12 for a 'large' bus (table 8.9).

Views on access fees

In its 2009-10 monitoring report, the ACCC claimed Melbourne Airport 'appears to have reduced the ability of off-airport parking and private bus operators to compete with on-airport parking by imposing excessive levies' (sub. 3, p. 57). This claim is based on the fact that Melbourne Airport's revenue from off-airport parking and private bus services is substantially higher than that of Sydney and Brisbane. However, the level of demand from off-airport parking at these airports is not as high as Melbourne, indicating that the number of buses entering the airport grounds and paying access fees would be lower. Analysis based on ground transport revenue yields (revenue/per passenger) would indicate that Melbourne Airport is earning similar revenue per passenger as Sydney and Brisbane — when all ground transport access fees (taxi, bus, rail and private limousine hire) are included (table 8.10).

Table 8.10 **Ground transport revenue yields — selected monitored airports, 2009-10**

	Brisbane	*Melbourne*	*Sydney*
Passenger (m)	19.3	26.3	34.9
Ground transport revenue ($m)	4.2	5.8	8.9
Ground transport revenue per passenger ($)	0.22	0.22	0.26

Source: Melbourne Airport, sub. 29.

The views of the ground transport providers vary somewhat (box 8.5) Some participants believe that there should be no access fees. Other participants recognise fees are necessary to recover the capital costs associated with the access facilities but believe fees above this level represent a misuse of market power. The level of consultation and negotiation also differs between parties.

As a first step, the price of ground transport access must reflect the cost of providing the service. However, costs are not the only issue determining price. Melbourne Airport noted that capital investment is but one element of price:

> This charging model is based on economic principles, reflecting locational rent, convenience for travellers (particularly those carrying large bags), size of vehicle and demand. The charges are used to cover costs, such as roads, lighting, security infrastructure and traffic management personnel. (sub. 70, p. 5)

Increasing demand and constrained supply also influence the amount paid by transport operators accessing the airport — through congestion and locational pricing.

Many airports have congested forecourt areas and prices reflect, in part, this congestion. Melbourne Airport drew attention to the extent of usage in this area:

> The availability of forecourt access to ground transport operators is limited by the finite amount of kerb space available directly in front of the airport terminals. With well in excess of 27,000 vehicles movements into and out of Melbourne Airport's forecourt each day, it is necessary to balance the needs of all user groups to ensure safe, equitable and efficient movement in that area (sub. 29, p. 94).

The scarcity of this area is also highlighted by the Bus Industry Confederation of Australia's call to exclude cars from the forecourt as one solution to reduce congestion:

> There is significant traffic conflict in the arrivals forecourt as coaches are fighting for parking space with public cars in arrivals forecourt, the airport must not allow private cars in the forecourt or more strictly police current arrangements. (sub. 45, p. 3)

As the central parking area in front of the terminal is in demand, the prices paid by transport operators (such as buses) will also encompass locational rents. While it did not disclose the fee, SkyBus (at Melbourne Airport) pays a premium access fee for kerbside bus stops. The prime location of these stops provides the company with a 'readily identifiable, strong branded and uncluttered' position at the terminal (sub. 31, p. 6). The Commission is aware that the 'space' immediately near the terminal at other airports have been auctioned to ground transport providers at a substantial premium to other locations.

Box 8.5 **Participants' views on access fees**

The Australian Taxi Industry Association (ATIA) 'appreciates' the facilities and services airports provide for the taxi industry but claimed that the supply of such facilities has 'rarely' occurred as a result of commercially negotiated outcomes. Furthermore, ATIA did not support the imposition of tolls but they believed that if tolls are necessary to fund the supply of facilities and services for taxis on airports, they should be 'commensurate with the cost of the facilities and services provided, plus a modest profit margin for the respective airport' (sub. 35, p. 2). In regard to the current level of fees, ATIA claimed that airports appear to regard taxi access fees as a convenient 'cash cow' (sub. 35, p. 2).

In contrast to these views, the NSW Taxi Council acknowledged the 'significant' upgrades to taxi facilities in recent years and the good working relationship with Sydney Airport:

> … [Sydney Airport] has liaised with the NSW Taxi Council in relation to making these and other improvements and other issues of concern to the taxi industry. (sub. 11, p. 3)

The NSW Taxi Council, however, would like greater transparency in the price-setting process but overall it concluded that Sydney Airport is not misusing its market power:

> … [it] does not have any evidence that SACL [Sydney Airport] has attempted to limit the quality of services or increase the cost of services provided by taxis at Sydney airport with the aim of influencing the competitive position of taxis compared to on-site car parking. (sub. 11, p. 4)

Andrew's Airport Parking (an off-airport provider) understood that there are costs of providing facilities for ground transport providers which should be paid for by the users:

> … AAP [Andrew's Airport Parking] have been paying access fees for our courtesy buses to use the General Transport Operators ('GTO') lane at Brisbane Airport and the public collection lane at Melbourne Airport. This is standard practice at most international airports around the world, and we are strongly aware of the need for major airports to charge such fees for the upkeep of their access roads and associated infrastructure. (sub. 62, p. 1)

A consortium of hire car companies — Barton Chauffeurs, Specialised Security Transport, and Omega Chauffeurs (sub. 17) — claimed that Melbourne Airport access fees to the designated parking facilities for hire cars are too high — representing 'monopolistic behaviour'. This group of hire companies would like to have the 'same level of access as was enjoyed prior to the airport privatisation'. They also claimed the airport is not willing negotiate:

> Despite our attempts to encourage APAM [Melbourne Airport] to discuss and consult with us … they continue to demonstrate a lack of desire to acknowledge us as stakeholders or engage with us on any meaningful level (sub. 17, p. 1).

Despite the likely presence of a premium above costs being paid by some operators, Sydney Airport claimed its access fees are not in excess of costs — instead the airport is actually making a loss:

> … the revenues generated from landside fees at Sydney Airport are far from excessive. Rather, they are considerably less than the costs the airport incurs. The quantum of under-recovery is not altogether surprising given that the substantial costs associated with providing landside access are recovered from only *some* of the beneficiaries of those facilities. In particular, although taxis, shuttle buses and private hire cars are required to pay for landside access, private vehicles dropping off and picking up passengers *are not.* (sub. 46, appendix E, p. 63)

Access conditions

Some participants raised concerns about their dealing with airports over their conditions of access or the airports' conduct — Barton Chauffers, Specialised Security Transport, Omega Chauffer Cars (sub. 17), Bus Industry Confederation of Australia (sub. 45), Hertz, Europecar, Thrifty, Avis and Budget (sub. 47), and Andrew's Airport Parking (subs. 62, 64).

It is not clear, however, if the issues brought to the Commission's attention are indicative of widespread problems across all airports or a number of isolated cases at a few airports (box 8.6). Furthermore, it appears that there may be grounds for some of the access conditions — such as security and congestion management — although these may not have been conveyed to all ground transport users in a clear manner. Furthermore, with some of the claims made in-confidence, it is difficult for the Commission to verify the situation.

DRAFT FINDING 8.4

Airports charge access fees for vehicles, ranging from nothing for drop-off and pick-up to differential fees for taxis, limousines and shuttle/mini buses, including direct competitors such as off-airport car park providers. At face value, the fees do not appear excessive, notwithstanding that they may be in excess of costs for reasons of reducing congestion in the limited forecourt areas and rationing of scarce resource to those ground transport providers willing to pay for premium access. However, information about terms and conditions of access is less transparent.

The question of the appropriate economic regulatory settings for car park services and ground transport to airports is considered in chapter 11.

Box 8.6 Selected concerns raised by ground operators: conditions of access

Hire car agreements

Barton Chauffeurs, Specialised Security Transport, and Omega Chauffeurs claim the hire car and limousine operators are required to sign agreements that have onerous operating terms and conditions. They cited the requirement to produce evidence of a pre-booked client which may disclose the identity of their client. While the hire car companies acknowledge the intention is to eliminate touting, they felt that it is an unreasonable condition, given that many clients choose to use hire cars for privacy reasons:

> This clause is probably well intentioned and designed to eradicate touting by a very small percentage of the industry. However it does not acknowledge the status and privacy requirements of most hire vehicle customers, who by definition utilise our services in part to preserve their anonymity. (sub. 17, p. 7)

These companies complained that Melbourne Airport did not consult the industry prior to introducing the agreements, nor has there been any willingness to discuss the content of these agreements.

Bus operators

The Bus Industry Confederation (BIC) argued that Melbourne Airport has imposed more restrictive security arrangements than required by the Federal police by not allowing bus or coach drivers to leave their vehicle:

> From January 2010, the coach driver has not been not permitted to leave coach to collect their group from the arrivals terminal. This is not a directive from Federal Police and this over regulation has impacted on service provision for passengers arriving at the airport. (sub. 45, p. 2)

At Sydney airport, BIC also claimed that the time limits for bus/coach pick up are not long enough to allow for plane delays and locating passenger groups. The confederation suggested increasing the time a bus is parked in the forecourt area as well as improving the accuracy of the flight information displayed throughout the airport (sub. 45, p. 7).

Andrew's Airport Parking (AAP) stated that Brisbane Airport charges bus operators access fees for picking up passengers at the domestic terminal and again for the same vehicle when it travels to the international terminal:

> In Brisbane, however, the Domestic and International terminals are in separate discrete areas and, if AAP has collected a customer at the Domestic Terminal and then travels to the International Terminal for another pick-up, we are required to pay both the domestic and international access fees. Brisbane Airport is the only airport in Australia that has adopted such a 'double charging' arrangement. (sub. 62, p. 3)

9 Commercial negotiation

Key messages

- Commercial negotiation is rarely conducted among equals, but this is only policy-relevant where one entity's market power derives from an enduring market failure such as monopoly supply.
- Because price regulation ceased in 2002 and commercial agreements run for five or more years, there have been limited opportunities for the parties to iterate them.
- Features of commercial agreements, which are now the primary means for terms and conditions for airport services to be set, include:
  - price paths subject to variation in agreed circumstances
  - consultation on capital investment
  - agreed service levels
  - dispute resolution.
- Airlines consider that commercial negotiation is unnecessarily protracted — often taking years — and that airports' approach to negotiation embodies:
  - a 'take it or leave it' approach
  - the transfer of risk to airlines
  - refusal to provide relevant information and manipulation of building block model parameters.
- However, airlines' dissatisfaction is not indicative of systemic failure — some airports are characterised as reasonable, with others said to be belligerent.
- Neither airports nor their customers support supplanting negotiation with heavy-handed regulation.

Commercial negotiation is the ubiquitous interaction between entities in market economies. Negotiated contracts attempt to provide certainty about the relationships between suppliers and purchasers of goods and services. Commercial negotiation is rarely conducted among equals — in the automotive industry, for instance, small component manufacturers have been subject to unrelenting cost-down directives from vehicle assemblers in order to secure long-term contracts (PC 2002b). It is not surprising therefore that commercial negotiations can range from robust to gruelling, especially where the delivery of complex multi-faceted services is involved.

Commercial agreements, by definition, deliver mutually advantageous outcomes, although each party will try to extract the best outcome for itself at the expense of the other. The more bargaining power a party has, the more likely that it will achieve that aim. Such distributional battles become policy-relevant where an entity's market power derives from an enduring market failure and gives rise to efficiency losses to the detriment of the wider community (chapter 4).

9.1 The slow path from regulation to negotiation

From 1997 to 2002, aeronautical charges at the major privatised airports were determined primarily by the regulator, the Australian Competition and Consumer Commission (ACCC), rather than through commercial negotiations. The ACCC even overruled some agreements that were struck between airports and airlines on charges for new infrastructure.

A Productivity Commission review in 2002 identified that the prevailing regulatory control environment promoted strategic behaviour by all parties and discouraged commercial negotiation. It concluded that:

- a framework that encouraged negotiation on price and service quality could obviate the need for strong regulatory involvement
- to be successful, commercial agreements would need to 'be negotiated voluntarily, without automatic recourse to the regulator and without prescriptive requirements'. (PC 2002a, p. xxxiv)

The Commission recommended that price regulation be replaced by light-handed price monitoring, which should be reviewed in five years. It noted, however, that even though the parties are better placed than a regulator to work through the details of agreements, decades of government ownership of airports (and airlines) meant that a commercial negotiation culture needed to develop and mature. To this end, the Commission proposed some initial principles to help guide pricing (box 9.1).

2002−2006: commercial negotiation commences and develops

The Productivity Commission's 2006 review found that light-handed regulation had delivered significant benefits and price outcomes that did not appear excessive. It observed, however, that some non-price outcomes had been less satisfactory and relationships between certain airports and their customers were strained. It is instructive to report some of those airport users' perceptions at that time (box 9.2). This can be drawn on in the context of this inquiry to ascertain if airlines now consider that negotiation dynamics have worsened, remain unchanged or improved.

Box 9.1 **Aeronautical pricing principles**

Pricing principles relate to prices for aeronautical services and facilities (defined in Part 7 of the Airports Regulations 1997). The principles originated with PC (2002a) and include amendments introduced over time, including after PC (2006). The current principles are:

a) that prices should:

(i) be set so as to generate expected revenue for a service or services that is at least sufficient to meet the efficient costs[1] of providing the service or services; and

(ii) include a return on investment in tangible (non-current) aeronautical assets, commensurate with the regulatory and commercial risks involved and in accordance with these Pricing Principles;

b) that pricing regimes should provide incentives to reduce costs or otherwise improve productivity;

c) that prices (including service level specifications and any associated terms and conditions of access to aeronautical services) should:

(i) be established through commercial negotiations undertaken in good faith, with open and transparent information exchange between the airports and their customers and utilising processes for resolving disputes in a commercial manner (for example, independent commercial mediation/binding arbitration); and

(ii) reflect a reasonable sharing of risks and returns, as agreed between airports and their customers (including risks and returns relating to changes in passenger traffic or productivity improvements resulting in over or under recovery of agreed allowable aeronautical revenue);

d) that price structures should:

(i) allow multi-part pricing and price discrimination when it aids efficiency (including the efficient development of aeronautical services); and

(ii) notwithstanding the cross-ownership restrictions in the Airports Act 1996, not allow a vertically integrated service provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher;

e) that service-level outcomes for aeronautical services provided by the airport operators should be consistent with users' reasonable expectations;

f) that aeronautical asset revaluations by airports should not generally provide a basis for higher aeronautical prices, unless customers agree; and

g) that at airports with significant capacity constraints, peak period pricing is allowed where necessary to efficiently manage demand and promote efficient investment in and use of airport infrastructure, consistent with all of the above Principles.

Source: Costello (2007).

[1] For determining aeronautical prices through commercial negotiations, these should be long-run costs unless another basis is acceptable to the airports and their customers.

Box 9.2 **Airline views on commercial agreements in 2006**

Qantas said airport users had been required to enter into agreements with terms that:

- provided airports with a unilateral right to increase charges
- had minimal (if any) service levels and, where included, provided no penalty for the airport operator if it failed to meet the service level obligations
- had no binding dispute resolution procedures.

Virgin Blue's major concern was the per passenger basis for charging, which it regarded as disproportionately impacting on low cost airlines. It also considered:

- airports were over-recovering on aeronautical services
- guidance was required on issues such as asset valuation
- access to ACCC arbitration was needed to encourage commercial negotiation.

The Board of Airline Representatives of Australia (BARA) said light-handed regulation had resulted in a spectrum of outcomes from airports, ranging from reasonable to intransigent. It identified systemic flaws as:

- the incomplete scope of aeronautical services
- disagreement over the valuation of airport assets
- the lack of a formal response to ACCC monitoring reports.

Source: PC (2006).

Responding to concerns, the Commission proposed amended pricing principles to 'enhance', but not 'direct', negotiations — for example, principles (c)(i)−(ii) and (f) (box 9.1). Accepting the recommendations, the Government noted:

> A persistent failure to produce results consistent with these Principles could lead to more detailed scrutiny of an airport(s) … and potentially the imposition of more heavy-handed regulation. The Government also considers that these Pricing Principles should act as a guide for the conduct of all airports … (Costello 2007)

Adjustments to the pricing principles mirror the evolution of commercial negotiation in a non-price capped environment. Because commercial agreements typically are for five years or more, the opportunity for regular iterative refinements by the parties from one agreement to the next has been limited. To date, agreement making has been characterised more by 'step' changes than a series of gradual changes. For example, Westralia Airports Corporation observed:

> Commercial arrangements have progressed from the formal price regulation prior to 2002, through a relatively unsophisticated 'prices and services accord' dialogue commencing in 2002, to far more sophisticated processes from 2007, which are now culminating in comprehensive price and service agreements … (sub. 41, p. 37)

Similarly, Sydney Airport noted that, on privatisation it enforced conditions of use developed from (the former) Federal Airports Corporation by-laws. After

privatisation, it negotiated non-standard conditions of use with parties for the international terminal and agreements with domestic operators. In 2004, negotiations commenced on charges and terms for domestic and international use of the airfield and the international passenger terminal.

> By the end of calendar year 2007[2], agreements were in place with all international and domestic scheduled passenger airlines … These agreements established a negotiated base level and structure of aeronautical charges for a five year period, with provision for recovery of the cost of new investments over the period, specific discounts, and a range of aeronautical and non-aeronautical terms. (sub. 46, p. 26)

With airports and airlines only entering their second or third round of commercial agreements, the 'learning' to date might be expected to lead to greater maturity and sophistication in future negotiations (and reduce the time taken), unless of course, the framework is inherently dysfunctional.

DRAFT FINDING 9.1

Reflecting that commercial negotiation in a light-handed environment only commenced between 1997 and 2002 and that commercial agreements typically are for a duration of five years or more, the opportunity for the parties to progressively iterate to more comprehensive and refined agreements has been limited.

Commercial negotiation becomes more sophisticated

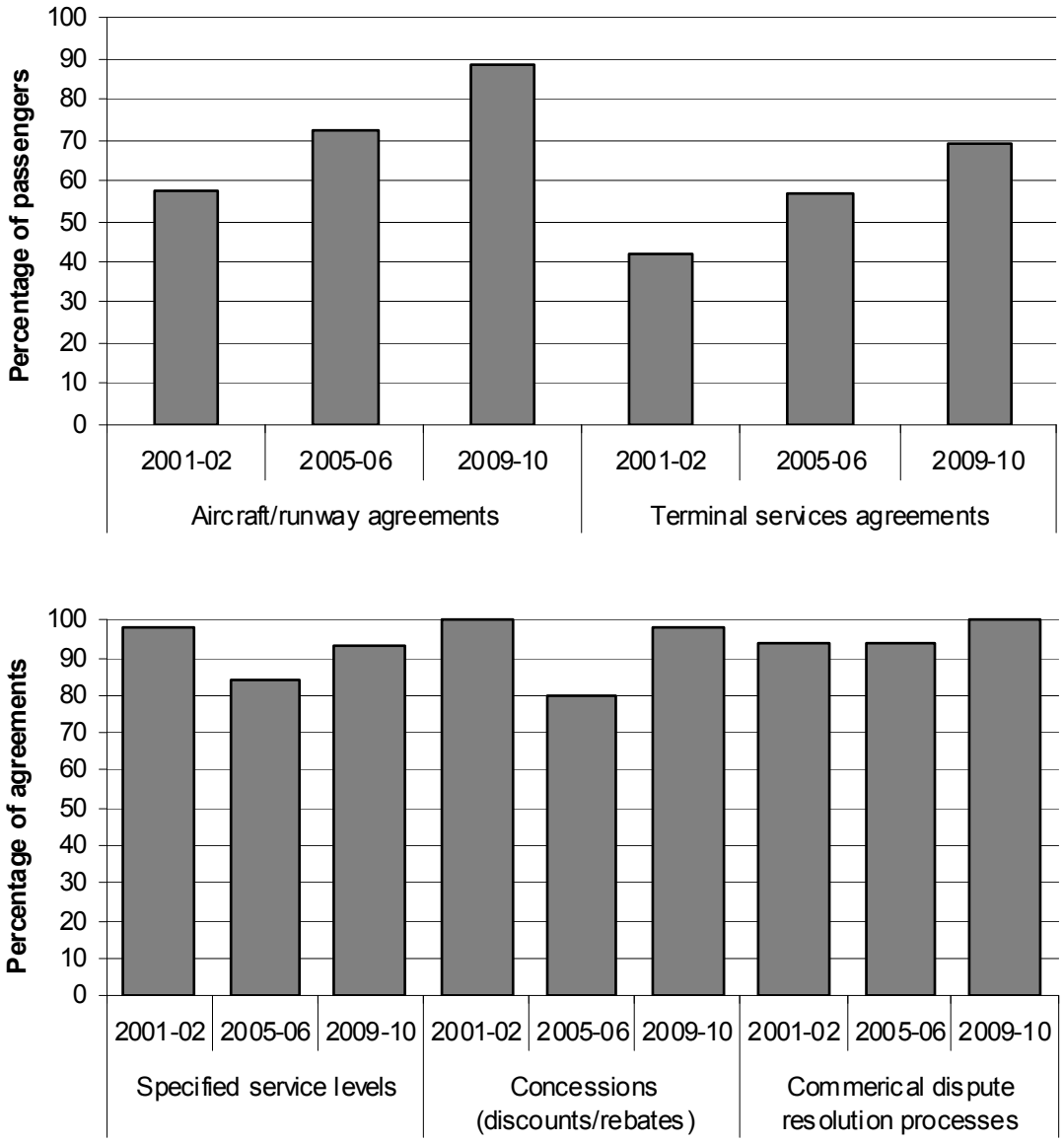
Coming to a definitive view on the state of negotiations between airports and their customers is problematic. Submissions are replete with claims, contradictions, counter claims and refutations — as was the case with the inquiries in 2002 and 2006. Allegations are often made in confidence and therefore difficult to verify.

It is clear that commercial agreements are now the primary means by which terms and conditions for airport services are set. Drawing on its constituent base, the Australian Airports Association (AAA) submitted that, at June 2010:

- 89 per cent of airports' passengers flew on airlines that had aircraft/runway related agreements
- 69 per cent of airports' passengers flew on airlines that had terminal services agreements
- 93 per cent of agreements specified service levels for at least one service, 98 per cent offered discounts, rebates or enticements and all specified commercial dispute resolution processes (figure 9.1).

2 Negotiations were delayed by Virgin's Part IIIA case and the Commission's review (PC 2006).

Figure 9.1 **Coverage and content of commercial agreements**[a]



[a] Data on coverage (excluding domestic terminal leases), service levels and dispute resolution relate to all Tier 1 airports and two (of four) Tier 2 airports. Data on agreements offering discounts relate to four Tier 1 airports and two Tier 2 airports.

Source: Australian Airports Association, sub. 18, pp. 14–15.

The increase in the coverage of agreements is marked, but there has been a small reduction in the proportion that specify service levels and offer discounts (figure 9.1). According to the AAA, this is because there are now many more agreements than in 2001-02, including with airlines that have little interest in

multi-faceted agreements. This explanation is plausible given the entry of low cost and international carriers with relatively low-scale operations. For these airlines, the transactions costs involved in negotiating specific term agreements may lead them to instead use an airport's generic 'conditions of use' and 'schedule of charges'.

On the substance of the agreements, the AAA claims that 'a consistently high percentage of agreements' involve service obligations, discounts and dispute resolution mechanisms. This view is echoed in airports' submissions (box 9.3).

However, some regional (for example, Newcastle) and smaller capital airports (for example, Hobart and Darwin) reported that low cost carriers (LCCs) have changed the way they do business. Newcastle Airport stated that, given the footloose nature of LCCs and their aggressive stance on airport charges, there is pressure to find other sources of revenue (such as car parks and retail) to make up for lower aeronautical revenues:

> … the market dominance of an airline, particularly on domestic routes, should not be underestimated. This can affect pricing and contract negotiations leading to a greater dependency on ancillary revenue for an airport to thrive and expand … (sub. 14, p. 2)

But for the larger airports, commercial agreements form the basis for their relationships with the majority of airlines. And, while there is no 'template' for commercial agreements, based on the information provided by airports it appears that some increasingly common elements are:

- longer duration — 5–7 years for aeronautical and up to 15 years for terminals
- price paths subject to variation in agreed circumstances
- prohibitions on unilateral introduction of new charges for some aeronautical services
- consultation processes on capital investment with exchange of information
- rebates for airlines where airports fail to meet agreed service levels
- airports to bear construction risk and traffic risk associated with new investment
- discounts for new services, including new destinations
- dispute resolution processes ranging from mediation to arbitration.

Some agreements provide seemingly novel features. For example, Adelaide Airport Limited reported that it:

> … offers a choice of charges based on passenger (pax) or tonnes, to give airlines added flexibility depending on their business model. Airlines are allowed to elect from year to year which method of charging will apply ... This facility enables airlines to elect whether they or AAL bear traffic risk. (sub. 12, p. 6)

Box 9.3 Airports' views on commercial agreements

Sydney Airport Corporation Limited: 'Sydney Airport has in place a number of separate commercial agreements with various international airlines in addition to the standard agreement taken up by other international airlines and has agreements with all scheduled domestic airlines. These agreements differ according to the needs of the airlines and the facilities and services used. The agreements … are for five years, although some are of 17 years duration. They all include dispute resolution clauses negotiated with the airlines.' (sub. 46, p. 10)

Melbourne Airport: ' … commercial agreement can be reached over the capacity, quality and price of aeronautical services and facilities. The agreements provide a commercial dispute resolution process, which as a fall-back, provides for binding arbitration for the life of the agreement.' (sub. 29, p. 64)

Brisbane Airport Corporation: 'Airlines … have supported the use of five-year pricing agreements which have given them certainty as to investment in capacity and to pricing … Risks have been shared between the parties and there has been regular consultation on progress of the investment program.' (sub. 40, pp. ii–iii)

Westralia Airports Corporation: 'During the second half of 2011, WAC expects to conclude comprehensive seven-year agreements with airlines on a wide range of price and non-price terms, covering at least 85% of passenger movements … WAC provided all airlines a comprehensive proposal, including:

- a comprehensive indicative 10 year capital expenditure plan …
- 10 year passenger forecasts with supporting explanation;
- detailed breakdown of all assumptions;
- the proposed pricing model; and
- a pro forma prices and service agreement.

… submissions to the airlines have included detailed capital plans and a pricing methodology based on the ACCC's building block methodology … the assumptions underpinning the price proposal … and projected operational expenditure.' (sub. 41, pp. 8, 38–9)

Adelaide Airport Limited: 'AAL has in place formal pricing agreements for aircraft services which have been negotiated with and agreed to by all of its major airline customers. The agreements are for a period of 5 years, the second such arrangement was negotiated in 2007 … Prices are negotiated based on a cost based price calculated using the ACCC approved building block model. Prices are only escalated during the period of the agreement by CPI adjustments each year. The pricing agreements are underpinned by AAL's Conditions of Use which include Performance Principles and Dispute Resolution clauses.' (sub. 12, p. 5)

Darwin International Airport: 'The current LTPA [long-term pricing agreement] has an 8 year term and an agreed investment profile of around $100M. The fact that each item of aeronautical investment is approved by airlines means that terminal and associated infrastructure quality of service is dictated by what airlines are willing to pay for'. (sub. 7, p. 3)

Canberra Airport: '… these agreements took time and effort by both parties to negotiate … They are all long term agreements for the use of services at Canberra Airport — indeed some are for up to 15 years.' (sub. 50, p. 8)

Hobart International Airport Pty Ltd: 'Hobart Airport has sought (successfully) to reach long-term growth partnerships with airlines that are beneficial to all parties, agreements which are reached through a process of commercial negotiation'. (sub. 56, p. 8)

Based on airlines' comments reported in box 9.2, the 'field' of disagreement and/or concerns has changed since 2006. For example:

- agreements now contain clauses to constrain unilateral increases in charges and most have service level obligations, involving rebates for service failure
- the scope for asset re-valuations to trigger unwarranted increases in charges has largely been resolved by the 'line in the sand' approach
- disputes about the per passenger basis for charges have diminished.

But despite these apparent improvements, in 2011, airlines continue to contend that negotiation with airports remains manifestly unsatisfactory (box 9.4).

DRAFT FINDING 9.2

Commercial agreements now incorporate features that airlines considered were absent or deficient in 2006. But despite these advances, airlines continue to claim that commercial negotiations with some airports are one-sided and dysfunctional.

9.2 Airport users' views on commercial negotiation

Participants raised concerns about their dealings with airports over prices and/or conditions — see International Air Transport Association (sub. 9), Overnight Airfreight Operators Association (sub. 13), Board of Airline Representatives of Australia (BARA, sub. 19, 59), Regional Aviation Association of Australia (RAAA, sub. 49, 61), Qantas (sub. 52), Virgin Blue (sub. 54), Qantas, Virgin Blue, RAAA and BARA (sub. 55), Regional Express (sub. 65) and Toll Group (sub. 48). Matters raised by airport users in relation to surface transport are canvassed in chapter 8.[3]

Views vary by airport

The dissatisfaction expressed by airlines is not necessarily indicative of widespread systemic failure of commercial negotiation.

[3] Surface transport access was raised by Aerial Capital Group (sub. 4), NSW Taxi Council (sub. 11), Barton Chauffers, Specialised Security Transport, Omega Chauffer Cars (sub. 17), SkyBus (sub. 31), Australian Taxi Industry Association (sub. 35), Bus Industry Confederation of Australia (sub. 45), Hertz, Europecar, Thrifty, Avis and Budget (sub. 47), and Andrew's Airport Parking (sub. 62, 64).

Box 9.4 **Airline views on commercial negotiation in 2011**

BARA was especially critical of Sydney:

> BARA believes that SACL [Sydney airport] has probably progressed to a point where only the imposition of stricter economic regulation is likely to be able to correct its long-term commercial conduct. (sub. 19. p. 3)
>
> For AAL, BAC, APAM and WAC [Adelaide, Brisbane, Melbourne and Perth airports] BARA is concerned that some may have chosen to forget the basis on which they are now obtaining very high rates of return and are becoming increasingly aggressive in their demands in seeking to maintain such levels. (sub. 19, p. 6)

The RAAA contended that commercial negotiation:

> … has been characterised by inappropriate use of airports' market power … massive price increases, lack of adequate consideration of operational needs including safety issues, the loss of security of tenure, amenity and the ability to negotiate. (sub. 49, p. 4)

Like the RAAA, Qantas raised concerns about regional and capital city airports:

> Whilst the Government's Aeronautical Pricing Principles were intended to serve as a guide for the pricing of aeronautical services at the non-monitored capital city and larger regional airports, many of these airports also exert significant market power and exhibit behaviours that are not consistent with those of service providers operating in a competitive environment. The current regulatory regime provides no disincentive at all for the major airports in charging demonstrably excessive rates for any core aviation facilities that sit outside the current light handed regime. (sub. 52, p. 2)

Virgin Blue considered that:

- airlines cannot effectively commercially negotiate with major Australian airports except in cases where the airports have a special commercial incentive to do so;
- airports have been able to increase airport aeronautical charges above efficient levels and increases in charges have significantly exceeded increases in costs; and
- at the same time, services at airports have not generally improved or, worse, have deteriorated. (sub. 54, p. 7)

Regional Express, which also focused on Sydney airport, stated that:

> … it is nonsensical to point to the existence of long term commercial contracts as being proof that there is no abuse of market power or efficiency impact downstream. Major carriers, not being able to simply stop using Sydney Airport, could be signing such contracts under duress or as the 'least worst option' with consequent efficiency impacts. (sub. 65, p. 4)

BARA's 'report card' summarises the commercial conduct of airports as:

> Adelaide: Approach to aeronautical pricing is principally formula driven.
>
> Brisbane: Continues to reap the largest windfall gains while continuing to revalue its assets and claim low returns.
>
> Melbourne: Has traditionally been the most reasonable, but commercial conduct has deteriorated in recent times with a marked reduction over the transparency of capital investment programs.

> Perth: Traditionally very poor, but has improved substantially recently.
>
> Sydney: Continues its poor conduct seemingly unconcerned with the existence of the prices monitoring regime …
>
> Cairns: Has sought to set prices based on unrealistic asset valuations, unrelated to current passenger throughput levels. (sub. 19, p. 21)

In a similar vein, the domestic airlines also tended to shy away from generalisations about airports as a whole. Virgin Blue, for example, stated:

- … *some airports* can be unwilling to share with Virgin Blue information regarding the basis for price increases which are often the subject of negotiations …
- airports will *on occasion* adopt an inflexible approach to negotiations. This includes the refusal … to agree to certain provisions … such as effective dispute resolution clauses. (sub. 54, p. 17, *emphasis added*)

The combined airlines industry submission noted that 'Since the introduction of light-handed monitoring there has been progress with certain airports towards a more appropriate commercial negotiating approach' (sub. 55, p. 1).

The RAAA likewise submitted that its members' 'experience of airports since privatisation has been largely negative, with the possible exception of a small number of regional airports' (sub. 49, p. 4).

Toll Group, a leading provider of integrated logistics services, complained of some airports adopting an intransigent attitude to access and pricing decisions. It noted, however, that where it has been in dispute over pricing and access:

> … the response by airports has varied considerably from a high standard of commercial conduct to a 'take it or leave it' attitude. For example, Brisbane and Adelaide airports have demonstrated on occasion a willingness to consider independent arbitration and negotiation. In other instances, we have been forced to accept an unreasonable outcome because the airport has refused to negotiate. (sub. 48, p. 8)

Regional Express singled out Sydney Airport for criticism and made a general observation that negotiation benefited large airlines:

> Some aeronautical service charges are subject to 'commercial arrangements' with individual operators which is Sydney Airport's preferred method of negotiating charges … This allows larger operators to negotiate a better deal than their smaller competitors. (sub. 65, p. 12)

Toll Group also reserved special criticism for Sydney airport. And BARA alleged that it 'has been involved in lengthy and generally pointless "negotiations" for many years … with SACL simply making demands for higher profits and prices' (sub. 59. p. 2). It stated that this problem stems from a failure 'to hold SACL accountable for its poor commercial conduct' (sub. 19, p. 3).

BARA concluded that successive governments' refusal to act on Sydney airport meant that light-handed regulation lacks credibility.[4]

DRAFT FINDING 9.3

Commercial agreements are the basis for the relationships between airports and most airlines. Problems with commercial negotiation are not symptomatic of system-wide failure, but appear to reflect different practices across airports. Sydney airport in particular attracts more criticism than other airports. This variation underscores that commercial negotiation can, but may not always, work well.

What are the main problems?

Airlines provided a litany of complaints about airports' attitudes to, and behaviour in, commercial negotiations. Essentially, there are some common criticisms of negotiation processes, which to the extent they are correct, could contravene the spirit of 'good faith' negotiation. Complaints included that airports:

- adopt a 'take it or leave it' approach and dictate rather than negotiate
- refuse to provide information that is necessary for airlines to understand the basis for increased charges
- unfairly transfer risk to airlines
- are not amenable to resolving disputes
- are prepared to spend years negotiating.

In addition to these high level concerns, airlines also considered that more revenue streams should be classified as aeronautical — so more revenue streams could be drawn on to reduce aeronautical charges. Airlines also considered that building block parameters — asset betas, market risk premiums and the weighted average cost of capital — should be subject to regulatory specification (chapter 11).

4 BARA's concerns about 'pointless' negotiations with Sydney need also to be considered in the context of that airport's counter claim. Sydney airport submitted that, after concluding commercial negotiations in 2007, BARA recommended that member airlines accept the agreement. According to Sydney airport, BARA's media release quoted its Executive Director as saying: 'Airports and airlines have to work together to take advantage of the opportunities for sustained growth that are emerging. I am very pleased that the upgrade to Sydney Airport is now underway. There has been extensive consultation between BARA and Sydney Airport on this project. The consultation process was valuable in producing an outcome that meets airlines' ongoing operational requirements. As well as providing upgraded passenger facilities the project will provide much needed operational improvements to the baggage handling system.'

Take it or leave it

Airports stated that they cannot embark on new investment without the approval of airlines. Airlines claimed the opposite — that, in any practical sense, negotiation with airports is a take it or leave it proposition. This notion of 'gun at the head' negotiation is often asserted as a fait accompli. The RAAA, for instance, stated that the major airports:

> … are all monopoly businesses with the power to impose 'take it or leave it' conditions in the certain knowledge that operators, particularly regional operators, must either 'take it' or severely damage their businesses (or worse). (sub. 49, p. 12)

While the presumption is that market power must inexorably lead to an abuse of process, actual outcomes are likely more nuanced. For instance, BARA stated that airports' initial offers usually seek maximum prices and subsequent negotiation often result in poor outcomes for airlines. The point is, however, that despite the 'outrageousness' of an ambit position, typically there is a negotiated outcome. Qantas provided an example whereby:

> Jetstar recently approached all Australian airports to install Self-Service equipment in Domestic terminals to facilitate the implementation of SMS technology … the Self-Service technology is in place in all Domestic ports Jetstar operates to in Australia. Negotiations with Sydney Airport around the installation of this Self-Service equipment in T2 have been extremely difficult … The airport has identified a number of trivial issues … exemplified by the citation of the potential fading of carpet at a different rate due to equipment blocking sunlight on the carpet.
>
> … Jetstar has now created a draft formal agreement … The airport has 'in good faith' agreed to allow Jetstar to install Self-Service technology at Terminal 2 in the short term while the airline continues to formalise an agreement with the airport. (sub. 52, pp. 20−1)

Few would dispute that a major hub airport will have a stronger bargaining position than an entity in a more competitive environment. Nevertheless, it is also unreasonable to treat airlines as powerless. Chapter 4 canvasses the constraints on airport market power including the complementarity of non-aeronautical revenues and airline countervailing power. In short, the presence of market power does not automatically mean an airport will exercise and misuse it.

Indeed, a notable juxtaposition of views relates to the non-capital airports. Smaller airports, particularly those that might be attractive to low cost carriers or that are tourism 'end destinations' complain of 'take it or leave it' negotiation stances — this time by airlines.

Moreover, several airports reported that where airlines do not agree to increased charges, it is not uncommon for airlines to refuse to pay. As airports are prohibited

by legislation from denying services (chapter 3), the non-payment of additional charges can go on for some time (box 9.5).

Furthermore, it also could be risky for an airport to undertake major investments without airlines' agreement. As Westralia Airports Corporation noted:

> While theoretically WAC could proceed to commit to major capital investment without having first reached agreements with airlines, or by seeking to unilaterally impose increased prices, in a practical sense WAC is most unlikely to be able to achieve funding support from equity or debt providers with the resulting risks of disputation, non-payment and regulatory intervention. (sub. 41, p. 59)

Box 9.5 **Airlines can and do refuse to pay**

Airlines do not always accept increased charges. Rex cited its refusal to pay at Sydney airport:

> … the lease agreement had expired and Rex was forced to simply refuse to pay the increase and risk eviction. After Rex's refusal to pay the initial 30% increase the lease was never renewed and Rex has not had tenure for its hangar site for some years as a result. Because of the lack of tenure, Rex has found it difficult to make certain investment decisions … (sub. 65, p. 8)

Rex adopted a similar tactic at Melbourne airport, which had worked with Virgin Australia to improve that airline's security screening processing in the common user facility. Rex considered that this would degrade the service offered to it and decided that it 'will be holding back 70% of the security screening fees as compensation for the degradation of service provided' (sub. 65, appendix 3).

Hobart International Airport submitted that negotiating on a 'take it or leave it' basis would:

> … result in airlines flexing their countervailing market power by reducing capacity and subsequent passenger traffic … due to the discretionary nature of passenger traffic at Hobart Airport, we cannot afford to negotiate in a non-commercial manner; with no market power the cost to our business … of not reaching a commercial outcome is far too high. (sub. 56, pp. 8-9)

Similarly, Adelaide Airport Limited reported that:

> One domestic airline did not engage in the price negotiations for 12 months which was after agreement had been reached with all other domestic airlines … the airline continued to access Adelaide Airport during that time and only paid the pre-increase charges until agreement was reached. No action was taken by AAL to recover the underpayment during the course of the year, nor was any attempt made to refuse access on the grounds of the substantial 'arrears' accumulating in AAL's books. (sub. 12, p. 4)

The AAA also highlighted that an airport might be considered culpable if it only provided services at a level for which airlines were prepared to pay:

> It is not unknown for an airport to want to upgrade its terminal services in the near future and yet face resistance from airlines who wish to see upgrades deferred to a future date because they are not prepared to contribute to the inherent cost in the short term. Clearly there would be legitimate grounds for concern if airports could enforce a 'take-it-or-leave-it' position and unilaterally impose upgrades and higher costs on airlines — which is simply not the case. Equally it should be a legitimate ground for concern if an airport is criticised for providing airport services at only the level for which airlines are prepared to pay. (sub. 18, p. 36)

Indeed, airports need to deal with the conflicting needs of airlines. For example:

- airport investments that increase capacity may be opposed by incumbent airlines that see no upside from providing greater access to competing airlines
- low cost and infrequent carriers may have little interest in contributing to improving passengers' experiences at common user facilities.

Melbourne Airport noted:

> There will be times where some airlines agree and some do not about issues involving the provisions and pricing of common use services and facilities. There will be times where an airport for its own legitimate business reasons pursues a course of action (within the bounds of the Principles) which will have differential impacts on its customers and possibly detrimental impacts on some. (sub. 29, p. 66)

These commercial conflicts are compounded by the fact that airports are volume businesses with long-term horizons (a reflection of the cost and life of assets) whereas airlines are focused on yield and shorter horizons. Given these characteristics, it would be remarkable if commercial negotiation was conducted smoothly.

Protracted negotiations and unwillingness to provide information

Virgin Blue talked of negotiations with airports on price and non-price matters that, in some cases, extended over 12 months or more (sub. 54). Similarly, Qantas submitted that:

> In many cases the period of negotiation nears the duration of the contract, and commonly takes many years. When negotiations extend for several years the outcome cannot be considered a truly commercial agreement. (sub. 52, p. 19)

BARA stated that it 'has found that negotiating the provision and pricing of international aeronautical services and facilities with SACL has been protracted with less than satisfactory outcomes' (sub. 19, p. 4).

While unduly protracted negotiations are undesirable, commercial negotiation is still maturing. As noted, there have been few rounds of negotiated contracts to date.

The matters under negotiation for multi-product entities, such as airports, are inherently complex (chapter 5). As MAp noted in relation to the regulated privatised airports at Heathrow and Gatwick:

> The CAA determinations for these airports now occupy more than two years out of every five, and contain extensive detail on many areas — despite the intention of the regulator to broker commercial negotiations evidenced in the requirement for 'constructive engagement' introduced in 2005. (sub. 22, p. 12)

Thus, complexity and protracted negotiation can be a feature of any regulatory regime, whether light-handed or involving price controls. It is important, however, that airports ensure that they provide sufficient, high quality and detailed information to airlines if negotiations are to be expedited. From an airport's perspective also, protracted negotiation can mean delayed investment.

Notwithstanding the problems with the former regulatory arrangements, parties in the industry have a general understanding of the building blocks approach to setting prices. Indeed, one airport contended that 'a necessary evil' of the former regulatory regime was that it established a well understood pricing methodology (particularly in the context of 'necessary new investment'). Similarly, Brisbane Airport Corporation noted:

> The significant improvements in airport/airline relationships that have developed and matured is in the large part, due to the stable pricing framework (aeronautical/non-aeronautical definition, valuation of assets, building block pricing model, pricing as investment occurs etc.) that has evolved as 'shadow regulation' through the earlier ACCC and Productivity Commission involvement. (sub. 40, p. ii)

BARA (sub. 19) and Virgin Blue (sub. 54) noted that agreements with most airports revolve around aeronautical charges derived using the building block formula. An important established parameter of the building block approach is that pricing is now based on established 'line in the sand' asset values plus capital investment.[5] This has reduced the scope for disagreements in a critical area of negotiation. As the Commission found from its discussions with airlines and privatised airports in New Zealand, Australia's 'rule of thumb' resolution of this matter stands in contrast to the New Zealand experience where asset revaluations are the prime area of contention (and the subject of legal challenges) in pricing consultations. Outside

[5] In its 2006 review, the Commission considered that the practice of airports raising charges on the basis of periodic asset revaluations should not be sanctioned. It recommended that a 'line in the sand' be drawn on revaluations. This inevitably involved an element of 'rough justice' but overall was a reasonable compromise between competing interests. The Commission noted that the 'line in the sand is not intended to prescribe a methodology or a set of asset values that must be used by airports and airlines … Rather, its purpose is simply to establish asset values to facilitate the monitoring of rates of return — and thereby help inform the Government on the reasonableness of charging outcomes … (PC 2006, p. 77).

that contentious issue, in New Zealand it seems that the parties agree on many matters. (See consultations in appendix A.)

At an airline roundtable conducted by the Commission (appendix A), Australian airlines expressed a general view that consultation and provision of information by airports sometimes involves them receiving a 'fat' book specifying various rationales for, and a building blocks approach to underpin, new investment proposals. Airlines suggested that often there was insufficient evidence that demand management and/or productivity-enhancing practices had been fully explored, which might otherwise have reduced the need for, or allowed deferral of, an investment.

Airlines contended that an imbalance of market power meant that they might have to pay for new investments that airports had introduced too early. Such claims:

- involve conjectures about the relative state of knowledge of participants to these transactions — for example, do airlines have the means to verify demand projections and other assumptions?
- presuppose that airports have the capacity and desire to raise capital for projects that might be unnecessary or that could be deferred.

Suffice to say, as was the case in the Commission's 2006 review, what does seem clear is that negotiations over non-price outcomes appear to be unsatisfactory in some circumstances and commercial relationships remain strained. Airlines, in particular, want more information on the extent to which existing assets are being used as efficiently as possible.

Fairness and asymmetric risk profiles

Airlines claimed that the pricing behaviour of airports during the global financial crisis (GFC) was a litmus test of the existence of market power (box 9.6). During the crisis, as demand fell, airlines had little choice but to cut airfares heavily tom maintain their load factors, but there was no corresponding price reduction by airports.

Box 9.6 **Asymmetric risk profiles and 'fairness'**

A source of irritation for the airlines was the manner in which they were forced to respond to the GFC relative to airports. Virgin Blue said:

> When demand for air travel drops, as it did during the GFC, airlines discount fares in order to stimulate demand and keep load factors steady. Airports do not alter their charges in response to demand shocks … as airfares drop, airport charges remain the same and become a higher proportion of airfares. In this way, the risk of sharp falls in demand is borne almost entirely by airlines. (sub. 54, p. 6)

Similarly, Qantas reported that:

> Recent experience during the Global Financial Crises demonstrated that airports and airlines have asymmetric risk profiles and that airports exercised significant market power in transferring risk to airlines during a particularly turbulent global economic period. Australian airports derived significant benefit when airlines discounted airfares, as passenger volumes increased driving an increase in airport yield. This demonstrates the market distortion whereby airports do not share downside risk and enjoy upside benefits given no mechanism exists for airlines to share these upside benefits. (sub. 52, p. 3)

And, the joint airline industry submission said the GFC experience provided:

> … evidence of the market distortion whereby airports do not share downside risk and enjoy upside benefits in their entirety, given no mechanism exists for airlines to share these upside benefits. A comparison of airline earnings to airport earnings during the GFC clearly illustrates this point. (sub. 55, p. 2)

Airports contested the airlines' claims. For instance:

- Sydney Airport said that:

  During the economic downturn in 2009 that resulted in falling passenger demand, a number of airlines approached Sydney Airport to renegotiate and amend the terms and conditions in those agreements. Despite the known commercial risks that eventuated and contracted terms in place, Sydney Airport positively responded by renegotiating several key contractual terms including the need for lower investment due to lower traffic volumes … Sydney Airport deferred a number of capital projects by extending the life of existing assets and/or deferring projects due to slower passenger demand. The net effect will be slower increase in airport charges in the years between 2009 and 2012 than previously advised. (sub. 46, p. 27–8)

- Adelaide Airport submitted that during the GFC 'the annual CPI increase agreed in the pricing agreement was foregone … in recognition of the adverse circumstances facing the industry at that time' (sub. 12, p. 5).

Exemplifying further the problem of claim and counter claim, in relation to Sydney airport's claim about deferring projects during the GFC, Qantas submitted that:

> In late 2008, Sydney Airport Corporation Limited approached airlines around proposed amendments to the capital works program. As a result of the GFC, and slower than expected passenger growth, the airport was seeking to align the delivery of capital

investments in an efficient manner that met with passenger demand requirements. One of the projects proposed for delay was investment in new aprons.

In February 2009, the Qantas Group advised the airport that it did not support the proposed deferral of the investment in new aprons. BARA also did not support the delay in the aprons … Regardless of the airlines objections to the delay … Sydney Airport deferred the investment. Now, almost two years later, and well after Australia has recovered from the effects of the GFC, the investment in aprons at Sydney airport still has not occurred to the level required. (sub. 52, p. 32)

The Commission considers that the behaviours cited in box 9.6 do not constitute 'significant market power in transferring risk to airlines'. Airlines had to protect their load factors and this helped insulate airports' revenues. The airlines' response would similarly have benefited fuel companies and catering services.

Nonetheless, the pricing principles (box 9.1) encourage sharing of risks and returns 'as agreed between airports and their customers'. This might include cases where passenger numbers exceed projections, leading to over-recovery of charges levied on airlines for a new investment. In these instances, some form of rebate might be negotiated. Where demand is less than projected in commercial agreements, airports generally carry that risk.

Airlines have, however, suggested that airports pass on all costs incurred, including project over runs, regardless of their efficiency or reasonableness. If such practices were permitted to occur, then airlines would bear the risk of changes to the scope or cost of investment. The corollary to this would be that airports would have little incentive to manage project risks. Ultimately, these are matters for negotiation, unless manifest misuse of market power is evident.

Beyond those directly affected, few participants commented on commercial negotiation and dispute resolution. The Department of Infrastructure and Transport concluded that:

While prices for aeronautical services have increased since privatisation, the Department notes that these have been negotiated with the airlines and reflect significant investment in aviation infrastructure … These agreements fix prices and services between airports and participating airlines for periods that typically range from three to five years and in some cases as long as 15 years.

… these commercial agreements have evolved to become increasingly sophisticated, for example often including clauses to deal with risk sharing and other matters of contention. This is a positive outcome, although … some airlines remain concerned about their ability to overcome the market power of the larger airports, and believe there is room for greater transparency about the underlying assumptions of the building block pricing models. (sub. 43, p. 10)

In response, BARA accused the department of making 'unsubstantiated claims over the quality of commercial negotiations with airport operators' (sub. 59, p. 1). The RAAA similarly challenged the conclusion that 'the current regulatory regime is working effectively' (sub. 61, p. 2).

Dispute resolution

Virtually all commercial agreements between airports and airline customers have dispute resolution processes (figure 9.1). Melbourne Airport reported that those contracts that are not subject to dispute resolution are those that:

- relate to decisions taken by the airport about operational or regulatory issues, or
- may affect the amount of capital shareholders are required to commit.

It is unlikely that any airline would now enter into an agreement unless it contained dispute resolution clauses. Typically, they involve disputes being escalated up the line, ultimately to CEOs. Some go further, with recourse to an arbitrator selected by disinterested person in a neutral jurisdiction. And, the courts always remain an option. The 'escalation' mechanisms have been used, but the Commission understands that arbitration mechanisms have not been invoked at any airport.

These dispute resolution mechanisms are confined to issues within existing contracts. As acknowledged by Melbourne Airport:

> … it is not the settling of disputes within agreements that is of policy concern. Rather, it is those situations where the differences between the parties are so intractable that no agreement can be reached or that airlines, whilst continuing to pay for services believe the conduct of the airport concerned is outside the Principles laid down by the Government. (sub. 29, p. 66)

The arguments for dispute resolution, including arbitration at the contract formation stage, are central to the ACCC's proposal for airports to be deemed declared under Part IIIA of the *Competition and Consumer Act 2010* (CCA). This is taken up in chapter 11 of this draft report.

9.3 Where to now?

There is a divergence in the perceptions between how airports and airport customers view commercial negotiation under the light-handed framework. The Department of Infrastructure and Transport has taken the view that 'disagreements on access to airport services and facilities are eventually resolved through commercial negotiations, despite sometimes difficult negotiations' (sub. 43, p. 10). And, indeed

there does appear to be some commonality of view about retaining negotiation. Almost all participants agree that commercial outcomes are preferable to the regulatory intervention model of the past. For example, Qantas submitted that 'to provide the best and most efficient service to consumers, Airports and airlines must negotiate commercial acceptable arrangements' (sub. 52, p. 7). Virgin, similarly noted that 'Commercial negotiation is the most efficient and flexible method of setting the terms and conditions for which airports supply, and airlines acquire, airport services' (sub. 54, p. 46).

The conundrum is that while airlines are emphatic that prices and terms should be set by commercial negotiation, their suggested reforms get very close to a return to heavy-handed regulation. Most notably, airlines support the application of ACCC arbitration as an adjunct to quasi-regulation, such as mandatory codes. This type of framework could detract from commercial negotiations. This is taken up in chapter 11.

DRAFT FINDING 9.4

The divergence in the observations and assertions made by airports, on the one hand, and their customers on the other, seems to reflect 'positioning' to either protect or change the distribution of profits between them. While not surprising, testing the veracity of opposing propositions is difficult. Ultimately, the claim and counter claim nature of the evidence means that it is not possible to make a definitive call that greater regulatory intrusion is warranted. Some negotiations are said to work well and others not. These differences might reflect personalities and experience as much as systemic parameters. There is considerable scope to improve commercial negotiation as it has not yet achieved the level of maturity envisaged with the lifting of price regulation nearly a decade ago.

10 Performance of Australian airports

Key points

- Benchmarking identifies a particular airport's relative performance. Benchmarking indicators can inform airport management about relative performance against similar overseas and Australian airports.
- Benchmarking results can also be used by regulators to foster 'yardstick competition' — although experiments with 'yardstick competition' for airports have not been successful.
- Airports should be benchmarked against a sample of Australian and overseas airports that share similar characteristics, so the performance of the regulatory regime, as well as the relative performance of the airports can be analysed.
- There are numerous impediments to effective benchmarking. These include differences across airports, data limitations and competing methodologies.
- Unless benchmarking is constructed and interpreted carefully, there is a risk that inaccurate policy inferences will be drawn from unreliable estimates.
- These caveats aside, benchmarking studies suggest that, relative to their overseas counterparts, Australian airports have achieved:
  - relatively low aeronautical and non-aeronautical revenue per passenger
  - relatively low total costs, operating costs and staff costs
  - relatively high profits
  - average to above average capital expenditure per passenger and return on capital employed.
- Taking all indicators into account, Australian airports appear to perform well relative to their overseas counterparts.
- Australian airports have demonstrated increasing productivity over the post-privatisation period from 2002 to 2007. In addition, where there have been changes in the efficiency of Australian airports, these changes have been positive.

Benchmarking an airport against comparable overseas and Australian airports is a useful way of appraising an airport's performance. Not only can it demonstrate the performance of Australian airports relative to a sample of their counterparts but it can also provide insight into the various factors that drive performance outcomes. Thus benchmarking can be a tool for improving both absolute and relative performance.

This chapter provides an overview of benchmarking in the airport sector, including its limitations. In addition, it discusses the scope to use benchmarking within a regulatory regime and the findings of a range of studies on the relative performance of Australian airports.

10.1 Benchmarking in the airport sector

For the purposes of this inquiry, benchmarking refers to examining airport performance relative to a similar airport, group of airports or index of airport performance. Many aspects of airport performance can be benchmarked. The most common are price, customer satisfaction, quality of service, unit cost and productivity or efficiency.

The use of benchmarking in the airport sector has increased throughout the world since the early 1990s (Graham 2005). The commercialisation of airport operations has led to a recognition that benchmarking can indicate not only how an airport has performed relative to its counterparts, but also what factors have affected performance and whether the airport has met its own internal performance targets. In this way, airports use benchmarking as a managerial tool to inform decisions and, ultimately, improve performance.

Collaborative benchmarking studies — which entail voluntary participation in a collective project — have also become common in the airport sector. Prominent examples include the Air Transport Research Society (ATRS) Airport Benchmarking Report (ATRS 2010) and the Airports Council International (ACI) Airport Service Quality survey (ACI 2010). The results of projects such as these may be used by airports for managerial and promotional purposes, but also, more broadly, as tools for industry-wide improvement.

Effective benchmarking in the airport sector is complicated by several issues. Primarily, across airports, 'apples-to-apples' comparisons are difficult to engineer and, in their absence, interpretations are challenging (Morrison 2008). In support of this argument, MAp Airports Limited (MAp) has indicated that benchmarking

across its *own* portfolio posed substantial challenges[1]. With respect to their own portfolio of airport investments, MAp states:

> There can be pitfalls with attempting to benchmark overall performance across different airports. For example, MAp, which has had a number of airports in its portfolio at various times, found it difficult to compare their overall performance. Inevitably broad indicators / measures mask the 'devil in the detail'. MAp found that there were often location-, geographic- or configuration-specific reasons, unrelated to airport efficiency per se, that could lead to wide variations in costs across its airports. Benchmarking was most useful in identifying specific activities for detailed investigation. This was compounded by the joint product problem. For example, an airport might provide sufficient check in desks and baggage infrastructure, but an airline might use the desks inefficiently and/or have poor baggage handling practices, and this will be reflected in an airport's measured performance indicator. (Martyn Booth pers. comm. 2011)

As well, comparisons across airports are complicated by differences in the quality of available data and the presence of competing methodologies. These complicating issues are discussed more completely in appendix C.

Choice of sample

Given a critical aspect of effective benchmarking involves 'apples-to-apples' comparisons, it is often the case that benchmarking studies are undertaken within a single jurisdiction or regulatory system. This may result from the difficulties in procuring overseas data, or from the fact that airports within a country share many characteristics and may be considered the most appropriate for comparison. Although this choice of sample does allow the performance of the airports to be analysed, it provides no information on how the regime in which the airports operate performs relative to other airports or regulatory regimes throughout the world.

This is the case with the benchmarking included in the ACCC's *Airport monitoring report* (ACCC 2011). From this report, it is possible to observe how Adelaide, Brisbane, Melbourne, Perth and Sydney airports have performed relative to each other across a range of metrics such as aeronautical revenue per passenger and overall quality of service. However, there is no notion of how these airports performed in an international context.

[1] MAp has or had significant airport investments at: Bristol; Birmingham; Sydney; Rome Fiumicino; Rome Ciampino; Brussels; and Copenhagen Airports. MAp has also had smaller investments in airports in Japan and Mexico, and has evaluated potential investments in many other airports in Europe, the United States of America, Asia and Australia (sub. 22).

The implication of this is that benchmarking Australia's price monitored airports against a sufficiently comprehensive sample of overseas airports with similar characteristics frames airport performance in an international context. From this, performance metrics can either be identified as specific to an individual airport or as characteristic of the system as a whole. That an airport is ranked first in a sample of five Australian airports does not preclude the possibility that it is actually underperforming by global standards. Similarly, even if an airport is ranked last in a sample of five Australian airports, when placed in a international context, it may be shown to have performed well.

Since the analysis of an airport may differ considerably depending on whether it is benchmarked in a national or international context, the policy implications may also differ. Since the ACCC's current method of benchmarking Australia's price monitored airports against each other provides no information on the international context, it can only be considered partially indicative of the performance of Australia's airports.

10.2 Benchmarking and regulation

The usefulness of benchmarking to a regulatory framework derives from its capacity to identify the relative performance of an airport. The fact that benchmarking may also describe what has driven changes in the performance of airports may be useful, but only when the drivers of change can be influenced by regulatory policy. Whether an airport has achieved internal performance targets has limited applicability to the regulatory context. As a result, the discussion of the potential role of benchmarking is limited to how an airport performs relative to its counterparts and also, to a lesser extent, how regulatory policy has influenced airport performance.

The potential role of benchmarking within a regulatory framework is the subject of a growing body of research. This research found has largely found that, as long as certain issues remain unresolved, the usefulness of benchmarking as part of any regulatory process may be limited (see Graham 2005; Liebert 2011 and Morrison 2008).

Nevertheless, benchmarking may be useful for regulatory purposes on two levels:

- as an indicator of comparative performance of airports within a particular regulatory regime
- as a mechanism for determining airport charges (box 10.1).

Box 10.1 **Benchmarking as an integrated regulatory instrument**

In principle, a regulator could use benchmarking to foster 'yardstick competition' — sometimes linked to incentives. For airports, this would involve setting prices based on average prices or cost levels identified through benchmarking.

The Commission has previously noted that this has been tried for some urban water utilities both in Australia and overseas. In this context, yardstick regulation can be a:

> … means to use competition to achieve more efficient outcomes in a regulated monopoly environment is through incentive regulation whereby the performance of similar businesses are compared and better performing businesses permitted to retain part of their cost reductions. (PC 2008, p. 110)

While the use of yardstick competition has become standard in several regulated industries, particularly in Britain, it has been sparingly applied to airports (Liebert 2011). The single prominent example of yardstick competition in the airport regulatory process — by the Dublin Airport Authority in 2001 — attracted considerable criticism and was ultimately abandoned (Reinhold et al. 2010).

Forsyth and Niemeier argued that benchmarking three aspects of domestic airport performance is necessary to properly evaluate the regulatory regime. They specifically recommended undertaking:

- Benchmarking of productivity (whether services are being produced at minimum cost);
- Benchmarking of prices and profits (and whether the airports are making use of market power by allowing costs to rise while protecting their profit margins); and
- Benchmarking of quality (sub. 6. p 9).

While the benchmarking of prices and quality demonstrates how an airport has performed relative to comparable airports or an industry standard, the benchmarking of efficiency may estimate both airport efficiency *and* the effects of the regulatory regime on airport efficiency. Forsyth and Niemeier elaborated:

> … [t]here are several ways in which benchmarking can be used to improve the regulatory environment for airports. Two distinct but related ways are:
>
> - As a way of assessing if the general approach to regulation (such as light handed regulation) is consistent with, and promoting efficiency; and
> - As a way of assessing how efficient specific airports are, and whether services could be provided at lower cost. (sub. 6, p. 8)

Although Forsyth and Niemeier did not state *how* benchmarking studies that focus on efficiency inform the regulatory process, there are several potential ways to achieve this. One application would involve using estimates of efficiency to determine whether specific airports had operated at levels that were not 'scale and mix' efficient, in order to profit from higher prices (O'Donnell 2008). Another would be to identify whether aspects of the regulatory environment were associated with increased inefficiency across the sector and whether, as a result, the efficiency of airports around Australia might be improved by changes in the regulatory regime.

The Department of Infrastructure and Transport argued for the benchmarking of Australian airports against comparable overseas airports. It states:

> An analysis of airport performance with comparable international benchmark airports would be a useful addition to the price monitoring analysis that the ACCC performs each year for our major airports. There are two main reasons for this:
>
> - the ACCC monitoring is limited in that there are only 5 monitored Australian airports and comparisons are necessarily limited as well; and
> - commentators have pointed out that while price monitoring may assess whether prices reasonably reflect costs, it does not assess whether airports are under investing. (sub. 43, p. 11)

While acknowledging the difficulties involved in effective benchmarking, the department concludes that comparing the outcomes of Australian airports against comparable overseas airports with regard to prices, costs, capital expenditures and other measures over a period of several years may offer valuable information to the ACCC and help to contextualise the performance of Australian airports. The Commission agrees that additional information that can help illuminate and contextualise the performance of the five Australian price and quality monitored airports within a sample of comparable overseas airports would be worthwhile, provided the current limitations to effective benchmarking can be addressed.

10.3 Performance of Australian airports

Several benchmarking studies (ATRS 2010, IATA 2011, Jacobs Consultancy 2010) have found that Australian airports, relative to airports in other countries, exhibit:

- from below average to above average airport charges
- relatively low aeronautical revenue per passenger
- relatively low costs per passenger
- relatively high profits

- average to above average capital expenditure per passenger and return on capital employed.

A separate study (Assaf 2011) suggests that the productivity of Australian airports has increased over the post-privatisation period from 2002 to 2007. In addition, where Australian airports have demonstrated changes in efficiency, these changes have been positive. However, given the many differences between them and the inherent shortcomings of benchmarking, careful interpretation of the findings of these studies is required.

Airport charges

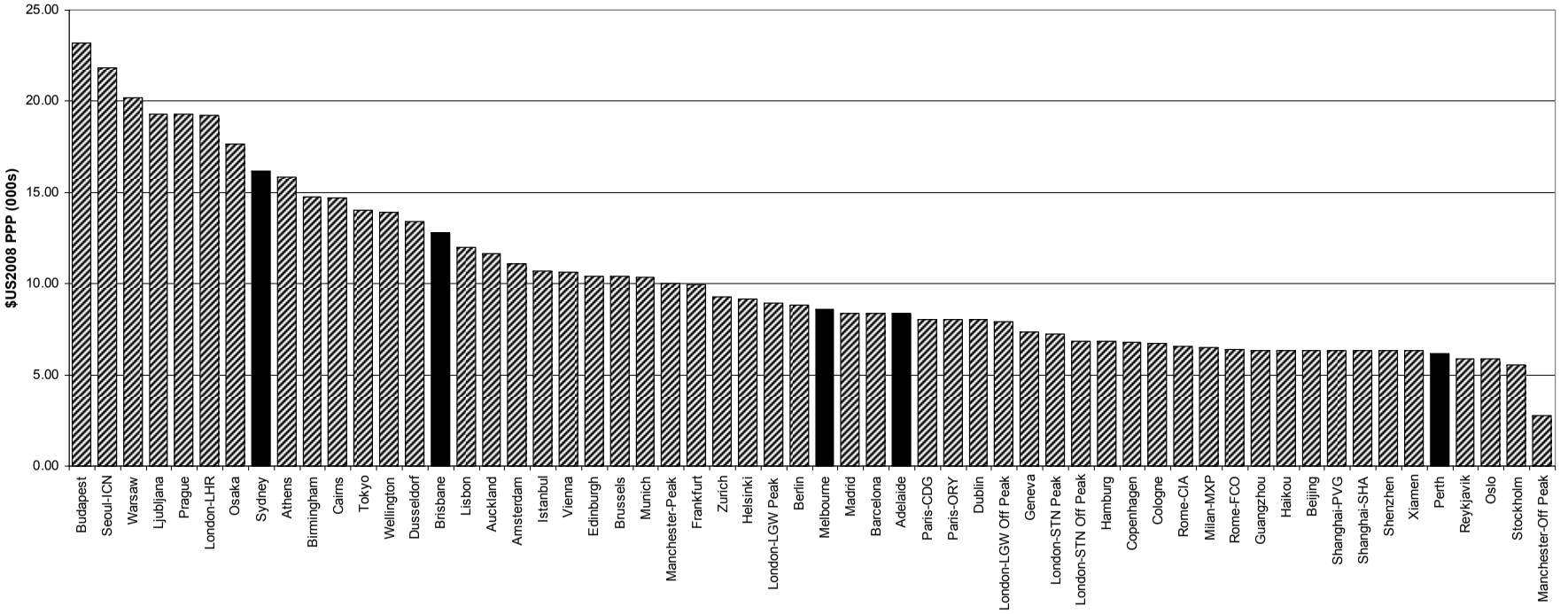
Australian airports' performance with regard to airport charges — comprising both landing and terminal charges — for three types of aircraft has been reasonable according to a recent study (ATRS 2010). When compared to a sample of 55 Asia Pacific and European airports, charges at Adelaide, Brisbane, Melbourne, Perth and Sydney airports range from well below to well above the average price (figures 10.1, 10.2 and 10.3).

For the Boeing 747-400, Sydney is the most expensive of the Australian airports, with estimated airport charges 57 per cent above the average of its Asia Pacific and European counterparts (figure 10.1). Brisbane airport is also relatively expensive, and exceeds the average by around 24 per cent. In contrast, airport charges at Melbourne and Adelaide airports are lower than the average of the sampled overseas airports by 16 and 19 per cent respectively. Perth airport is the least expensive in Australia for this aircraft type, with charges around 40 per cent below the overseas sample average.

The results are similar for the Boeing 767-400 (figure 10.2). Airport charges at Sydney airport are 61 per cent above the average of its overseas counterparts while Brisbane airport is approximately 27 per cent more expensive than the sample average. The other Australian airports are all below the sample average — Melbourne airport by 14 per cent, Adelaide airport by 20 per cent, and Perth airport by 39 per cent.

Figure 10.1 **Airport Charges (2009) for Boeing 747-400**

Select Australian and overseas airports

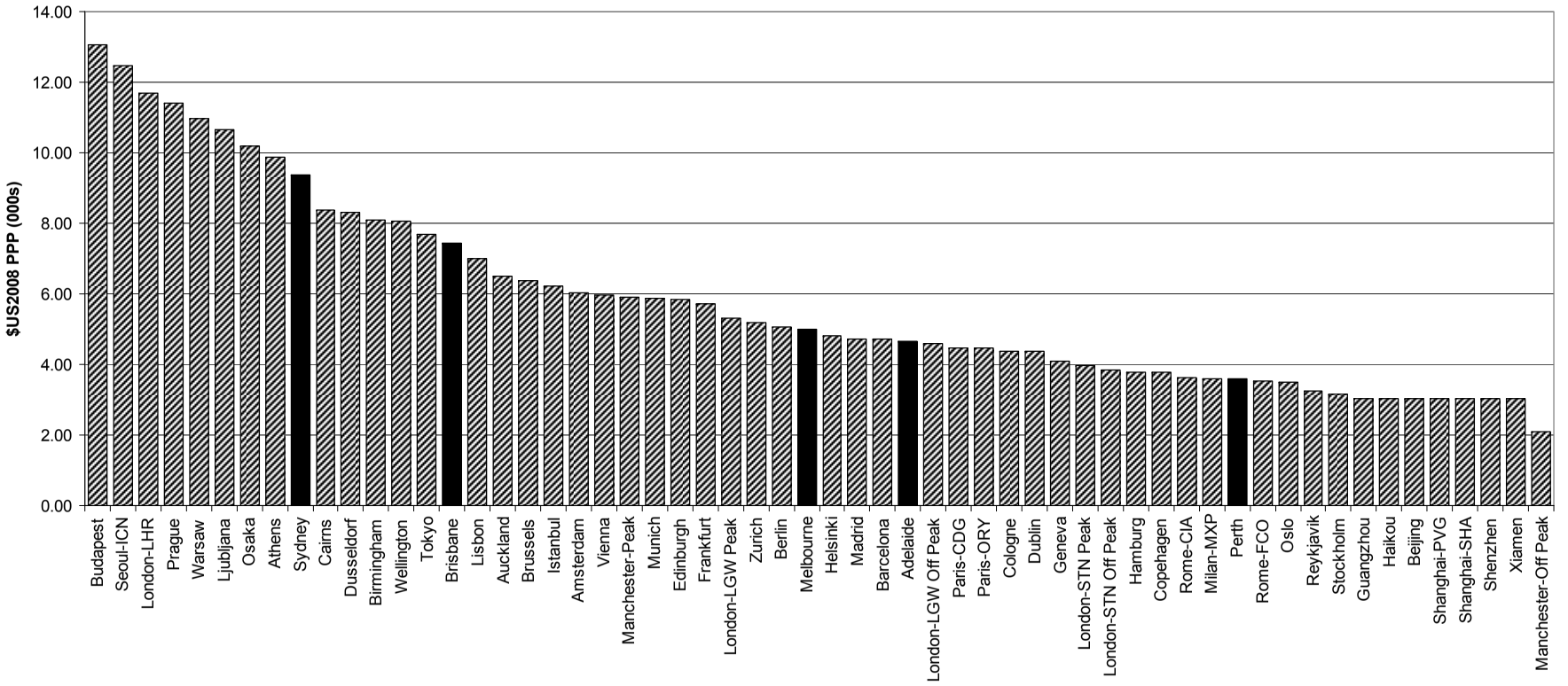


a Airport charges in $US 2008. Airport charges adjusted for purchasing power parity (PPP).

Data source: Air Transport Research Society (2010) from Australian Airports Association (sub. 18).

Figure 10.2 **Airport Charges (2009) for Boeing 767-400**

Select Australian and overseas airports[a]

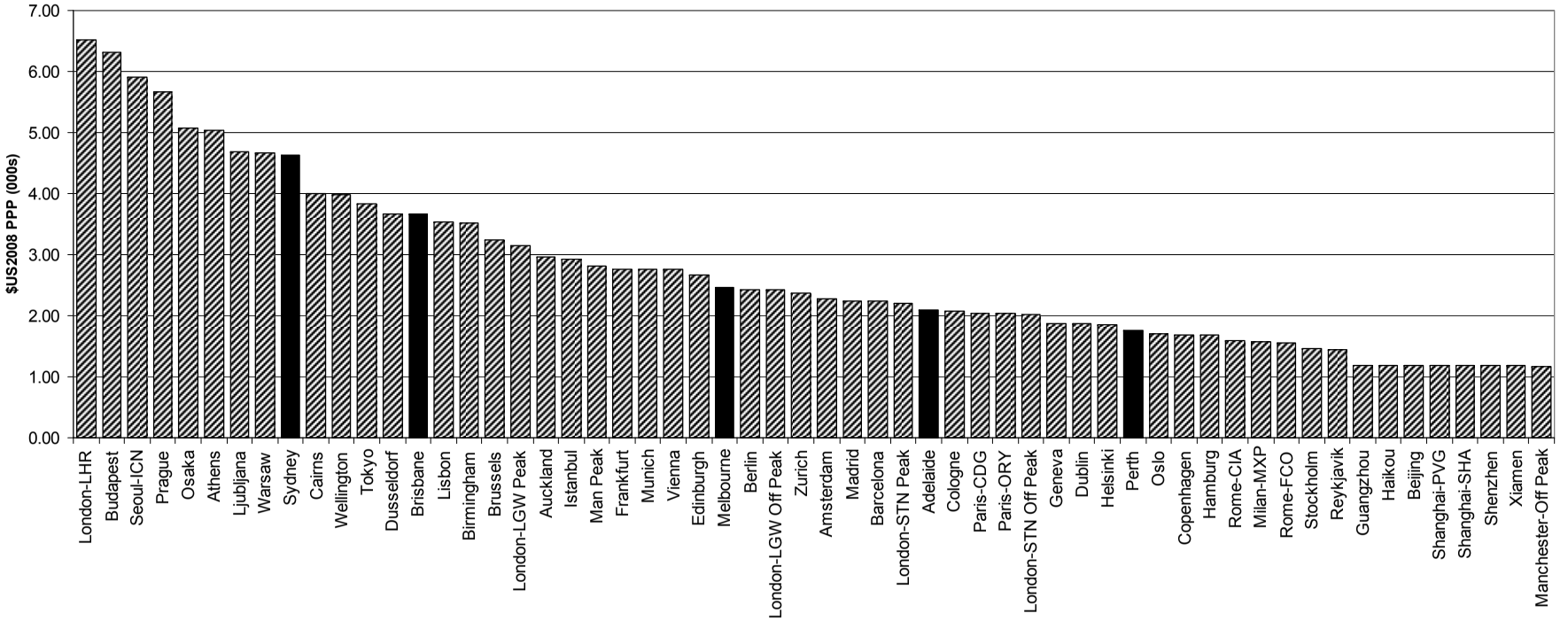


a Airport charges in $US 2008. Airport charges adjusted for purchasing power parity (PPP).

Data source: Air Transport Research Society (2010) from Australian Airports Association (sub. 18).

Figure 10.3 **Airport Charges (2009) for Airbus 320-100**

Select Australian and overseas airports[a]



a Airport charges in $US 2008. Airport charges adjusted for purchasing power parity (PPP).

Data source: Air Transport Research Society (2010) from Australian Airports Association (sub. 18).

Similarly, for the Airbus 320-100, Sydney and Brisbane airports exceed the sample group average by 69 and 34 per cent respectively, while Melbourne airport (10 per cent) and Adelaide airport (24 per cent) are less expensive than the average of their overseas counterparts. Again, Perth airport is the least expensive — 36 per cent less expensive than the sample average.

In appraising the ATRS study, the Australian Airports Association noted that:

> … Australian airport charges are broadly aligned with the charges at other international airports. (sub. 18, p. 65)

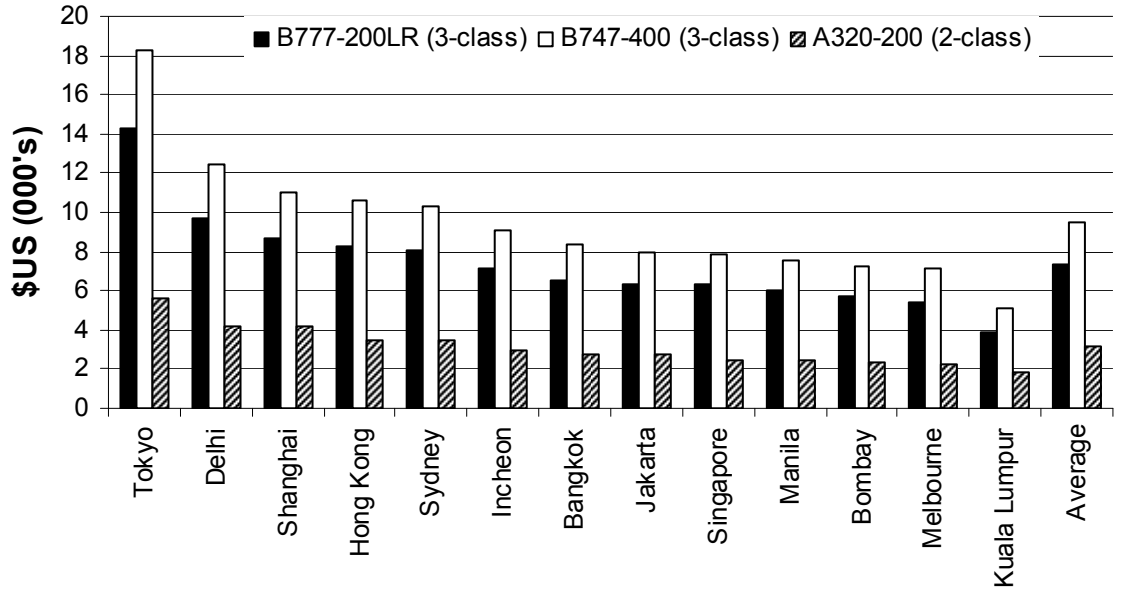
The Department of Infrastructure and Transport concurred:

> … Australian airports are providing at least a satisfactory to good service in international terms and at reasonable levels of charging. (sub. 43, p. 14)

Sydney and Melbourne airports perform reasonably when they are benchmarked against other airports of comparable size (IATA 2011). When their airport charges per turnaround for three types of aircraft were compared to 11 other airports which handle between 23.5 million and 43.5 million passengers per year, Sydney had the third highest while Melbourne had the fifth lowest (figure 10.4).

Figure 10.4 **Airport charges per turnaround (2010)**

For airports with between 23.5 and 43.5 million passengers per year[a]



a Average is for all 13 airports.

Data source: Airport, Air Traffic Control and Fuel Charges Monitor (2010) from International Air Transport Association (IATA) (sub. 9).

According to this study, charges at Sydney airport are between 9 and 11 per cent higher than the average of its overseas counterparts across the three sampled aircraft. Charges at Melbourne, on the other hand, are between 24 and 30 per cent below the average of the same sample.

Although, against a sample of 13 comparably sized airports, airport charges at Sydney are estimated to be above average, the Australian Airports Association argues that 'there is certainly no indication that any Australian airport represents an 'outlier' in terms of the level of charges that it is setting' (sub. 18, p. 65).

The Commission considers that Australian airports, as a group, are not setting airport charges at the extreme of the spectrum when compared to the samples of overseas airports in the ATRS and IATA studies. It should be noted that the charges presented in the IATA study are aggregate charges per aircraft turnaround. Disaggregating these figures into per passenger terms will offer an estimate of the revenue an airport receives from facilitating the movement of a traveller.

Aeronautical revenue per passenger

Aeronautical revenue per passenger is often considered a proxy for the level of aeronautical charges (ACCC 2010a). It is the per passenger amount the airport earns through the supply of air services to airlines. Analysis in the submission of the Australian Airports Association demonstrated the performance of Australian airports in terms of aeronautical revenue per passenger against a sample of 97 airports from the Asia Pacific, Europe and North America (sub. 18). This analysis demonstrated that, in 2008, Brisbane, Melbourne, Perth and Sydney airports earned lower aeronautical revenues per passenger well within the range described by their international counterparts (table 10.5).

In 2008, all of Australia's price monitored airports earned less aeronautical revenue per passenger than the average of their overseas counterparts. Brisbane airport earned the least revenue among the Australian airports at just over US $4.00 for each passenger movement. This was 53 per cent lower than the sample average. Sydney, Perth and Melbourne airports earned 25, 38 and 44 per cent less than the overseas average respectively. Adelaide airport earned just over US $7.50 of revenue per passenger, representing over 12 per cent less than the sample average.

In the case of figures 10.1, 10.2, 10.3 and 10.5, the Australian Airports Association has made a purchasing power parity (PPP) adjustment (box 10.2) in order to account for the fact that the real purchasing power of different currencies may vary at a certain point in time, depending on macroeconomic conditions.

While the Commission accepts that purchasing power parity adjustments are necessary, it has investigated the effect of these adjustments on aeronautical revenue per passenger. Aeronautical revenue per passenger is often used as a proxy for the level of aeronautical charges (ACCC 2010a). When compared with figure 10.5, unadjusted aeronautical revenues per passenger (figure 10.6) for Australian airports as a group are higher, and further from the low end of the distribution. In effect, they shift towards the left. However, they still remain within the range defined by their overseas counterparts.

Box 10.2 **Purchasing power parity (PPP)**

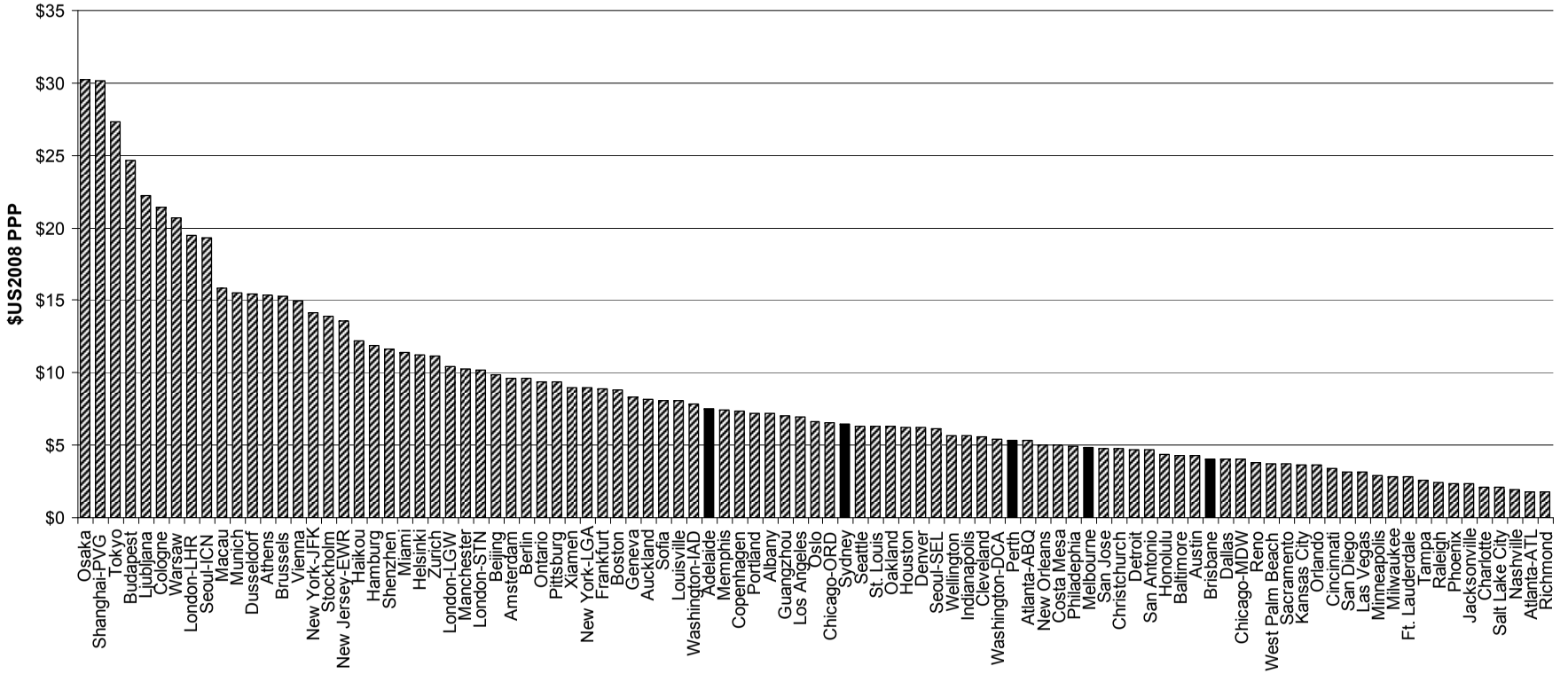
The purchasing power parity (PPP) concept states that, in the absence of transaction costs and barriers to trade, identical goods or services will have the same price in different markets when converted to a common currency. In markets for air services, where PPP holds, then it follows that similar air services should trade at similar prices at airports throughout the world.

In practice, this does not occur. In a general sense, PPP may fail to hold when the general price level in a country relative to another country shifts and the exchange rate is not able to adjust to compensate.

If PPP does not hold, then similar goods or services may trade at different prices in different markets. In the context of air services, as a result of the macroeconomic forces that affect price levels and exchange rates (such as global demand for commodities), and independent of the pricing policy of an airport, the same amount of money (once converted into a common currency) may not purchase the same quantity of air services across a sample of countries. A PPP adjustment corrects for this.

Figure 10.5 **Aeronautical revenue per passenger, 2008 — PPP adjusted**

Select Australian and overseas airports[a]

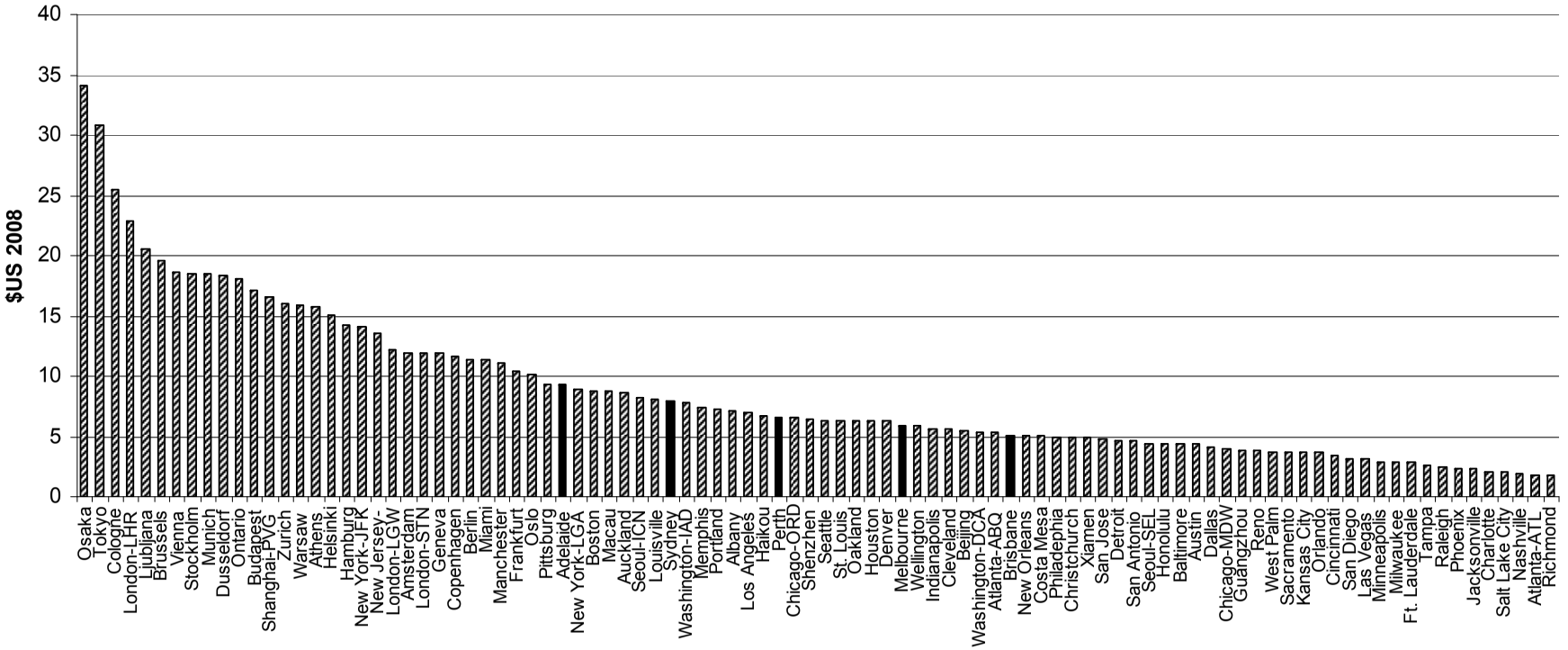


a Airport charges in $US 2008. Airport charges adjusted for purchasing power parity (PPP).

Data source: Air Transport Research Society (2010) from Australian Airports Association (sub. 18).

Figure 10.6 **Aeronautical revenue per passenger, 2008 — unadjusted**

Select Australian and overseas airports[a]



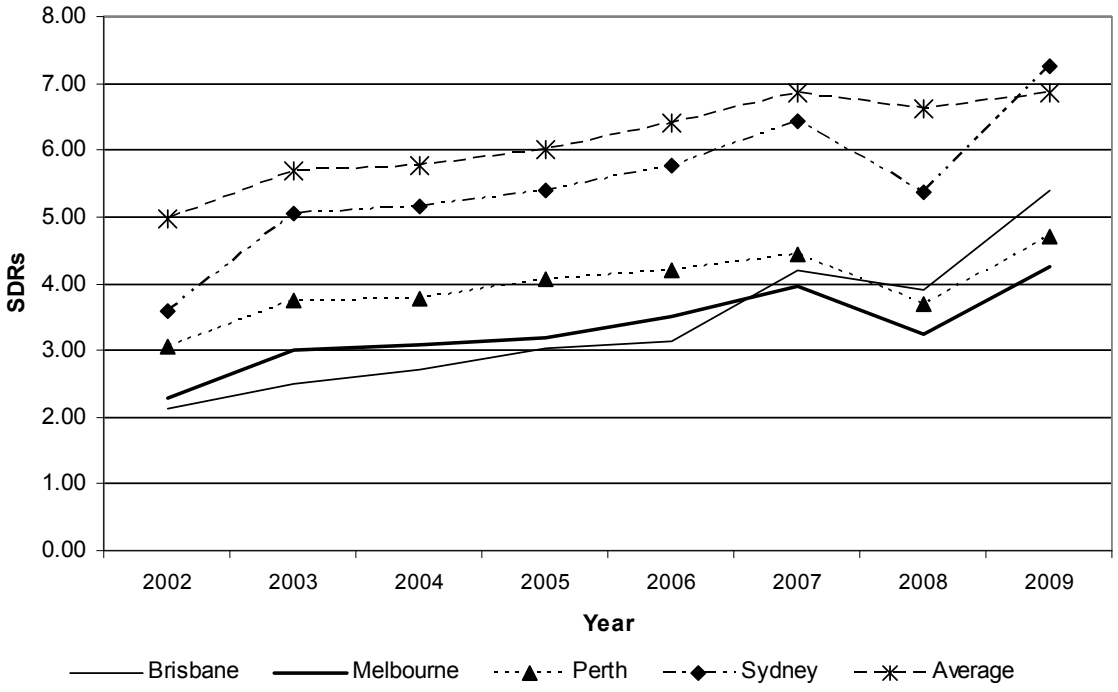
[a] Airport charges in $US 2008. Airport charges adjusted for purchasing power parity (PPP).

Data source: Air Transport Research Society (2010) from Australian Airports Association (sub. 18).

A study included in the Melbourne Airport submission (sub. 29) analyses changes in the aeronautical revenues per passenger of Adelaide, Melbourne, Perth and Sydney airports relative to the average of a sample of 12 overseas airports of comparable size. Between 2002 and 2009, and with the exception of Sydney in 2009, the four Australian airports earned less aeronautical revenue per passenger than the average of their counterparts (figure 10.7).

Between 2002 and 2006, Brisbane airport earned the least aeronautical revenue of the Australian airports. In most years, this represented approximately 50 per cent less than the sample average in each of those years. From 2007 to 2009, Melbourne airport earned the least aeronautical revenue of the Australian airports at around 40 per cent less than the sample average. In every year, Sydney airport earned the most aeronautical revenue of Australia's airports. In 2002, Sydney earned 28 per cent less than the sample average. In 2009, Sydney's earnings exceeded the sample average by six per cent.

Figure 10.7 **Aeronautical revenue per passenger, 2002 to 2009**
Select Australian and overseas airports[abc]



[a] Average includes 12 overseas airports. [b] Statutory Drawing Rights (SDRs) represent a common currency unit based on the trade weighted values of a group of major currencies. [c] Data for some airports is reported on a financial year basis, while for other airports data has been reported on a calendar year basis. No adjustment has been made for this.

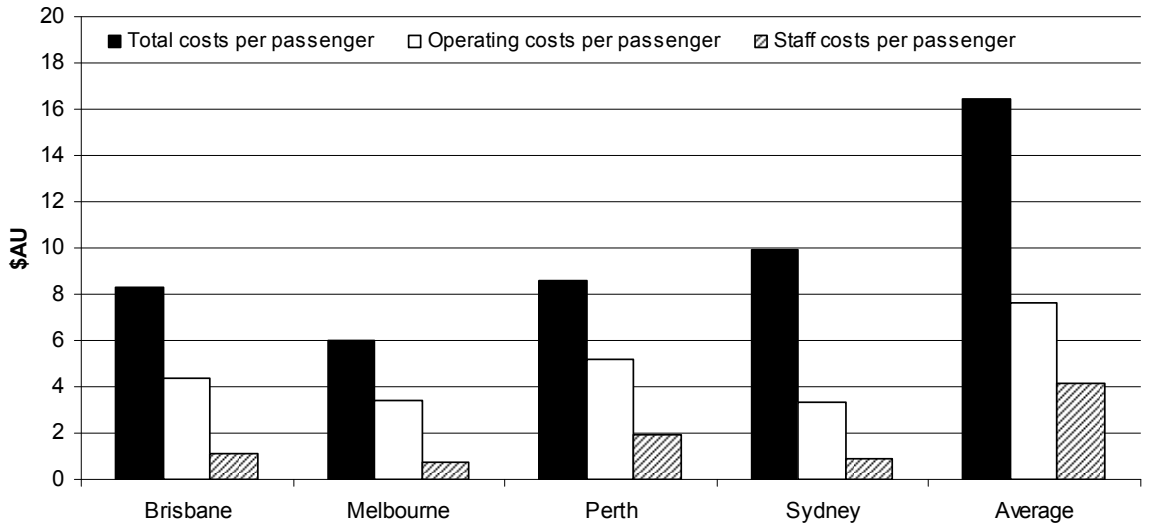
Data source: Leigh Fisher Performance and Charges Benchmarking Study (2011) from Melbourne Airport (sub. 29, attachment 1).

Costs

Airports, as with businesses in general, can improve their profitability by constraining costs. The Department of Infrastructure and Transport (sub. 43) indicated that Brisbane, Melbourne, Perth and Sydney airports all had costs per passenger that were substantially lower than the average cost of a sample of 34 airports from Asia Pacific, Europe and North America (figure 10.8). Adelaide airport is not included in the analysis.

Figure 10.8 **Costs per passenger, 2008-09**

Select Australian and overseas airports



a Average includes 34 airports. According to Jacobs Consultancy, data for some airports is reported on a financial year basis, while for other airports data has been reported on a calendar year basis. No adjustment has been made for this.

Data source: Jacobs Consulting Airport Performance Indicators (2010) from Department of Infrastructure and Transport (sub. 43).

Total costs per passenger

As a group, Australian airports had relatively low total costs per passenger. While the average for the overseas sample was over $16.40, total costs per passenger at Sydney airport — the highest of the Australian airports — was just under $10.00 in Australian dollar terms. Brisbane and Perth airports incurred total costs of around $8.30 and $8.60 per passenger respectively. Melbourne airport had the lowest total costs of the four Australian airports, and more than 60 per cent lower than the average of the overseas sample.

Operating costs per passenger

Operating costs are costs other than staff or financing costs incurred in the operation of the airport. As with total costs per passenger, the four Australian airports kept operating costs below the overseas sample average. Perth airport had the highest operating costs — at just under $5.20 — but this still compared favourably to the sample group's average. Operating costs at Brisbane airport were just under $4.40 while both Melbourne and Sydney airports achieved operating costs of less than $3.50 per passenger.

Staff costs per passenger

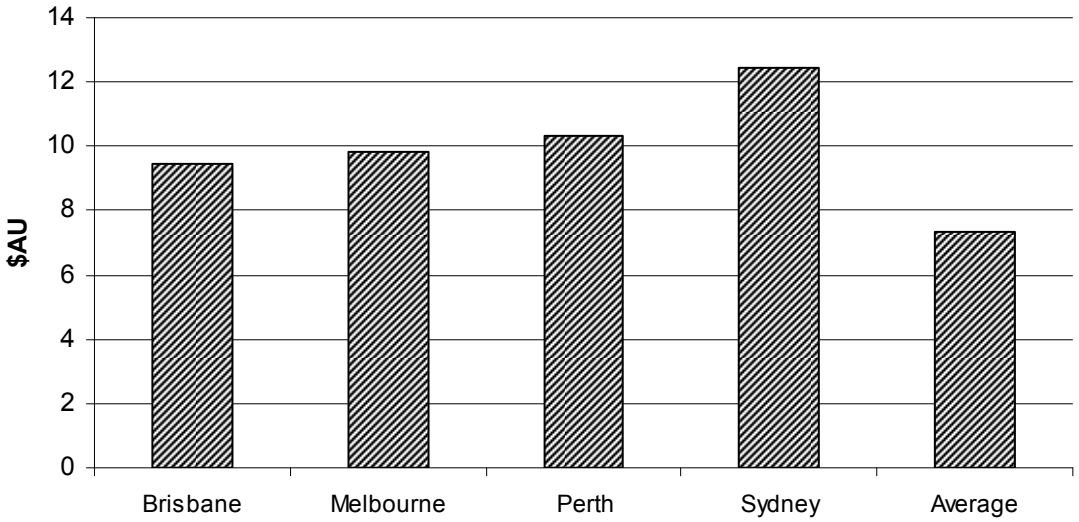
Staff costs are the labour costs incurred in the course of airport operations. Staff costs per passenger at Australian airports, as a group, were considerably lower than the sample average of $4.20 per passenger after conversion to Australian dollars. Staff costs at Perth airport — the highest of the four Australian airports — just exceeded $1.90. By comparison, Brisbane and Sydney airports incurred staff costs of just over $0.90 and $1.10 per passenger respectively, while Melbourne airport had staff costs per passenger of just over $0.75.

Profit

Analysis provided by the Department of Infrastructure and Transport (sub. 43) shows that in 2008, Brisbane, Melbourne, Perth and Sydney airports were all relatively profitable when compared with 34 overseas airports. Adelaide is not included in the analysis (figure 10.9).

Compared to the overseas sample group average profit per passenger of just under $7.40 in terms of Australian dollars, Brisbane and Melbourne airports earned around $9.50 and $9.80 per passenger respectively. Perth airport exceeded the sample group average by over 40 per cent while Sydney airport was the most profitable Australian airport over the period with a profit of over $12.40 per passenger — exceeding the sample group by almost 70 per cent.

Figure 10.9 **Operating profit per passenger, 2008-09**
Select Australian and overseas airports



a Average includes 34 overseas airports. According to Leigh Fisher, data for some airports is reported on a financial year basis, while for other airports data has been reported on a calendar year basis. No adjustment has been made for this.

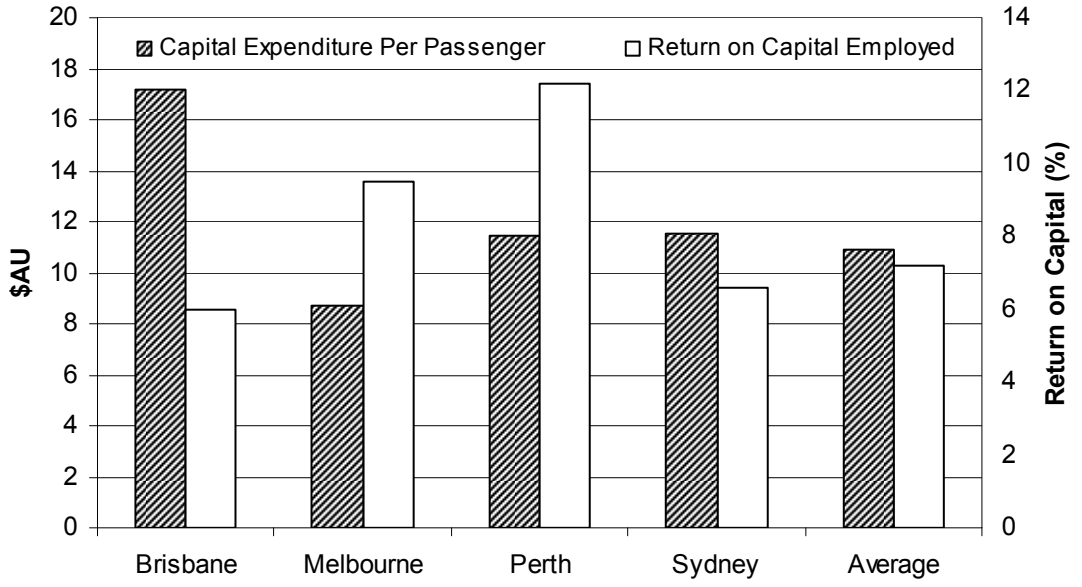
Data source: Jacobs Consulting Airport Performance Indicators (2010). from Department of Infrastructure and Transport (sub. 43).

Investment

Benchmarking studies generally examine two aspects of an airport's investment performance. The first is the level of investment (commonly measured by capital expenditure per passenger) while the second is the return on capital (measured by the return on capital employed). These two measures are not independent. Changes in the level of investment can affect the return to capital. As a result, investment outcomes are best analysed over a longer time period. This has not been possible in this instance. A complete discussion of investment in the airport sector is included in chapter 5.

Figure 10.10 **Investment outcomes, 2008-09**

Select Australian and overseas airports



a Average includes 50 overseas airports.

Data source: Jacobs Consulting Airport Performance Indicators (2010) from Department of Infrastructure and Transport (sub. 43).

Capital expenditure per passenger

The Department of Infrastructure and Transport (sub. 43) analysed the investment outcomes of Brisbane, Melbourne, Perth and Sydney airports against a sample of 50 overseas airports (figure 10.10). With regard to capital expenditure per passenger, Brisbane, Perth and Sydney airports compared favourably with an average of 50 of their overseas counterparts (Jacobs Consulting Airport Performance Indicators 2010).

Of the airports studied, Brisbane airport had the highest capital expenditure per passenger at over $17.00 per passenger. This level exceeded the overseas sample group by close to 60 per cent. In the same year, Perth and Sydney airports both invested approximately $11.50 per passenger on capital, about five per cent more than the overseas sample group. By contrast, Melbourne airport invested just under $8.70 per passenger on capital over the same period — about 20 per cent less than the sample average.

Return on capital employed

In terms of return on capital employed, the results for Australian airports varied. Perth and Melbourne airports outperformed the sample group average by a

considerable margin, while Brisbane and Sydney airports earned a return below that of the sample group (Jacobs Consulting Airport Performance Indicators 2010).

Of the four Australian airports, Perth airport earned the highest return on capital. Its return to capital exceeded the average of 50 overseas airports by just under 70 per cent. Melbourne airport also exceeded the sample group average — by just over 30 per cent — whereas Brisbane and Sydney airports earned 17 per cent and 8 per cent less than the average respectively.

Productivity and efficiency

A recent study by Assaf (2011) assesses the extent of productivity, efficiency, scale and technological changes at 13 Australian airports from 2002 to 2007. The study demonstrated that, with few exceptions, Australian airports exhibited increasing productivity over the post-privatisation period. Efficiency levels have also remained constant or increased and where technological change has occurred, it has been positive. This implies that the development of new products or new production techniques has enhanced the airports' ability to add value.

This broadly supports Melbourne Airport's argument that the profitability of Australian airports can be at least partially attributed to cost efficiency rather than excessive charging:

> … Australian airports are generally the most efficient in cost and staff productivity terms and derive the lowest levels of revenue from their airline users'. (sub. 29, p. 109)

Productivity and efficiency studies can identify the drivers of relative performance. In this way, these studies may highlight where productivity and efficiency improvements may be made. However, given that this study was undertaken with limited data describing the environment in which each of the airports operated, it has not been able to quantify the impact of the regulatory environment on airport productivity and efficiency. So, even though this study supports the argument that productivity at Australian airports has improved in the post-privatisation period, it provides no indication as to how regulatory policy can support future improvements (a complete summary of recent efficiency and productivity studies is provided in appendix C).

DRAFT FINDING 10.1

Compared to their overseas counterparts, Australian airports' aeronautical charges, revenues, costs, profits and investment outcomes remain within the performance range of their overseas counterparts. The analysis suggests that, despite earning below average revenues per passenger, Australian airports are able to profit from cost reductions.

There are many difficulties in effective benchmarking that arise from differences across airports, data limitations and competing methodologies. These issues are discussed in detail in appendix C. Even benchmarking studies that offer relatively straightforward measures may differ in method and subsequently offer different results. These differences mean that the results of benchmarking studies are limited to their context and require careful interpretation.

11 Options for future airport regulation

Key messages

- Airports and airport investors say that light-handed regulation works well, airlines and other airport users contend that airports abuse their market power, yet the key regulatory bodies have differing views.
- The light-handed regime includes safeguards that enable concerns about an airport's behaviour to be acted on, yet:
  - the Australian Competition and Consumer Commission (ACCC) has not called for, nor has the Minister instigated, a price investigation
  - for nearly a decade no airport user has applied to have airport services declared, nor has the Minister commenced such an application
  - notwithstanding criticism levelled at Sydney airport consequent to its domestic airside services being declared for five years to December 2010, only one user notified the ACCC of a dispute — which was resolved commercially — and no user sought to have the declaration extended.
- Airlines are concerned that the ACCC's suggestions that airports have abused their market power have not resulted in any action by Government.
- To ensure a 'determined' response to monitoring reports:
  - the ACCC should be able to direct an airport to show cause why its conduct should not be subject to a Part VIIA price inquiry
  - where the ACCC is dissatisfied with an airport's response, the Government should invoke such a price inquiry guided by the Pricing Principles
  - there is scope to improve the conduct of commercial negotiations through amending the 'Pricing Principles' or developing a new voluntary code of conduct.
- Price and quality of service monitoring, including for car parking, should continue.

The architecture of the economic regulation governing Australia's major airports will shape the efficiency, effectiveness and productivity of the aviation sector and, ultimately wider regional, state and national economies. This is the primary focus of this chapter. The Terms of Reference also invite analysis of airports' car parking businesses and this is discussed in section 11.7. Issues relating to planning of surface transport to airports are canvassed in chapter 12.

11.1 The anecdotal evidence is contradictory

As is evident from chapters 4−9, the Commission received contradictory views about almost every aspect of light-handed regulation (box 11.1). From this conflicting evidence base, the Commission has had to assess the effectiveness and efficiency of the regime, including the merits and the intended (and potentially unanticipated) effects of reform proposals.

Box 11.1 **The 2011 review — claim and counter-claim**

The airports contend that the arrangements are working well,

> … [s]tarting from a zero base at the time of privatisation, there is now a network of mature, flexible and mutually beneficial commercial arrangements that have been negotiated between Australia's major airports and their airline customers. (Australian Airports Association, sub. 18, p. 3)

whereas the airlines argue that outcomes are unreasonable.

> … the current regulatory framework does not strike the appropriate balance between providing incentives for airports to invest in airport infrastructure and ensuring that mechanisms are in place to prevent airports' unreasonable behaviour and excessive pricing of facilities and services. ('The Airline Industry' — Qantas Group, Virgin Blue, Regional Aviation Association of Australia, Board of Airline Representatives Australia. sub. 55, p. 1)

Airport investors consider the arrangements facilitate necessary investment …

> The industry has grown and performed strongly under the current regime as is demonstrated by the strong investment over the 2005–2010 period, with approximately $3 billion invested in infrastructure (e.g. new passenger terminals, runway extensions) at the airports in which Hastings' funds are invested. (Hastings Funds Management, sub. 33, p. 2)

as does the Government's Department of Infrastructure and Transport.

> … Australia's major airports have continued to invest in, improve and operate aeronautical infrastructure to meet steady growth in the aviation market. They have been able to finalise negotiations for commercial agreements with the airlines on airport charges notwithstanding the inevitable tensions from time to time. The airports have delivered relatively efficient pricing, high levels of productivity and operational efficiency in international terms … (sub. 43, p. 1)

But, the two regulatory authorities in this field have contradictory views.

- The ACCC proposes that aeronautical services be deemed declared to enable airports and airlines 'to carry on "business as usual", but with the threat of ACCC arbitration in the case of a dispute' (sub. 3, p. 3).
- The National Competition Council counters that the ACCC's proposal increases the risk of regulatory error, is problematic for implementation and '[t]o so impose regulation by legislative fiat … reduces confidence in the integrity of the National Access Regime' (sub. 21, p. 15).

Airports contend that the light-handed framework is working well. Indeed, Adelaide and Perth airports argue that, because monitoring reports have found no indication of misuse of market power on their part, they should be excused from monitoring. In contrast, the airlines consider that airports, including regional airports, adopt unreasonable 'take it or leave it' tactics, with Sydney airport nominated as especially culpable. Other airport users such as car rental firms, land transport operators and logistics companies also take issue with the way that airports approach negotiations on pricing and terms. While consumers and their advocacy groups appear generally ambivalent, airport car parking charges are an issue for many in the community.

Airports investors (such as QIC Limited, Hastings Funds Management and Industry Funds Management) say the regime provides the necessary foundation for airport infrastructure investments. The Department of Infrastructure and Transport considers light-handed monitoring to be a success, the ACCC contends that airports should be deemed as covered under Part IIIA and that monitoring should be terminated, whereas the NCC — the agency charged with making declaration recommendations — argues that the ACCC's case for deemed declaration is flawed.

Policy analysis in the presence of conflicting views

The Commission approaches this review from an economywide economic perspective through an 'efficiency lens' (chapter 4). In advanced economies, market failures are normally addressed in an ex post conduct context through general competition laws. Consequently, very few industries are subject to industry-specific regulation. Those industries are typically integrated network infrastructures such as electricity transmission, fixed telecommunications and gas pipelines — which are quite dissimilar to multi-product, stand alone entities like airports. Moreover, Commission consultations with infrastructure investors found that they generally regard airports as a riskier class of assets with greater exposure to shocks than say energy infrastructures, involving poles, wires and pipes.

In an airports context, a case must be made that:

- an airport is using its market power in a way that creates distortions that detract from community welfare (that is, the market failure is policy-relevant)
- a regulatory response is the most appropriate response
- it is feasible to devise a regulatory response that can address the market failure without imposing costs greater than those arising from leaving that market failure untreated.

All these conditions must be met because the trade-off between imperfect competition and imperfect regulation is heightened by the asymmetric nature of regulatory risk. In essence, while 'permissive' regulation can allow income transfers from customers to airports, too restrictive regulation can distort production, chill investment and deter risk taking and innovation — which would work against the long-run interests of Australian consumers. These are not just theoretical possibilities — as the Commission noted in 2002 in relation to Australia's price cap 'experiment':

> At best, a lack of clarity has promoted strategic behaviour by all parties, increased compliance costs and discouraged commercial negotiation. At worst, the arrangements, which combine elements of incentive and cost-based regulation, have discouraged efficient investment by sending poor price signals both to airport operators and users about the costs of providing aeronautical services and by requiring very detailed regulatory assessment of every investment proposal. (PC 2002a, p. xxxii)

Where an airport has the ability and incentive to misuse market power and chooses to do so, the concern is that airlines will pass on inflated aeronautical charges, resulting in reduced demand for air travel. As noted in chapter 4, this effect is unlikely to be significant because of the minor influence that such charges have on airfares, even after taking account of their relatively greater impact on 'no frills' airfares.

Nevertheless, at the margin, higher prices will have some effect on the demand for air travel or increase the cost faced by airlines' users, including business travellers and leisure passengers. But overall the evidence indicates that the concerns about aeronautical charges mainly reflect a distributional tussle between airports and airlines, rather than inefficient impacts on the demand for air travel by consumers. While distributional issues involving *people* are clearly important, it is less clear that battles by *corporations* over profits have any significant regressive impacts. Moreover, the Commission's focus is on outcomes for the Australian community as a whole. To this end, it outlined the principles for economically efficient airports in chapter 4 and it is against these principles that chapters 5−10 have assessed the performance of airports. This has been no easy task because the nature of the evidence received is not readily verifiable.

11.2 How is the light-handed regime performing?

The Commission has focused on whether outcomes under the regime, and the processes to achieve them are at least consistent with, or systematically diverge from, efficiency.

Against this background, several indicators suggest that the major airports sector is progressing well.

- There has been substantial growth in air travel over the last decade, aligned with large reductions in average airfares (chapter 2). Airports have responded without the bottleneck problems that have bedevilled other infrastructure sectors — there has been a large increase in aeronautical investment since the removal of price-caps in 2002, with new facilities and a projected $9 billion in the pipeline (chapter 5). While airlines raised concerns over the consultation, transparency, timing and efficiency of airport investment, there is little evidence to suggest systemic failure in the delivery of investment; rather the evidence points to the contrary (chapter 5).
- Examination of airports pricing and financial information data does not provide evidence of misuse of market power. Airport revenues do not reveal systematic and egregious pricing behaviour. The overall quality ratings for all airports over the last five years is 'satisfactory' to 'good'. From a distributional perspective it is notable that passenger ratings are more favourable than airline ratings. Although airlines are well-informed users of airport services they have an incentive to give low scores for strategic reasons (chapters 6 and 7).
- There are many transport options to access airports including private cars, taxis, rental cars, shuttles and, where available, mass transport such as rail and buses. Australians generally access airports by private car, opting mainly for free kerbside 'pick up and drop-off'. Beyond that, there are various choices for parking, all subject to a direct relationship between convenience and price. The evidence suggests that airports generally have tended to invest ahead of demand for on-airport car parks and that they charge reasonable access fees for transport providers, including competing off airport carpark operators. However, information about terms and conditions of access is less transparent (chapter 8).
- Commercial negotiation between airports and airlines is maturing slowly, albeit differentially across airports. Because genuine commercial negotiation commenced only after 1997–2002, this process has tended to involve discrete stages, each with a learning curve, from relatively rudimentary 'conditions of use' to increasingly sophisticated agreements. Today many agreements include features (for example, service level standards) that were, not very long ago, quite novel. While airlines consider that negotiation is unnecessarily protracted and have concerns about aspects of the approach adopted by some airports, there is little substantive corroborating evidence that there are systemic failures that would justify airlines' dissatisfaction (chapter 9).
- While there are difficulties in benchmarking airports — especially across the small sample of markedly heterogeneous Australian airports — international

benchmarking with a sufficiently large sample size can help determine whether Australian airports are atypical in any systematic way. The evidence suggests that across a wide range of measures (such as aeronautical and non-aeronautical revenue per passenger; operating costs, profits and capital expenditure per passenger; and return on capital employed), Australian airports are like many others operating overseas (chapter 10). These comparisons include overseas government-owned airports (appendix C) that lack a commercial focus and that may subsidise aeronautical charges for national 'tourism' reasons.

Little appetite for re-regulation, but there is scope for improvement

Notwithstanding the difficulties of sifting through claims and counter-claims, most participants accept that the current arrangements are an improvement on price caps. Unsurprisingly, the AAA said:

> … the major airport sector has matured significantly under the interim monitoring arrangements. There is now in place an extensive network of commercially negotiated agreements between airports and airlines — agreements that are becoming increasingly refined over time. This outcome is what one would expect to see in any industry characterised by well-informed sellers and equally knowledgeable buyers.[1] (sub. 18, p. 16)

And, while airlines' submissions highlight an imbalance of bargaining power that makes commercial negotiations with airports difficult, they see no basis for supplanting negotiation with heavy-handed regulation:

> The airline industry remains committed to a process of constructive engagement between airports and airport users in Australia. While we support improvements to the current regime, there is no interest in re-regulating airport services and pricing, by introducing a requirement for regulatory approval of all changes to pricing. Such re-regulation would only increase costs for all parties and lead to inefficient outcomes. ('The Airline Industry', sub. 55, p. 1)

In essence, airports and airlines want to negotiate rather than have prices and terms set externally. However, the analysis in this draft report highlights some problems with the present regime.

- There are concerns about the efficacy of monitoring as it is presently configured. The information collected does not appear to be used systematically to determine whether a monitored airport should be subject to further scrutiny.

[1] The AAA added that monitoring arrangements have been successful at recreating what Darryl Biggar (sub. 1, p. 3) describes as: 'the long-term contract that the parties would have agreed to if they could have negotiated costlessly prior to making any sunk investments'.

- Assessing the true state of commercial negotiation between airports and their customers is an exercise in sifting through conflicting accounts of the extent to which agreements have been negotiated in accordance with the Pricing Principles and the degree of genuine consultation and exchange of information.
- Governments have appeared reluctant to act in response to the ACCC's suggestions that some airports may be misusing their market power.

The question for the Commission is how the current regime can be improved.

11.3 What remedies exist now?

Before examining the merits or otherwise of changing the regulatory framework, it is instructive to recap the requirements that airports face currently.

- The Government continues to exert influence over the privatised airports through lease conditions. For instance, it can request an airport to provide plans within 60 days to bring the airport site up to the standard required under its investment obligations (see chapter 3, box 3.1).
- The *Airports Act 1996* (Cwlth) imposes ownership restrictions, site use obligations and requirements to submit master plans and major development plans. It enables the Government to establish movement restrictions/curfews and provides for monitored airports to forward regulatory accounts to the ACCC.
- Instruments under Part VIIA of the *Competition and Consumer Act 2010* (Cwlth) (CCA) empower the ACCC to control the price of regional air services at Sydney airport (not under reference) and monitor the prices, costs and profits related to the supply of aircraft- and passenger-related services and facilities and car parking services.
- Part VIIA of the CCA enables the ACCC to recommend to the relevant (competition) Minister that there be a price investigation of an airport. In fact, the Minister can require the ACCC or other body to conduct an inquiry without such a recommendation.
- Section 46 of Part IV of the CCA prohibits the misuse of market power where a corporation prevents competitors entering into the market. These provisions may be relevant for upstream or downstream services such as car parking services, where an airport operator might impede a competitor from entering the market.
- Section 155 of the CCA confers a mandatory information-gathering power, that enables the ACCC to require a person to provide information, documents and/or give evidence under oath or by way of affirmation if it has reason to believe that the CCA has been, or may be, contravened.

- In the event that an airport had an 'understanding' with a particular airline, or group of airlines, it may be subject to the cartel conduct regime in Part IV of the CCA or the prohibition on anticompetitive agreements in section 45 of the CCA.
- An airport user can initiate an application to the NCC that an airport be declared under Part IIIA of the CCA. If the criteria are satisfied, the Minister may declare access to the relevant services, thereby providing a right to negotiate the terms and conditions of access with resort to arbitration by the ACCC. Alternatively, the Minister can commence an application to the NCC to make a recommendation that a service be declared.

So many triggers, few shots fired

In relation to the powers to initiate a price inquiry at any time, Perth Airport said:

> … the availability of this response represents a credible prospect of intervention/sanction if an airport abused market power. The Minister is open to call an inquiry if and when considered necessary and the outcomes would be expected to inform the Minister on whether any further action was required. (sub. 41, p. 74)

The ACCC has not, however, recommended a Part VIIA inquiry and the relevant Minister has not instructed the ACCC, or any other body, to undertake one. The Board of Airline Representatives of Australia (BARA) considered that this lack of recourse to potential sanctions has sent a signal to airports that behaviour outside the Pricing Principles will be tolerated:

> … the current regime is being rendered largely ineffective because the findings of the ACCC and concerns raised by airlines are not being acted upon by the Australian Government. (sub. 19, p. 40)
>
> - SACL has now probably progressed to a point where only the imposition of stricter economic regulation is likely to be capable of improving its long term commercial conduct.
> - For other price monitored airports, making the probability of being 'caught and convicted' of poor commercial conduct high will likely remedy their behaviour without the need to impose stricter price controls. (sub. 19, p. 29)

There have been few Part IIIA access cases for airports. Some freight-related services were declared at Melbourne airport (12 months in 1997) and Sydney airport (5 years in 2000). Following an application from Virgin Blue, domestic airside services at Sydney airport were declared in 2005 for five years (chapter 3). The NCC reported that no airport user sought to have that declaration extended:

> The declaration of airside services at Sydney Airport expired on 8 December 2010. During the period of declaration one access dispute was raised with the ACCC, although this was resolved commercially and no arbitration was required. No inquiries

or applications were received by the Council in relation to declaration of the services for a further period. (sub. 21, p. 9)

While acknowledging that the Part IIIA route can be costly and time consuming, its lack of use, including during the declaration period, is nonetheless noteworthy, particularly given airlines' claims that negotiations themselves can take years (chapter 8). The Minister also has not seen fit to exercise powers to commence a declaration application.

DRAFT FINDING 11.1

Despite complaints from airport users and the public stance on airports taken by the Australian Competition and Consumer Commission (ACCC), existing safeguards have been very little used.

- *The ACCC has not called for, nor has the relevant Minister instigated, a price investigation of any airport.*
- *For nearly a decade no airport user has commenced an application to the National Competition Council to have airport services declared, nor has the relevant Minister commenced such an application.*
- *No user sought to have the declaration of domestic airside services at Sydney extended beyond the December 2010 expiry date.*

Fundamental to the effectiveness of the light-handed approach is the threat of sanction for airports that abuse their market power. The availability of potential remedies through the CCA suggests that a credible threat *should* exist through present avenues. However, rather than respond with direct instruments such as a Part VIIA price inquiry, Governments instead have referred these matters to the Productivity Commission. While the Commission is suited to system-wide reviews from an economy-wide perspective, it is less suited to undertaking forensic evaluations into individual airports' conduct.

In its 2006 review, the Commission referred to the need to replace 'passive' inaction with 'determined' inaction or action (PC 2006). It made recommendations to this effect that were accepted, but ultimately not implemented (see below). The same problems identified in 2006 are present today.

11.4 The regime would benefit from a credible threat

In its 2006 review, the Commission recommended that the Minister for Infrastructure and Transport be required to draw on the ACCC's price monitoring

reports and other relevant information to publicly indicate each year either that for the period covered by the relevant monitoring reports:

- no further investigation of any airport's conduct was warranted, or
- one or more airports be asked to show cause why their conduct should not be subject to detailed scrutiny through a Part VIIA price inquiry, or other appropriate investigative mechanism.

The Commission stressed that any 'show cause' threat should only be exercised 'if an airport has clearly misused its power, and that the consequences of that misuse are significant' (PC 2006, p. 63). It further emphasised that:

- because the potential for misdiagnosis of misuse of market power is considerable, the possibility of reregulation should not come into play unless a prima facie case of inappropriate behaviour has been clearly established
- recognising the potential costs of regulatory intervention, invoking the threat of reregulation for minor indiscretions would be counterproductive
- because airports have to reach agreement with many customers on many issues, and re-regulation would impact on all such negotiations, claims that an airport has seriously misused its market power should be assessed in this wider context.

Notwithstanding this advice, the Government's draft show cause proposal enabled the transport department to consider complaints or information about an airport provided at any time, by any person. Complaints also could be made in confidence. The proposal essentially was silent on the materiality of the consequences of any misuse of market power, so that issues of little consequence (for instance, minor issues raised by a member of the public) could trigger an unwarranted intervention.

With the global financial crisis occurring at the time, airports indicated that enacting the proposal in that form would add to uncertainty, with likely adverse consequences for investment. The proposal was abandoned. The Government's aviation white paper observed:

> The Government is sensitive to any potential impact a show cause assessment could have on airports' ability to attract capital, particularly because of the impact of the global financial crisis on investor confidence and access to finance, now is not the time to introduce this. However, should the ACCC monitoring report or other evidence indicate that an airport warrants further investigation for its pricing behaviour, the Minister retains the discretion to recommend a formal inquiry under the Trade Practices Act. (DITRDLG 2009a, p. 180)

As the Minister has not seen fit to exercise discretion, the Commission considers it is now timely to revisit determined inaction/action through a show cause concept, but with more tightly defined parameters and roles for those agencies at key

decision points. Chief amongst these is to designate the ACCC as the body solely responsible for assessing whether a show cause direction should be issued. The ACCC is independent and has the requisite skills. Being outside the political process, it would not be subject to pressures, such as public opprobrium for being seen to not deal with constituents' complaints.

Indeed, the Commission considers that the show cause direction should not be contingent on a complaints based mechanism at all. Rather, the ACCC could make an assessment based on its interpretation of the price and service quality monitoring data it collects. These long-term data series, which are supplemented annually, should be sufficient to enable the ACCC to issue a direction. After all, a show cause direction would not be a 'conviction' but only an indication that, without an adequate response, the matter might go to 'trial'.

BARA also considers that the monitoring reports are sufficient for this purpose:

> The role of the prices monitoring reports is to initially identify any likely issues of concern with each price monitored airport. In doing so, the current reports provide sufficient evidence of emerging issues without requiring each airport operator to provide excessive levels of detail on its prices, revenues, costs and non-price terms and conditions. Evidence to date suggests that the current information is sufficient to identify issues of concern.
>
> BARA, therefore, does not consider that there are any material gaps in the information currently collected by the ACCC for the purposes to which it is put. An important feature of the current regime is that the ACCC also undertakes analysis of the information and provides its opinion of whether abuses of market power are likely to be occurring. (sub. 19, pp. 36–7)

The ACCC itself has noted that monitoring reports can point to misuse of market power, even if monitoring cannot rectify such misuse:

> Although monitoring has gone some way to identifying issues related to the exercise of market power by airports, it has not facilitated the competitive process. (sub. 3, p. 4)
>
> Although monitoring has played a role in problem identification, it is ineffective as a tool to address the problems it identifies. (sub. 3, p. 6)

For the record, the ACCC did not propose or endorse a show cause mechanism. It considers that as the benefits of monitoring are unlikely to outweigh the costs, monitoring should be discontinued and replaced by deemed declaration (see below).

A proposal for a 'show cause direction'

Features of the Commission's proposal for an ACCC show cause direction are that:

- at the time of publication of its annual monitoring reports, the ACCC could chose to issue a direction that a particular airport (or airports) show cause why its (their) conduct should not be scrutinised under a Part VIIA price inquiry
- any airport that did not receive a show cause direction would be taken to not warrant closer scrutiny at that time.

This process would place a responsibility on the ACCC to be robust in its process, explicit and definitive in its judgment and be prepared to stand by and act on that judgment.

To underpin this proposal, the Commission sees merit in continuing *annual* price and service quality monitoring (section 11.6). There is a case for moving to biannual or triennial assessments — which might be more appropriate for identifying a pattern of misuse of market power — but this would likely create staffing, resourcing and work flow problems for the ACCC, potentially leading to loss of corporate memory and expertise.

However, the Commission considers it imperative that a show cause direction not be issued solely on the basis of particular outcomes in any one year. Rather, the ACCC should, after drawing on the latest and prior monitoring reports, come to a view that there is prima facie evidence that an airport has, over time, shown a consistent pattern of achieving aeronautical returns in excess of a reasonably expected band of outcomes, having regard to price paths, the quantum and timing of investment and how that bears on quality outcomes, and market conditions such as passenger growth (box 11.2).

Box 11.2 **What is a reasonably expected band of outcomes?**

Littlechild (2010a) looked at how various authorities in the United Kingdom define 'acceptable' returns. He noted that regulators tend to regard 'appropriate profits' as about equal to the cost of capital, whereas competition authorities tended to accept that profits in excess of that could be efficient:

- Regulators — weighted average cost of capital (WACC) of about 7 per cent
- Mergers and Monopolies Commission — in the range 7–10 per cent real (pre-tax)
- Office of Fair Trading — 'referrals' where returns are about 20 per cent real (about three times the regulatory WACC)
- Commerce Commission — 'not guilty' at about 10 per cent real, but 'guilty' when returns hit about 35 per cent real (about five times regulatory WACC)

Source: Littlechild (2010a).

What constitutes acceptable competitive returns can depend on factors such as airports' investment cycles or whether passenger traffic has exceeded or undershot projections (chapters 5–7). As the Commission noted in 2006:

> … price monitoring arrangements must continue to provide for a degree of latitude on outcomes if they are to foster commercial relationships between airports and their customers … (PC 2006, p. xxi)

If the ACCC were dissatisfied with an airport's response to a show cause direction, it could recommend that the relevant Minister issue terms of reference for a Part VIIA inquiry to be conducted by the ACCC or other suitably qualified body. The review body would go beyond the monitoring reports and take evidence from, and consult with, the airport operator, its customers and other relevant parties. The review would be guided by the Pricing Principles and in particular, the new principles arising from the Commission's recommendation in 2006 relating to commercial negotiations. These principles included that negotiation should be conducted in good faith with: information exchange; processes for resolving disputes in a commercial manner; and a reasonable sharing of risks and returns, as agreed between airports and their customers (chapter 9, box 9.1).

Having the ACCC undertake a price inquiry that ultimately could lead to it having expanded regulatory coverage raises an issue of potential conflict. For example, under Part IIIA, the NCC makes a coverage decision at arms length from the ACCC, which ultimately could be conducting arbitrations. On the other hand, the ACCC is well suited to undertaking detailed price inquiries and there is no other obvious appropriate body to undertake this type of detailed assessment.

Information request: The Commission seeks comment on whether the ACCC should be responsible for both issuing show cause directions and conducting any subsequent Part VIIA inquiry.

The Commission has also taken into consideration participants' expectations about the conduct and coverage of commercial negotiations. These include the airport industry view expressed by the AAA and airlines — for example, matters that Qantas submitted should be covered under an airport code of conduct (box 11.3). Some of these proposals have been incorporated in the Commission's draft recommendations.

Box 11.3 **Airports and airlines views on negotiation requirements**

AAA submitted that, in relation to facilitating commercially negotiated outcomes:

(a) airlines and airports should operate primarily under commercial agreements and in a commercial manner, with airport operators and users negotiating the terms and conditions of access to airport services;

(b) airports and airlines should negotiate in good faith, including to agree upon processes for resolving disputes in a commercial manner during the term of agreements;

(c) arrangements should allow for a reasonable sharing of risks and returns between airports and their customers, including those relating to productivity improvements and changes in passenger traffic;

(d) airport charges — including those contained in commercial agreements — should not be set at a level higher than would be justified on the basis of costs, new investment requirements and/or other enhancements to service quality;

(e) non-price terms and conditions are an important component of the agreements between airports and airlines, e.g. the allocation of gates and parking bays, dispute resolution mechanisms and the right of the airport to vary such terms and conditions;

(f) in order to allow commercial arrangements to develop, price monitoring arrangements must provide for a degree of latitude and flexibility in regard to charges, rates of return and other outcomes; and

(g) consultation mechanisms should be established between airports and stakeholders to facilitate the two way provision of information on airport operations and requirements, including users' reasonable expectations. (sub. 18, p. 11)

Qantas proposed a binding code of conduct for tier 1 and tier 2 airports to cover:

(a) Regulatory modelling process

(b) Capital expenditure planning and pricing

(c) Definition of aeronautical services

(d) Benefit sharing

(e) The use of precedent leases for commercial airport lease negotiations

(f) Clarification and extension of the application of the 'line in the sand' approach to asset valuation

(g) Binding independent dispute resolution (sub. 52, p. 87).

Qantas further proposed that a less onerous voluntary code of conduct for regional airports should cover (a), (c), (f) and (g) above (sub. 52, p. 87).

The first part of the Commission's draft recommendation 11.1 (show cause) goes to matters of misuse of market power, whereas the second part (Part VIIA inquiry) goes more directly to matters of airport conduct.

DRAFT RECOMMENDATION 11.1

The Australian Competition and Consumer Commission (ACCC), on publication of its monitoring reports, should be empowered to issue a direction that an airport has six weeks to show cause why its conduct should not be subject to scrutiny under a Part VIIA price inquiry.

To issue a show cause direction, the ACCC must form a view that there is prima facie evidence that an airport has, over time, demonstrated a consistent pattern of achieving aeronautical returns in excess of a reasonably expected band of outcomes, having regard to price paths, the quantum and timing of investment and how that bears on quality outcomes and market conditions.

Where the ACCC is dissatisfied with an airport's response to a show cause direction, it shall recommend that the relevant competition Minister invokes a Part VIIA inquiry. If the Minister initiates a Part VIIA price inquiry, the review body would draw on the monitoring reports and also take evidence and consult with the airport operator and its customers. In forming a view about an airport's exercise of market power, the review should examine:

- ***whether airport charges have consistently been set at a level higher than would be justified on the basis of costs, investment requirements and changes to service quality***
- ***how non-price terms and conditions are treated in agreements and how rights to vary such terms are set***
- ***the extent to which consultation mechanisms allow for the reasonable provision of (two way) information.***

The review body must be guided by the 'Pricing Principles'.

DRAFT RECOMMENDATION 11.2

Assessments of airport behaviour during the next period of price monitoring should continue to be governed by an overarching set of principles. All the current 'Pricing Principles' should be retained.

11.5 Is an arbitration mechanism also needed?

A show cause direction and consequent inquiry would be an ex post mechanism. As such, it would not resolve 'live' disputes directly. Agreements generally already provide for disputes to be resolved — typically by escalating disputes up the chain of command and, failing resolution, recourse to mediation and in some cases arbitration.

However, these dispute resolution mechanisms relate to issues within contracts. The ACCC's deemed declaration proposal,[2] in part a response to perceived time and cost issues with Part IIIA, would enable access to arbitration *during contract formation.* As the ACCC noted:

> … the general provisions of Part IIIA do not present an effective constraint on the behaviour of the airports given the considerable time, costs and uncertainty faced by airlines seeking declaration. (sub. 3, p. 8)
>
> The ACCC considers deemed declaration under Part IIIA to be the most appropriate regulatory option for constraining those airports that exercise market power in the provision of aeronautical services. This approach would encourage the airports to behave as if their activities were carried out in a competitive marketplace. It recognises that each of the major airports operates in a different market, and enables a targeted regulatory response. (sub. 3, p. 21)

The NCC sees little merit in this proposal, and argues:

> [i]t is critically important that regulation of access is predicated on an objective decision maker being satisfied that the declaration criteria are met. If it is not, there is no basis for confidence either that such regulation is likely to enhance competition and efficiency or that access decisions will be made consistently, fairly and with minimal risk of error … if aeronautical services would not satisfy the declaration criteria, then it is hard to see how a deemed declaration would not amount to the promotion of particular interests rather than the promotion of effective competition which is, after all, the fundamental object of Part IIIA … To so impose regulation by legislative fiat … reduces confidence in the integrity of the National Access Regime. (sub. 21, pp. 15–6)

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2 According to the ACCC, '[a]eronautical services, for the purpose of declaration, could be defined as services, provided by an airport, that are being used for the operation and maintenance of civil aviation services. [This includes all aircraft-related and passenger-related services and facilities within the boundary of the airport as described in tables 1 and 2 of reg. 7.02A of the Airports Regulations 1997]. Deemed declaration could be effected by an amendment to the Airports Act to deem aeronautical services provided at major airports to be declared services for the purposes of Part IIIA. Such a deeming provision was previously included in the Airports Act under s. 192 … [which] was repealed following a decision that airports should be subject to the general provisions of Part IIIA …' (sub. 3. p. 21)

The NCC argued that, '[l]eaving aside the distinction between a service and the facility by which a service is provided, the definition suggested by the ACCC may describe the 'minimum bundle of assets required to provide the relevant services' [The Tribunal in Sydney Airport No 1 found that, in practical terms, the whole of the airport constituted the relevant facility within the meaning of Part IIIA] or it may be under- or over-inclusive. Adopting a definition developed for one purpose and applying it in a different context does not provide a basis for confidence. Defining the minimum bundle of assets necessary to provide a service is commonly a matter of some debate in submissions to the Council or before the Tribunal. A deemed declaration has a greater risk of regulatory error because it limits the ability of interested parties to inform the declaration process.' (sub. 21, p. 16)

The Commission has similar reservations. It further considers that expedited access to arbitration at the contract formation stage could fundamentally undermine light-handed regulation. It is difficult to conceive how provision for ACCC arbitration would provide both airports and airlines with strong incentives to engage in genuine commercial negotiations. As the Commission has noted previously:

> … it seems likely that arbitration would come to be viewed by airlines as the default option, with negotiations increasingly centred in a narrow band around previously arbitrated outcomes. The net effect would therefore be a return to 'institutionalised' determination of charges and conditions for airport services, with its attendant costs. (PC 2006, p. xxv)

This view is contested by the ACCC and others (box 11.4). A difficulty with citing a lack of recourse to ACCC arbitrations as evidence of a well functioning regulatory framework is that the previous declarations operated concurrently with commercial agreements, which already had dispute resolution mechanisms. Ready access to arbitration is far more likely to have an impact during those 'windows' that are arise during the contract formation stage. Hence, the possibility that the ACCC might deconstruct charging and investment proposals using the building blocks approach would provide scope for airlines to get a 'second opinion'.

MAp, which has a portfolio of airports[3] across jurisdictions with different regulatory regimes drew on its experiences to caution that:

> In MAp's experience it is difficult to see how commercially negotiated deals could survive in the long term if the regulator is easily available and pre-disposed to intervene — and leadership changes can change the regulator's attitude towards intervention over time.
>
> Once the regulator has become involved, overseas experience is that the level of regulatory involvement increases over time. In the first instance, there is a tendency for each individual regulatory decision to set a precedent for future commercial agreements — progressively narrowing the scope for innovative and flexible agreements … (sub. 22, p. 12)

It is not that long since combative airlines and airports focused on getting the best regulated outcome. Having moved to commercially-focused negotiations with at least some form of constructive engagement, it would seem retrograde to allow heavy-handed regulation to potentially displace commercial negotiations and encourage gaming.

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[3] Airport companies in which MAp has or has had significant investments are: Bristol, Birmingham, Sydney, Aeroporti di Roma (Rome Fiumicino and Rome Ciampino), Brussels, and Copenhagen. It has had smaller investments in airports in Japan and Mexico, and evaluated potential investments in other airports in Europe, US, Asia and Australia (sub. 22, p. 4).

Box 11.4 **Deemed declaration — a small change to 'business as usual' or a return to heavy-handed regulation?**

Proponents of deemed declaration point to the time when the privatised airports were all initially deemed declared for five years. Also cargo handling and domestic airside services were declared for five years at Sydney. Despite the total combined period of declarations, no ACCC arbitrations ever arose.

The ACCC noted that the Productivity Commission had previously expressed the view that an airport-specific arbitration mechanism could 'come to be viewed by airlines in particular as the default option, effectively leading to a return to heavy-handed determination of charges and conditions for airport services, with all of its attendant costs' (PC 2006, p. 95). The ACCC countered this view, arguing that experience with Part IIIA suggested that airlines have not seen arbitration as a 'default option'. The ACCC submitted that:

> … it appears that dispute resolution mechanisms have also been successful overseas. Based on the experience in the United States and Canada in energy regulation, and in the United Kingdom (UK) for airport regulation, Littlechild found:
>
> "… evidence continues to accumulate that parties in a regulatory framework are willing and able to negotiate settlements to the extent that they are allowed to do so. These parties effectively have the ability to trigger regulatory arbitration simply by declining to reach agreement. Nonetheless, they have not in general found it necessary or advantageous to do this". (Littlechild 2010b, p. 21)

Sydney Airport rejected the ACCC's extension of Littlechild's work to UK airports, noting that:

> The UK has two groups of airports for the purposes of regulation:
>
> - London's Heathrow, Gatwick and Stansted airports are all price determined by the UK CAA. There is no opportunity for negotiation or arbitration, because the CAA must set prices
>
> - All other airports have no price regulation, no compulsory arbitration (although it is of course open to airports and airlines to negotiate arbitration clauses), and no monitoring of prices, profits or service quality. (sub. 72, p. 2)

In a response to this, the ACCC said that it had drawn on Littlechild's work on Constructive Engagement, as instituted by the UK Civil Aviation Authority, to support its view that:

> … under declaration of aeronautical services, airports and airlines are likely to reach commercially negotiated outcomes in preference to those of a regulator… While Professor Littlechild describes determination by the CAA as a form of regulatory arbitration, the ACCC submission discussed the UK model more broadly in the context of dispute resolution mechanisms. (sub. 66, p. 1)

In sum, the ACCC maintains its view that it is more likely that the threat of arbitration under Part IIIA would create an incentive for parties to negotiate on a commercial basis (sub. 3). This view is echoed by Qantas (sub. 52) and Virgin Australia (sub. 54).

Arbitration could well become the default option for an airport customer. Notwithstanding that agreements have captured greater complexities over time

(such as service levels, dispute resolution, and information exchange) there is a risk that airlines might see it in their interests to have building block parameters examined by regulatory decisions — an arrangement that might, through precedent, lead to a default form of revenue capping, antithetical to commercial negotiation.

Nevertheless, the Commission accepts that 'best practice' negotiation occurs at some airports and not others. It considers that faster progress to better practices could be expedited by guidance targeted to commercial negotiation. As noted (box 11.3) Qantas sought development of a binding code of conduct to facilitate commercial negotiations between Tier 1 and Tier 2 airports and airlines.

In a similar vein, Virgin proposed that:

> … guidelines prepared by the ACCC on the following issues would greatly assist parties in commercial negotiations:
>
> - the valuation of airport assets, including:
>   - how an initial asset value should be determined;
>   - how that value should be adjusted over time, including guidance on depreciation rates and whether the asset value should be indexed for inflation;
>   - the time at which charging should commence for new increments to capacity;
> - the allocation of costs between aeronautical and non-aeronautical services another cost measurement issues; and
> - the parameters or methods for estimating the WACC that the ACCC considers would be appropriate. (sub. 54, p. 48)

The Commission considers that these prescriptive proposals are 'a bridge too far', but sees merit in strengthening the generic Pricing Principles. An alternative approach might be to develop a voluntary industry code of conduct devised by, and agreed between, airports and their customers to support the Pricing Principles (box 11.5).

Box 11.5 **Industry codes of conduct**

There are various types of codes of conduct. Essentially, codes establish 'acceptable' boundaries of conduct between the parties, but do not dictate particular outcomes — that is, codes establish 'inputs' but do not control 'outputs'.

There are three recognised types of industry code, namely:

- non prescribed voluntary industry codes of conduct. The ACCC has nothing to do with the administration, oversight or establishment of specific, non prescribed voluntary codes, but it has published guidelines for developing an effective voluntary industry code of conduct
- prescribed voluntary industry codes of conduct. These must be established by Government regulation and is voluntary for each corporation that opts in. Currently, there are no prescribed voluntary codes of conduct
- prescribed mandatory industry codes of conduct. These are mandatory for an entire industry and can only be established by Government regulation. There are four mandatory codes in operation: Franchising code, OilCode, Horticulture code, and Unit pricing code.

Such a code could include matters already embodied in the Pricing Principles (for example, good faith negotiation; information exchange; service level agreements; processes for resolving disputes) but also add a degree of mutually accepted specificity. Airlines, in particular, sought greater information disclosure on strategic issues revolving around investment — whether existing assets were being deployed as efficiently as possible and whether improved demand management practices could delay new investment — and processes to facilitate agreement on effective service level agreements with airports. In relation to service level agreements, while Qantas favoured financial penalties akin to the model used in the United Kingdom, it also noted that:

> … great benefit could still be derived by enshrining the concept of formal Service Level Agreements (SLAs) between airlines and airport operators for the provision of terminal and infrastructure related services. This could be achieved by the Government including in its Pricing Principles a provision that airports and airlines were expected to conclude SLAs as part of the commercial negotiation process. Qantas is a strong supporter of the need for SLAs and has negotiated limited SLAs with a number of major Australian airports. The presence of an agreed SLA, particularly where there are remedies if service levels are not met, provides a commercial imperative in addition to the airports desire to provide a high level of service. (sub. 77, p. 3)

Ideally more embracing Pricing Principles or a code could become 'model negotiation and agreement making guidelines'.

The Commission stresses that, in the event that the parties could not agree to any voluntary code, mandation should not be contemplated. It would be unfortunate if a code developed in a way that, for instance, unduly constrained the range of outcomes and stymied innovation.

Strengthening the Pricing Principles would have the added benefit that the Principles would play a key role in any Part VIIA price inquiry triggered under the draft show cause process. Behaviour in contravention of the Principles would likely be viewed unfavourably, which would give the Principles more ex ante 'teeth'

Information request: The Commission is seeking information on whether guidelines on matters that could improve commercial negotiation — such as information on whether existing assets are being deployed efficiently prior to new investment and processes to facilitate effective service level agreements — should be:

- *devised by the Productivity Commission and incorporated into the Pricing Principles, or*
- *encapsulated within a new voluntary industry code — a committee comprising representatives from the Australian Airports Association, the Board of Airline Representatives of Australia, the Regional Aviation Association of Australia, Qantas, and Virgin Australia (and possibly with guidance from the Australian Competition and Consumer Commission) could be tasked with this.*

Other reform proposals

The draft show cause recommendation 11.1 aims to address a weakness in the light-handed monitoring arrangements. The Commission considers that rectifying this should secure the workable future economic regulation of airports.

Reform proposals proffered by participants ranged from the abolition of monitoring, through to mandatory codes of conduct and access to arbitration (box 11.6). Many proposals were couched ostensibly as adjuncts to light-handed regulation that would operate in conjunction with the ACCC's deemed declaration proposal. In reality, some of these proposals were tantamount to heavy-handed regulation.

Box 11.6 **Range of options**

Options range from no regulation (1) to price regulation (10). Commercial negotiation is most prominent, and least 'balanced', at Option 1, but has almost no role by Option 10. Options in between change the power balance in negotiations.

1. Terminate the price and quality monitoring regime
2. Replace monitoring with self-reporting by airports — the tier 2 monitoring model
3. The status quo
4. The status quo underpinned by a voluntary code of conduct
5. The status quo with a more credible threat of sanction for abuses of market power
6. Legislative requirement that commercial negotiations during the 'contract formation' stage provide for a dispute resolution mechanism where the parties agree to either (a) private commercial arbitration, or (b) ACCC arbitration
7. Commercial negotiation conducted according to a mandatory code of conduct
8. Deem airports covered under Part IIIA, thereby making ACCC arbitration available at contract formation stage
9. Regulatory specification of modelling processes; revenue capping by setting the WACC, asset betas, market risk premiums; re-specification of aeronautical services
10. Price regulation such as:
    - (a) price caps
    - (b) price notification
11. Part VIIA price inquiry into an airport or airports. As the Government has stated:

    … should the ACCC monitoring or other evidence indicate that an airport warrants further investigation for its pricing behaviour, the Minister retains the discretion to recommend a formal inquiry under the Trade Practices Act (DITRDLG 2009a)

Options 1 and 2 effectively end the monitoring regime. Option 3 was found by the Commission in 2006 to require strengthening, so it proposed Option 5, which was not implemented. Option 4 codifies expected behaviours but, on its own, lacks 'teeth'. Option 6 operates at the contract formation stage. Option 7 is a stronger, prescriptive version of Option 4. Option 8 is similar to Option 6(b). Option 9 was couched as matters that might be covered in a mandatory code of conduct — it would essentially be heavy-handed revenue capping. Option 10 has been shown to have a high risk of regulatory failure (PC 2002a). It was not supported by any stakeholders. Option 11 need not be stand alone and could arise in conjunction with other options.

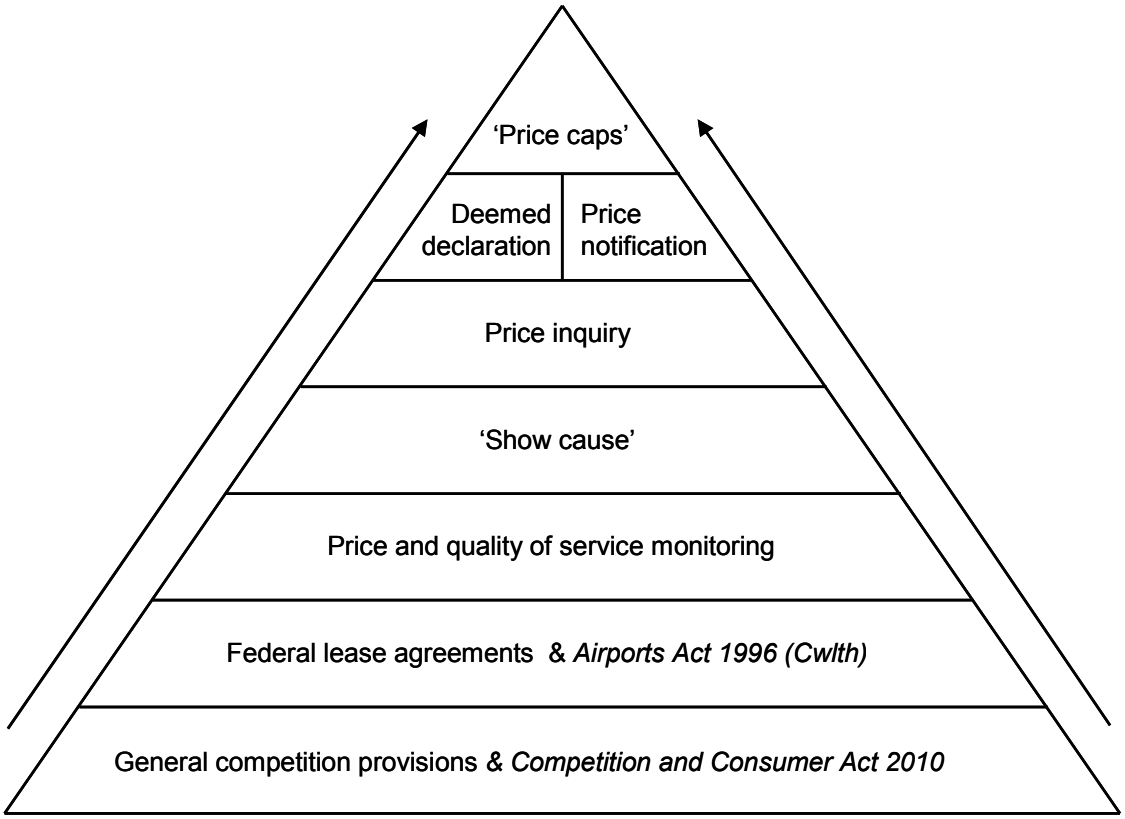
Under all of the options considered in box 11.6, the requirements of the airports' leases, as well as Parts IIIA and VIIA of the CCA, would continue to apply.

The Commission is satisfied that a show cause mechanism will achieve the necessary balance to help further commercial negotiation. It agrees with BARA (sub. 19), that having such a system will condition how an airport — the entity that typically, but not always, has the upper hand — approaches negotiations. In making

decisions, airport management would need to reflect on the (cumulative) probabilities of:

- the ACCC determining that an airport operator had abused its market power
- the Government acting on a show cause direction and initiating a review
- the Government acting on the findings of the subsequent review, including introducing stricter controls.

Figure 11.1 **Proposed regulatory enforcement pyramid for airports**



This is demonstrated in the regulatory enforcement pyramid (figure 11.1). The strength of the implied threat comes from the top of the pyramid. While the show cause mechanism has in essence always been there since 2002, its activation potentially looms large under the Commission's proposal — 'passive inaction' would no longer be an option. And, if the ACCC and relevant Minister fail to act and an airline customer is sufficiently aggrieved, it could always initiate a Part IIIA declaration application to attempt to achieve a similar outcome.

DRAFT RECOMMENDATION 11.3

An airport-specific arbitration regime activated by deemed declarations of airports under Part IIIA should not be introduced. Similarly, mandatory codes of conduct and mandatory guidelines to specify matters such as, the allocation of costs to aeronautical and non-aeronautical purposes and building block parameters, should not be introduced.

11.6 Future role for price and quality monitoring?

As noted, the ACCC contends that price monitoring is ineffective as a tool to address the problems it identifies. It therefore considers that 'In recognition of the costs it imposes, there is little justification for its continuation' (sub. 3, p. 6).

The Commission's view is that ACCC price and quality monitoring is fundamental to providing the information base necessary to establish whether there is a prima facie case of misuse of market power.[4] In essence, with an effective show cause mechanism in place, having a robust and consistent time series of relevant data would be a critical information foundation. Without continuation of such evidence gathering, any show cause mechanism would have to be triggered solely through a complaints-based process — an arrangement that the Commission considers would be undesirable, particularly given the problems with the Government's previous attempts to devise a complaints-based show cause mechanism (see section 11.4).

The policy question is whether the underpinning price and quality monitoring data might be improved in a way that does not cause 'breaks in data series' that would diminish the value of earlier data collections and hence the capacity to identify persistent misuse of market power. Indeed, the Commission is seeking participants' views on whether there are other sources of data that would facilitate the ACCC's role.

Information request: The Commission is seeking information on whether there are additional readily accessible financial or other data that would assist the Australian Competition and Consumer Commission to determine if a 'show cause' direction was warranted.

4 The Commission accepts the ACCC's view that under a deemed declaration model, price and service quality monitoring would be redundant.

There should be a further period of price monitoring at Australia's major airports when the current arrangements end in June 2013. The new arrangements should continue to apply to Adelaide, Brisbane, Melbourne, Perth and Sydney airports until June 2020 and be subject to a review in June 2018.

It is mainly for reasons of continuity, coupled with the relatively low compliance costs for monitoring, that the Commission considers that Adelaide airport should remain monitored, even though the extent of its market power (and to a lesser extent Perth airport's) appears not to raise particular policy concerns.

As outlined in chapter 7, the Commission has confidence in the robustness of the price and financial data reporting, but has reservations about the derivation and reporting of quality of service monitoring.

The ACCC presently draws on quality information from several sources, including airport operators, airlines, passenger surveys, and border agencies. The passenger surveys relate to common use facilities and, therefore, exclude terminals operated under domestic terminal leases (such as Qantas terminals). According to the Department of Infrastructure and Transport, the ACCC survey methodology 'does not cover 40 to 50 per cent of total domestic passengers' (sub. 43, p. 16). While this fails to give a full picture of customer satisfaction with the 'airport experience', it is appropriate for this regulatory regime — the role of quality monitoring is to inform questions of the exercise of market power and this, by definition, must exclude areas outside airport operators' control. (Qantas would have no incentive to run down its branded facilities, whereas Tiger might be happy with rudimentary facilities.)[5]

For self-interested reasons, all airports monitor their quality of service — all the major airports, apart from Brisbane, participate in the passenger-focused ACI (Airport Council International) Airport Service Quality survey. This is additional to the passenger survey requirements for the monitoring reports.

The Commission considers that the overall service quality monitoring results are skewed to the views of airlines, which have an incentive to cast an airport in a relatively poor light. Sample size is such that one airline's comments can have a major impact. Moreover, very small changes over time (for example, a rating of 3.1 versus 2.9 within a scale of 5) can have a significant impact on rankings and the

5 It is important not to conflate monitoring for the purposes of assessing market power, with the government's broader (tourism-related) objective of reporting what passengers think of an airport per se.

ACCC's views of airport performance. (Additionally, the validity of ranking five airports over such minor changes in an ordinal scale of zero to five is problematic.)

Future monitoring of service quality

As the Commission stated in 2002, the objective of any monitoring regime (as part of a wider economic regulatory regime for airports), should focus on market power and some related issues, including fostering commercial negotiation, promoting transparency and competition, and minimising compliance costs (PC 2002a, pp. 17-18).

The Commission considers that it is important that quality of service monitoring continues to serve as a complement to price monitoring. Nonetheless, specific improvements could be made to aspects of the program.

Collection of data on objective measures should continue, but the measures themselves should be periodically updated to account for changes in technology, market conditions and passenger expectations. A review of criteria was last conducted in 2007-08, culminating in a guideline published in October 2008. The next update should be completed by the ACCC by June 2013. However, given the potential for substantial changes to create a 'break' in the data series for the overall quality (and thus reduce its value in informing comparisons over time), changes should only be made when necessary to ensure the data's continued relevance. Careful consideration and reporting of the data, particularly investigation of the context of apparent 'outliers' before reports are published, can allay concerns of misrepresentation of the data.

The passenger surveys should continue. Currently, airport operators are free to choose the exact method they conduct the surveys (but must include specified information). While this contributes to low compliance costs, it also detracts from the ability to better gain context of an airports' performance through standardised reporting. While an increase in compliance costs would normally mitigate any benefit from standardisation, the Commission notes that four of the five monitored airports use ACI Airports Service Quality surveys. Sydney Airport (sub. 46, p. 79) suggested that airports could publish their ACI results as a form of quality of service monitoring. In principle, the Commission is attracted to this suggestion, but notes that this would impose a cost on Brisbane airport to align with the other airports. Further, the Commission understands that while airports are able to publish (or submit to a regulator) their own ACI results, contractual obligations prevent them from publishing any aspect of the information that may serve to benchmark them with other airports in ACI's survey.

Information request: The Commission seeks participants' view on the potential means to standardise passenger survey methodology, such as the use of ACI Airports Service Quality information, without incurring substantial increases in compliance costs.

The substantial issues with airline surveys — particularly in relation to the gaming of responses — could mean that they should no longer be included as part of the quality of service monitoring. However, the importance of airlines as the airports' direct customers suggests that there should be some avenue for consideration of the airlines' expectations for service quality. The Commission considers that the best way to 'reveal' the true preferences of the airlines is through the commercial negotiation of service level agreements (SLAs) that stipulate agreed quality standards, as well as means for recourse for airlines when these standards are not met.

The Commission appreciates that while SLAs are increasingly commonplace in negotiations, they are not yet universal in all airline-airport relationships. As such, the wholesale abandoning of airline surveys in favour of reliance on SLAs would, at this stage, leave a 'gap' in the monitoring system. Therefore, the Commission considers that an 'opt-out' system of monitoring may be an appropriate transitional stage. This would entail an airport being subject to airline surveys until it could demonstrate that it had finalised SLAs with all RPT airlines that were regular customers. The Commission also notes Sydney Airport's suggestion that airports could publish the extent (coverage) and performance ('failure rate') of their agreements.

Information request: The Commission invites participants' views on its proposals in relation to airline surveys and service level agreements. In particular, would annual publication of the coverage of, and performance under, service level agreements improve regulatory outcomes?

As noted in chapter 6, the Commission considers that the government agency surveys perform little to no role in a regulatory regime aimed at constraining market power. They result in the surveyed agencies, and the ACCC, incurring administrative costs for little outcome. As such, the Commission considers that the surveys of government agencies should cease, with any aspects of service provision that are relevant to be picked up in objective quantitative criteria and passenger surveys.

DRAFT RECOMMENDATION 11.5

Quality of service monitoring should continue to apply to the price monitored airports until June 2020. However, specific improvements are warranted:

- ***the objective criteria should be reviewed and updated by the middle of 2013***
- ***the Australian Competition and Consumer Commission should explore means of standardising the passenger survey across airports, while maintaining low compliance costs***
- ***where an airport has service level agreements with all of its regular passenger airlines, which stipulate methods for recourse in the event of a failure to meet a standard, the airline survey should no longer be conducted for that airport***
- ***government agencies should no longer be surveyed as part of the program. Any relevant variables can be picked up through objective measures and passenger surveys.***

DRAFT RECOMMENDATION 11.6

In administering the monitoring regime, the Australian Competition and Consumer Commission should:

- ***take steps to make as much of its methodology publicly available as possible (subject to a review of statutory requirements)***
- ***focus its conclusions on trends over time at a given airport, rather than comparisons across the five monitored airports. Such attempts at benchmarking are better suited to less frequent, broader reviews that can examine the airports in a wider international context.***

11.7 Car parking

Airport car parking has long been a contentious issue (chapter 8). In 2002, the Commission concluded that airports were unlikely to have significant market power in long-term car parking, but may have in short-term and possibly staff parking. However, it considered that this was likely to be constrained as long as landside access for competing operators is available on reasonable terms and conditions (PC 2002a). In 2006, the Commission recommended not continuing with monitoring of car parking. It determined that market power was constrained by the availability of off-airport parking, and by other options for travelling to and from airports (PC 2006).

Car park monitoring

For this inquiry, the Commission has not been able to substantiate the ACCC's suspicions that Melbourne airport charges monopoly car park prices by impeding access to competitors. Nor has the Commission found a compelling case that Brisbane airport inefficiently delayed its car parking investment to artificially constrain supply (chapter 8). Nevertheless, the question of whether to continue with price and quality monitoring of car park services is finely balanced for two interrelated reasons.

First, airports are vertically integrated with landside services through car parking businesses. As the ACCC has observed:

> … users of landside services, tend to be smaller and more fragmented, with less negotiating power … Importantly, unlike (particularly international) airlines, they have less scope to use alternative airports. Finally, the airports are vertically integrated with landside services through their car parking businesses. (sub. 3, p. 7)

Second, since 1997, the ACCC has collected car parking data on prices, capacity, yields, investment and revenues, including access revenues from competitors to airports' car parking businesses. Continuity in these collections contributes to a long-term database that could assist the ACCC to identify misuse of market power in competing downstream activities for the purposes of issuing a show cause direction (section 11.4). It is primarily for this reason that monitoring of car parking should continue. And, while the Commission has reservations about the need for such monitoring at Adelaide or Perth airports, there are benefits in having an extensive suite of data across airports to inform policy makers. For instance, the manner in which Perth airport used pricing as an effective management strategy to ensure short term parkers were not be crowded out was instructive (chapter 8).

DRAFT RECOMMENDATION 11.7

For Adelaide, Brisbane, Melbourne, Perth and Sydney airports, the Australian Competition and Consumer Commission should continue to monitor and publish:

- ***prices, costs and profits relating to the supply of car parking***
- ***access charges and the associated revenues for ground transport operators***
- ***qualitative indicators of service provision drawn from passenger surveys.***

Access undertakings

The ACCC proposed that airports with significant market power in landside vehicle services should be subject to mandatory Part IIIA access undertakings to allow

alternative transport operators to on-airport car parking to access airports on reasonable terms. It contended that:

> … mandatory undertakings for landside vehicle access services would best facilitate commercial negotiations and limit transaction costs. Access undertakings would assist the alternative transport modes to on-airport parking, which may not have the same experience, expertise and resources as the airlines in negotiating with the airports, which could make deemed declaration less effective for these operators. Access undertakings also give the airports the opportunity to remove uncertainty as to what access conditions will apply to landside vehicle access services. (sub. 3, p. 36)

Once the ACCC accepts an undertaking the service can no longer be declared.[6] In relation to the degree of prescription and latitude permitted of an airport operator in its mandatory undertaking, the ACCC said:

> … undertakings could allow for negotiation of terms and conditions by establishing procedures for negotiations and clearly defined boundaries to the negotiations. In terms of access pricing arrangements, prices can take the form of reference prices, or airports could specify maximum and minimum prices between which negotiation can take place. Irrespective of the approach used, the airport would be required to explain the basis for setting access prices and how they relate to costs. (sub. 3, p. 37)

Access undertakings would provide confidence that competitive access to airports had a 'clean bill of health'. Of course, this might do little to counter 'sticker shock' for customers unfamiliar with airport parking, but it should assure policy makers that competition was ensuring that prices were not inefficiently high.

However, setting access prices purely in relation to costs would not promote efficient outcomes if those costs failed to properly account for the opportunity cost of kerbside and forecourt land. And even if airports had little to fear from posting access charges — as these do not appear to be particularly onerous (chapter 8) — they could have concerns about a regulator being able to interpose itself in matters relating to terms and conditions of access. For example, in managing traffic flows through congested kerbside and forecourt spaces, airports might have legitimate reasons to strictly enforce rigorous conditions. Clearly, the regulator would need to be mindful of: traffic management and security reasons underlying conditions of access; and commercial arrangements for particular service providers that have agreed to pay a premium for restricted access to congested areas (for example, SkyBus at Melbourne airport).

The Commission considers that there is insufficient evidence for mandatory undertakings. However, it considers that it would be in the public interest for the

6 The ACCC proposes that landside vehicle access services 'could be defined as: use of terminal access roads, kerbside standing areas and holding bays at the airport for the purpose of dropping off and picking up airline passengers at an airport and its terminals' (sub. 3, p. 36).

monitored airports to publish the prices and terms and conditions of access for transport operators.

DRAFT RECOMMENDATION 11.8

Mandatory Part IIIA access undertakings setting out prices, terms and conditions for surface transport operators to access airports should not be introduced. The price monitored airports should be required, however, to publish on their websites the general prices and terms and conditions of access for transport operators. This should not preclude airports and their customers from being able to agree to vary these general conditions to suite their particular circumstances.

Master plans and car parks

The ACCC further identified the airport master plan process as a useful regulatory tool 'to ensure the major airports do not either attempt to withhold the supply of on-airport car parking, or discourage competition in the market for landside access'. However, it added that recent changes to the Airports Act did 'not go far enough to safeguard against any attempts by the airports to use their market power at the expense of users' (sub. 3, p. 38). The ACCC went on to suggest:

> In assessing the airport Master Plans, stakeholder groups and the Government could give consideration to the adequacy of investment, which would have the effect of deterring airports from limiting or delaying the construction of multi-level car parking facilities. If the opportunity cost of land at an airport is high, but the airport could expand its car parking operations, this suggests that on-airport car parking capacity is being artificially restricted. (sub. 3, p. 38)

The Commission questions the appropriateness of government agencies mandating the extent or timing of an airport's investments — that was a failing of the price cap regime (PC 2002a). An airport might have a range of projects (aeronautical, car parking, 'big box' retail) in train, with timing dependent on factors such as the cost of capital, demand projections, the need to diversify revenue streams, meeting deadlines for environmental impact assessments and other planning instruments and so on.

12 Land transport access and integration

Key points

- The roads to and around major city airports are often congested during peak times, with both airport and non-airport related traffic. This is, in part, a result of insufficient investment in land transport infrastructure.
  - Without remedial action, the projected increases in passenger numbers at major capital city airports (combined with increases in the general population) will exacerbate this congestion.
- The situation, particularly in Sydney, is compounded by a number of conflicting incentives that encourage airport users to drive rather than use rail or bus.
- Historically, planning on airports and surrounding land has not been well coordinated and integrated. However, recent legislative changes aim to better align airport planning with state, territory and local government planning, with particular attention to improving transport access to and around airports.
  - If these mechanisms are successfully implemented, they should go some way to reducing the planning and transport coordination problems.
- The primary responsibility for providing and funding ground transport infrastructure rests with state and territory governments. However, the Australian Government also plays a role in funding nationally significant road infrastructure.
  - In some cases, the Australian, state and territory governments have made recent commitments to fund projects that have or will improve road access to airports.
- Airport operators are responsible for funding terminal access roads and facilities in landside areas. Airports have in some cases chosen to contribute to off airport roads. Some local and state governments consider that airports should be required to contribute to infrastructure provision beyond the airport boundary, where on-airport developments have adverse off-airport impacts.

While the focus of this inquiry is on the economic regulation of airport services, the Terms of Reference also directs the Commission to examine the provision and quality of land transport facilities that provide access to major airports. The Commission is to assess the adequacy of these transport linkages and the mechanisms for planning and operating transport facilities and services that provide such linkages.

Chapter 3 outlined the institutional arrangements governing such facilities and services. Governments have a major role in planning and, in some instances, provide transport infrastructure and services that link an airport with its surrounding population. At the same time, some of the services and indeed the infrastructure is owned or operated by private interests, albeit typically under agreements or conditions specified by the relevant level of government. Thus, for example, in both Sydney and Brisbane, private companies operate the passenger rail service, and/or key aspects of the road network, that connect the airport with the city and broader catchment. Whatever the status of the providing entity, the efficacy of this infrastructure clearly affects the attractiveness and commercial viability of airports for airport users. Equally, developments on airports that draw in people or freight will increase demands for connecting infrastructure and services, with ramifications for those responsible for planning and providing infrastructure, as well as for those that use it.

Against this background, the question for the Commission is how well the present system 'works' and, if found inadequate, whether and how it might be improved.

12.1 The state of play 'on the ground'

Designing and delivering an efficient and coordinated land transport system in a large and dynamic city is a challenging task. It is thus to be expected that land transport access links to airports within most major cities will exhibit at least some deficiencies. In theory, problems could arise in a number of ways, including:

- traffic congestion due to the late or inadequate provision of arterial roads in the vicinity of airports or to airport precincts, relative to demand, or the underpricing of some roads
- insufficient mass transit services to airports, due to, for example, anti-competitive restrictions on rival services in government contracts (such as those contained in contracts with Airport Link (Sydney) and Airtrain (Brisbane)) and the underutilisation of some mass transit services due to overpricing
- restrictive licensing arrangements for taxis and other private transport providers, which, along with insufficient mass transit services, can influence some airport users to take private vehicles for their full journeys
- on-airport developments can also add to congestion on connecting transport links, particularly if there has not been adequate planning for the increase in people or freight.

While such problems arise in different cities at different times and to different degrees, participants in this study highlighted land transport access to Sydney as the most problematic at present.

Land access to Sydney airport: a case study

Sydney airport is Australia's largest airport, servicing almost 35 million passengers in 2009-10 and acting as a major freight hub. Just eight kilometres from the central business district, the airport is situated next to Port Botany and is surrounded by industrial and residential areas. A number of major arterial roads converge on and encircle the airport. It is also linked to the Sydney urban train network (chapter 2).

Clogged arteries

The roads to and around Sydney airport are often heavily congested, with both airport and non-airport related traffic. For instance, as the Australian Mayoral Aviation Council noted:

> … the eastern approach road system which is the major access route from the southern and eastern suburbs and the Sydney [central business district] CBD to the domestic terminals, suffers major delays in peak periods with travellers and commuters competing with air freight and expanding sea port container traffic. (sub. 5, p. 6)

There is often also congestion on the M5 arterial from western Sydney, which feeds both the airport and the port as well as being a major passage for commuters heading to the city. Sydney Airport noted:

> … [it] shares the use of the surrounding land transport infrastructure and services with Port Botany (which is located approximately 5 km to the east of Sydney Airport) and commuters including many travelling past the airport's boundary to the Sydney CBD. (sub. 46, p. 48)

Non-airport related traffic also clogs airport roads. Airport/Qantas Drive, for example, is located along the northern boundary of Sydney Airport, linking the international and domestic terminals. It is also a major commuter access route used by the public to access Sydney's eastern and south-eastern suburbs and the CBD. Sydney Airport estimated that at least 50 per cent of the traffic on this road is non-airport related. Furthermore, Sydney Airport expected that this proportion would increase over time with the 'substantial residential and commercial development which is taking place in the Mascot/Green Square region' (sub. 81, p. 2).

Meanwhile, the passenger rail service to the airport carries only 11 per cent of airport users. The low usage has been linked, in part, to the high price of tickets —

users of the airport terminals must pay a 'station access fee' of $11.80 per adult in addition to the standard fare of $3.20 (total one-way fare $15). The station access fee, which is retained by the private station operator (Airport Link), was part of the terms and conditions agreed to by the then state government when it commissioned construction of the line. Low usage is also attributed to the service being part of the suburban rail network with trains having inadequate luggage facilities and being crowded with daily commuters when it reaches Sydney airport or leaves Sydney CBD at peak times. Sydney Airport highlighted:

> … the train line is not a dedicated airport line – it is used by general commuters and can become congested at peak times … over the last three years, the Airport & East Hills line (which connects the airport) has operated at 100 per cent capacity in the morning peak hour (8am to 9am). (sub. 46, p. 36)

In addition, there is only one bus service to the airport — which is not direct to the CBD but travels between Bondi Junction and Burwood. Two other bus services (which commenced in March 2009) travel from the CBD but both stop a kilometre or more from the airport. The state government's ability to have these buses terminate at the airport is constrained by its contractual obligations with Airport Link.

Diagnosis

At one level, the congestion on the roads to and around Sydney airport can be seen — at least in part — as suggestive of insufficient investment in road capacity by the responsible government(s). The Tourism and Transport Forum (TTF) nominated a number of specific road upgrades that it considers should have been undertaken, including expanding the M5 East (sub. 53, p. 2).

However, as many participants emphasised, the problems evident on the roads to and around the airport can also be seen partly as a reflection of insufficient support for alternatives such as rail and buses. In this vein, the TTF attributed some of the reliance on vehicles, rather than public (mass) transport, to the 'failure by state governments to develop sufficient and appropriate public transport to our airports' (sub. 53, p. 7). Likewise, the Sydney Business Chamber criticised:

> … the inadequate land transport infrastructure and services that have been provided by successive NSW Government to access the airport. (sub. 23, p. 3)

And Sydney Airport argued:

> … road congestion getting to and from Sydney Airport has substantially increased over the past decade, due to a lack of investment in roads, buses and rail by the NSW government outside the airport's boundaries. (sub. 46, p. 7)

While around 20 per cent of passengers use mass transport options to/from Sydney Airport (chapter 8), with greater support, this proportion may increase with a similar reduction in use of the private car or taxi.

In fact, aside from a potentially insufficient investment in road infrastructure, congestion on the roads to and around Sydney airport appears, in the Commission's view, to have arisen from three sources of policy failure.

First, it can be seen as a failure to price roads to reflect the congestion costs associated with road use. While the use of congestion pricing remains limited in Australia, technological developments have improved its feasibility and the economic case for it is well established. In the case of the M5, a decision was made to remove a toll that had already been put in place. Since 1997, the state government's Cashback scheme has reimbursed private motorists from New South Wales for the toll paid. Sydney Airport estimated that the M5 Cashback scheme costs the state government around $60 million per annum (sub 46, p. 52).

Reintroducing the toll on the M5 for all users could potentially obviate the need to significantly increase road infrastructure spending. By extension, congestion elsewhere on the road network to and around Sydney airport could be diminished with targeted tolling. Tolls would increase incentives for drivers to change modes of travel and, in the long run, may affect work and residential locational choices in a way that lessens congestion in the tolled areas.

Second, as alluded to above, congestion on the roads to and around the airport can partly be attributed to the pricing regime in place for passenger services on the airport rail link. The cost of the station access fee is particularly pertinent to discouraging usage by on-airport employees. Whilst the cost of weekly access per trip is cheaper than for an adult single ticket, the annual cost of the station access fee is still likely to add almost $1000 to the normal metropolitan rail fare. In 2010, Booz & Company estimated that removal of the station access fee of $11.80 for the domestic and international terminals would provide an 'initial uplift' in patronage to the airport station of 26 per cent (or over 1 million passengers per year), which in turn would reduce trips by vehicles (sub. 46, appendix A). However, this estimate may be considered conservative in light of the greater than expected increase in train passenger numbers following the removal of the station access fees to Green Square and Mascot stations (of $2.60) since March 2011 (Saulwick 2011).

Third, congestion on the roads to and around Sydney airport might be alleviated to some extent by the provision of additional direct bus services to the airport. Sydney Airport argues the provision of public transport services by the New South Wales Government to the airport is insufficient, especially when compared to other major

events or urban centres in Sydney. For example, North Sydney has approximately 50 000 people employed in the area and serviced by 62 bus routes (table 12.1). This compares to Sydney Airport, which has an average of 140 000 users per day, and yet has only one bus service (sub. 46, p. 50). Sydney Airport also compared this limited bus service to major airports in Britain, highlighting, for example, that Heathrow Airport which receives 183 000 passengers per day and is served by 29 bus routes. The provision of bus services to the Sydney airport is constrained by the state government's agreement with Airport Link.

Table 12.1 **Bus routes serving Sydney urban centres**

Urban centre	*No. of people*	*No. of bus routes*
Sydney Airport[a]	140 000	1
Macquarie Park[b]	65 200	24
Randwick[b]	52 160	20
North Sydney	49 000	62
St Leonards	25 100	28
Chatswood	23 000	32
Hurstville	12 900	18
Bankstown	10 200	25
Bondi Junction	9 800	28
Burwood	9 500	22
Kogarah	9 500	14

a Passengers, meeters and greeters and employees. **b** employees and university students.

Source: Sydney Airport, sub. 46.

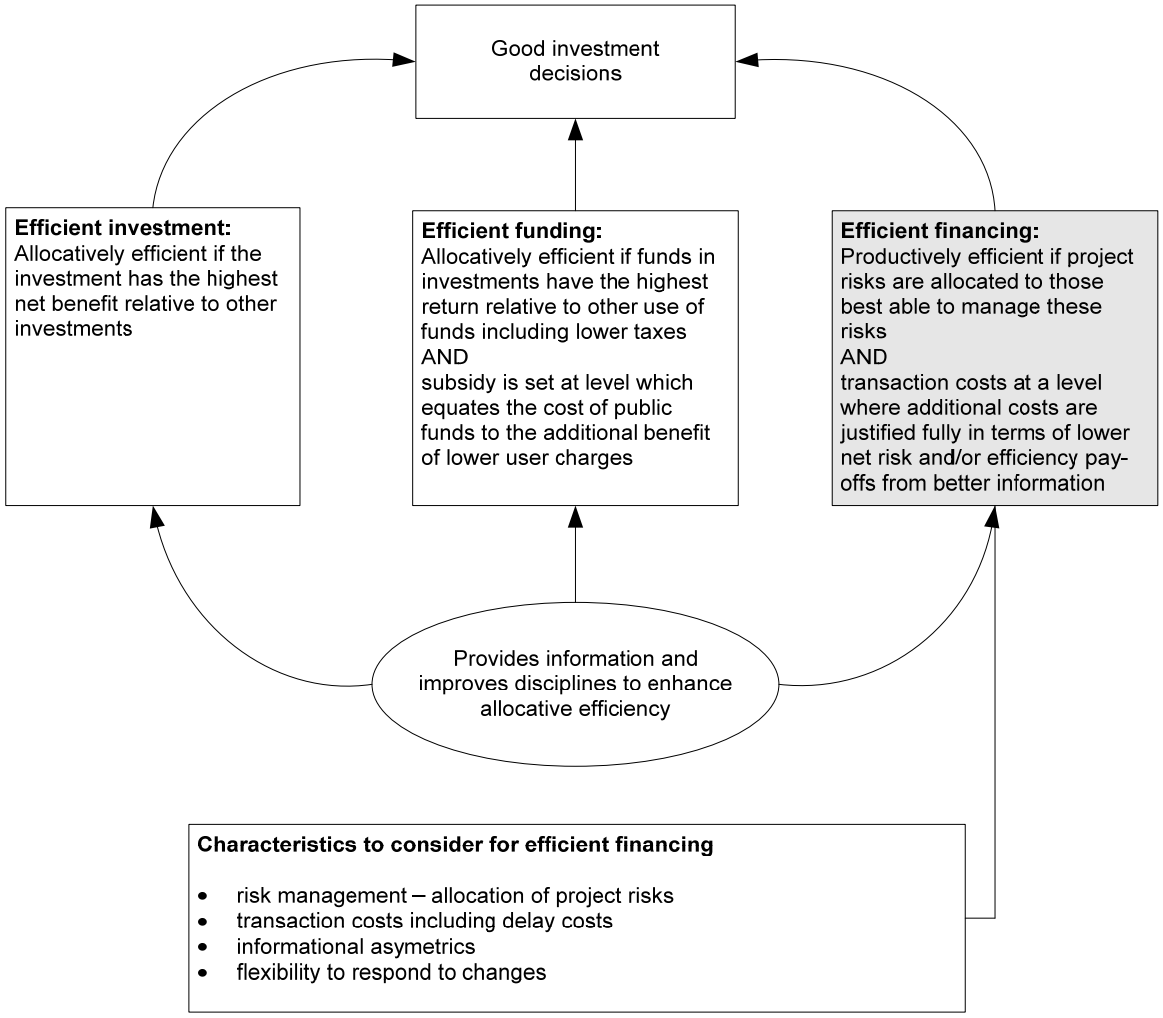
Some state governments have chosen not to explicitly subsidise public transport services run by private companies, instead favouring public-private partnerships (PPPs) for large infrastructure projects, such as Sydney's Airport link service. While PPPs have advantages, a desire to avoid 'going into debt' is one reason such governments have taken this financing approach. There may be some merit in governments disciplining their budgetary policy by seeking to limit debt financing. However, one adverse effect is that infrastructure (for which there may well be a valid economic efficiency argument for a subsidy) may not receive appropriate funding. Alternatively, if funded through a PPP arrangement, that arrangement may result in prices set above an efficient level and/or overall mass transport services limited (through restrictions on rival services) to ensure profitability.

In the case of Sydney's Airport link, it might be determined that reducing the station access fee would reduce the level of government expenditure needed on improving roads or bring other (non-market) benefits. If these were sufficiently significant, it may be cost effective for the state government to either subsidise the station access fee or 'buy out' the station operator, and run services at or near the normal suburban

rail price. The former NSW Labor government estimated the cost at $40 million per annum to abolish the station access fee for users of the two on-airport train stations (Saulwick 2011). Similarly, to address the constraint on bus services embodied in the agreement with Airport Link, the government could negotiate with the company to relax these restrictions or 'buy out' the service — making some of the 'off-book' cost more transparent.

A recent Commission staff working paper examined the provision of public infrastructure and the interrelated activities of investment, funding and financing of such infrastructure (Chan et al. 2009). The paper outlines efficiency considerations of good investment decisions (figure 12.1). The Commission suggests that these principles should be applied in undertaking future infrastructure investments regarding the most appropriate solution to Sydney's (and other airports) current land transport access infrastructure problems.

Figure 12.1 **Efficiency considerations of good investment decisions**



Source: Chan et al. (2009).

Land access to other major airports

The critical assessment of transport infrastructure is not isolated to Sydney, as Infrastructure Partnerships Australia (IPA) noted:

> … provision of land transport infrastructure by government (mainly state governments) has not met demand. At many of Australia's major airports, there is a need for additional road infrastructure for private and freight vehicles or public transport services for passengers. While the specific circumstances will vary from airport to airport, and from state to state, the general national trend is that investments by state governments in land transport infrastructure to and from airports have not kept pace with the demand from the community to access the airport infrastructure that has been constructed by airports. (sub 36, p. 2)

In Brisbane, for example, the roads around the airport are congested with airport and non-airport related traffic, although recent investment in roads should moderate this congestion. Brisbane City Council stated:

> The airport land is directly connected to major arterial transport routes to the north and south. Road access to the airport from the city centre is severely congested, particularly at peak travel times. Significant road investments being undertaken by State and Local Government are expected to resolve this issue. (sub. 42, p. 3)

Similarly, congestion is also a problem around Perth, as Perth Airport highlighted:

> … the arterial roads in the vicinity of Perth Airport have become badly congested during the traditional morning and afternoon commuter peaks, noting this is not unique to the roads in the vicinity of Perth Airport, nor to the city of Perth.
>
> … Congestion on the Tonkin and Leach Highways during the urban commuter peaks has made it very difficult to access the airport. (sub. 41, p. 105)

Queensland Airport Limited — who own Gold Coast, Mount Isa and Townsville airports — acknowledged that both aeronautical and non-aeronautical developments on airport land has placed pressure on the existing road infrastructure:

> There have been some examples where rapid development of aeronautical and non-aeronautical development on airports has caused short term traffic congestion. In most cases long term solutions are being put in place. (sub. 67, p. 13)

Information request: The Commission is seeking views about the adequacy of communication between airports and the tiers of governments in relation to the provision of information such as estimated traffic volumes, travel time projections and other key performance indicators relevant to current and future efficiency of access to airports.

At Brisbane airport, there are also limited mass transport services due to anti-competitive restrictions on competing bus services in the government contract with AirTrain. Brisbane City Council outlined the nature of the restrictions:

> Public transport accessibility has been constrained by agreements restricting operating hours for the AirTrain and limiting public bus access to the airport.
>
> … under the agreement with AirTrain and Queensland Transport, Brisbane City Council is not permitted to operate a bus service within 1 kilometre of AirTrain stations until 2014. (sub. 42, p. 8)

To improve the usefulness of public bus services to the airport, Brisbane Airport funds a range of shuttle services on airport land:

> BAC [Brisbane Airport Corporation] funds the staff bus, the terminal shuttle, the Airport Village bus and any infrastructure required to facilitate the operation of public bus services within the airport boundaries (e.g. bus stops). (sub. 40, p. 27)

Brisbane City Council also contended that the low patronage on the rail link is because 'prices have been kept high to provide a return on investment for the financiers of Airtrain (sub. 42, p. 6).

DRAFT FINDING 12.1

While ground transport access issues, such as congestion, arise in most major city airports to varying degrees, they seem to be most extreme in and around Sydney airport.

DRAFT FINDING 12.2

When entering into public-private partnerships, governments need to consider carefully restrictive competitive arrangements that aim to ensure profitability for the private provider. Locking in such arrangements, especially for extended periods, may lead to inefficient transport outcomes.

12.2 Coordination of planning systems

Historically, planning on airports and surrounding land has not been well coordinated and integrated. As Commonwealth Government leased airports are regulated under the *Airports Act 1996* (Cwlth), planning and development decisions fall under Commonwealth law. From its inception, the Airports Act (s 112) explicitly set aside state and local government laws.[1] As such, Australian

[1] And since 2007, Commonwealth planning laws, which apply to designated areas in ACT, ceased to apply to the Canberra Airport (s 112A).

Government leased airports are not subject to the planning and development laws of the states and territories, or the land use plans of local councils. In contrast, areas surrounding airports are subject to state/territory or local government planning laws.

This disjunction in planning responsibilities could in theory promote two distinct types of problems.

First, airports might not give as much weight to the impacts of on-airport developments on surrounding areas as would the governments in those areas. A number of state, territory and local governments as well as community groups have raised concerns about some non-aeronautical developments on airports. These concerns have included increased traffic on local roads and the inadequate planning and provision of connecting ground transport infrastructure (DITRDLG 2009a). However, airports do not necessarily subscribe to these criticisms (box 12.1).

Second, governments in surrounding areas might not see the airports as their 'responsibility' and might thus give less weight to their needs. The TTF argued, for example, that the lack of funding for transport infrastructure around airports stemmed from a view that any such investment would support private commercial aviation interests (sub. 53, p. 6).

Recognising the disjunction between Australian and state government planning laws, the Australian Government amended the Airports Act in December 2010. The amendments require airport Master Plans to include:

- a ground transport plan which shows how the airport's facilities connect with the surrounding road and public transport system (box 12.2)
- additional detail on proposed use of land including information on planned non-aeronautical developments
- detailed analysis on how the plan aligns with state, territory and local government planning laws, as well as a justification for any inconsistencies
- information on the number of jobs likely to be created, anticipated traffic flows, and the airport's assessment of the potential impacts on the local and regional economy and community.

Box 12.1 **Transport planning coordination tensions**

A number of local governments claim that on airport developments have created road congestion and increased infrastructure requirement.

The City of South Perth has noted the traffic issues arising around Perth Airport and blamed the growth in industrial and transportation industries on the airport land:

> One of the major problems associated with access to and from the Perth Airport has been traffic issues emanating from the significant growth in industrial and transportation industries within the grounds of the airport on Commonwealth land.
>
> … virtually no improvements have been made to these highways to match the huge increase in industrial (and office and service) traffic located within airport land. (sub. 30, p. 3.)

While these highways will be upgraded as part of the Gateway WA project (box 12.5), the City of South Perth claims that this should have occurred earlier with financial contributions from Perth Airport.

The South West Group also complained that non-aeronautical development on Perth Airport 'proceed without a contribution to resolving the traffic and transport impacts generated by that development'. South West Group specifically highlighted the warehouses and distribution centres on the airport:

> Perth Airport is an example of where major investment in warehouses and distribution centres created congestion at all adjoining road intersections. (sub. 24, p. 2)

In relation to Jandakot Airport, in Western Australia, the City of Melville highlighted the scale and intensity of non-aeronautical developments and the flow-on impacts to traffic (sub. 25).

Similarly, Brisbane City Council noted that airport developments 'can require substantial upgrades to city wide infrastructure' (sub. 42, p. 5).

Many airports claimed, on the other hand, to have consulted and taken into account transport linkages in their planning:

> … the commercial developments at Brisbane Airport have not impeded effective transport linkages. To the contrary, BAC [Brisbane Airport Corporation] takes a holistic view in its planning, with transport linkages being an integral component of the overall planning process. (sub. 40, p. 55)
>
> … [Adelaide Airport] recognises the potential impact on external road systems of both the growth in aeronautical activity and commercial developments taking place on airport land. AAL [Adelaide Airport] liaises closely with both State and Local Government on these matters through the Master Plan and Major Development Plan requirements of the Airport Act as well as various consultative committees … (sub. 12, p. 12)
>
> Unfortunately, informed consideration of on-airport land development has been clouded by unrepresentative and emotional debates about "big-box" retail at other airports and the BGC Brickworks at Perth Airport. The adverse perceptions of on-airport development are often encouraged by vested interests that would prefer not to have the competitive threat of alternative/additional development sites. (sub. 41, p. 101)

Box 12.2 **Additional ground transport regulatory requirements**

For the first 5 years of the master plan, airports are now required to provide detailed information on a ground transport system on the landside of the airport, including:

- a road network plan
- facilities for moving people and freight
- linkages between the facilities, the road network and public transport system at and outside the airport
- arrangements with state or local authorities or other bodies responsible for the road network and public transport system
- the capacity of the ground transport system
- likely effects of the proposed development on the ground transport system and traffic flows at and surrounding the airport.

All capital city regular passenger transport airports are required to establish and maintain planning coordination forums. These forums meet a number of times a year to discuss planning issues on- and off- airport that affect the airport. This provides state, territory and local governments with the opportunity to influence airport planning decisions outside of the master plan and major development plan processes.

Source: *Airports Amendment Act 2010* (Cwlth) explanatory memorandum.

These changes aim to better align airport planning with state, territory and local government planning, with particular attention to improving transport planning. A key aspect is to increase the level of consultation. Planning Coordination Forums for the main Australian Government leased airports have been established. These bring together the three levels of government on issues associated with master plans, development proposals and regional planning initiatives. Prior to this, there was no general requirement for airports to consult regularly and widely with state, territory and local governments on planning issues.

Airports differ on the likely impact of these changes. Melbourne Airport, for example, claimed that the recent legislative changes will be 'formalising existing networks and processes to facilitate two way communications between key stakeholders.' (sub. 29, p. 40). Other airports believed that the changes will make a difference. Perth Airport, for example, stated that 'both the Federal and WA Governments have taken very decisive steps to cause improved integration of Perth Airport planning and urban planning' (sub. 41, p. 113).

A number of local governments have welcomed the changes. Brisbane City Council, for example, contended that the new measures strengthen consultation with

relevant government stakeholders and address some of the concerns raised in the past (sub. 42, p. 5).

In its study for the TTF, Booz & Company stated:

> Although the previous airport governance framework (i.e. Airports Act 1996) did not prescribe land transport planning forums between airports and state/territory governments, some airports have built strong working relationships with state/territory governments. However, without formal or legislated land transport planning requirements (i.e. land transport plans and forums), airport land transport lacked the focus it deserves. (sub. 53, Attachment, p. 12)

As these changes were only enacted in legislation very recently, it is too early to assess their effectiveness. However, the Commission notes that if these mechanisms are successfully implemented, they should go some way to reducing the types of problems that arose in the past. For the present, the Commission considers it prudent to allow the recent changes to take their course. One area of concern may be the number of forums, working groups and government agencies looking into similar and overlapping areas (box 12.3). It is important the initiatives of these groups are implemented in a directed but coordinated manner to bring about change that represents a net benefit.

If these recent legislative changes prove insufficient to deal adequately with some of the problems identified, further reforms could be considered. One possibility would be to enact more stringent requirements for airport plans to align with state and local government planning laws. At the extreme, planning powers over on-airport developments could be transferred to state or local governments. Brisbane City Council, for example, proposed that non-aeronautical development should be required to meet the 'same local compliance conditions as imposed on other competing developments of a similar nature on non-airport land' (sub. 42, p. 6).

Of course, such measures could bring their own risks and costs. For example, state and local planning processes are themselves not always ideal, and there could be a risk that national considerations may be given insufficient weight in local decisions. The Commission's 2011 *Zoning, Planning and Development Assessments Benchmarking* report found that development approved by local or state authorities in proximity to Commonwealth land does not always take account of the uses of that Commonwealth land. It cited the example of the proposed Brisbane airport runway being re-located twice to accommodate noise impacts on existing communities. The result was a greater land buffer around the airport to ensure a balance between residential amenity and the airport remaining curfew-free. However, development approval by local or state governments has subsequently

been given in these buffer zones (after re-zoning), potentially reducing the benefits of the runway relocations (PC 2011a).

Box 12.3 **Just how many forums are there?**

There are a number of forums, working groups and government department and agencies that are working on issues related to airports and aviation, some with a planning and transport focus:

- *Community Aviation Consultation Groups:* aim to establish effective and open discussion of airport operations and their impacts on nearby communities.
- *Planning Coordination Forums*: aim to support a strategic dialogue between the airport operators and senior local, state and Australian government authorities responsible for town planning and infrastructure investment.
- *National Airports Safeguarding Advisory Group*: comprising high-level Australian, state and territory government transport and planning officials with the aim of developing a national land use planning regime to apply near airports and under flight paths.
- *Aviation Capacity for the Sydney Region Study:* a joint study, between the Australian and New South Wales Government, examining the short- and long-term aviation infrastructure and supporting land transport requirements of the Sydney region, and identify strategies and locations to meet future needs.
- *Major Cities Unit (Department of Infrastructure)*: provides advice to the Australian Government on issues of policy, planning and infrastructure that have an impact on Australian cities and suburbs.
- *Infrastructure Australia*: assists governments to develop a strategic blueprint to remove infrastructure bottlenecks and to modernise infrastructure.

Through the consultation process for the recent legislative changes, the Australian Government examined the possibility of state and territory government planning laws applying to airports but with the relevant Australian Government Minister retaining the final decision making authority. In assessing the various options, the Australian Government rejected this option as it would impose additional compliance costs on airports (and governments) (*Airports Amendment Bill 2010* (Cwlth) (Explanatory Memorandum)).

Fundamental changes to planning laws governing airports may raise issues of compensation to airport owners who effectively find their property rights altered by such reforms. The pros and cons of such reform options, therefore, would need to be carefully considered.

The recent changes to master plan requirements and the introduction of the consultative forums should be allowed to take their course before other policy options are considered. The efficacy of these measures should be reviewed in 2015.

12.3 Funding of transport infrastructure

Aligned with a need to ensure that planning processes are properly coordinated is the issue of which entity or entities should fund new infrastructure and services to provide land access to airports.

The primary responsibility for providing and funding ground transport infrastructure rests with the state and territory governments (table 12.2). State and territory funds are, nonetheless, scarce, with many competing interests vying for state government funding (for example education and healthcare) — transport infrastructure and services to the airport is merely one of the many competing needs. The Australian Government also plays a role in funding road infrastructure through Infrastructure Australia and other programs (box 12.4).

Table 12.2 **Land transport funding responsibilities**

Australian Government	*State Government*	*Local Government*
rail (shared) national & local roads (shared)	rail (shared) urban, rural & local roads (shared) public transport	local roads (shared)

Source: Infrastructure Australia (2008).

While the state of the road infrastructure to Australian airports appears deficient in some cases, the Australian, state and territory governments have made some recent commitments to fund projects that have or will improve road access to airports (table 12.3). One project of major significance is the Gateway WA project in Western Australia (box 12.5).

Box 12.4 Commonwealth Government funding of roads and infrastructure

Infrastructure Australia

Infrastructure Australia provides advice to the Australian Government on requests for funding from the Building Australia Fund (BAF). Such requests typically relate to infrastructure projects in the transport, communications, energy and water sectors. It is required to assess the proposed projects against the BAF evaluation criteria which, in summary, require a consideration of:

- the extent to which projects address national infrastructure priorities
- the extent to which proposals are justified by evidence and data
- the extent of efficiency and co-investment
- the extent to which efficient planning and implementation has occurred.

Nation Building Program

The following programs represent Australian Government funding under the Nation Building Program. Additional funding assistance is also offered for local roads.

- National Projects: target high priority projects which will deliver national benefits.
- Off-Network Projects: provides funds to state, territory and local governments for road, rail and intermodal projects not situated on the national network.
- Roads to Recovery: addresses the problem of local roads reaching the end of their economic life, and their replacement being beyond the capacity of local government.
- Black Spots: aims to improve the physical condition or management of hazardous locations with a history of crashes involving death or serious injury.
- Innovation and Research: provides funding for land transport research, intelligent transport initiatives and corridor studies.
- Heavy Vehicle Safety and Productivity Program: delivers improved safety and productivity outcomes for the heavy vehicle industry.
- Boom Gates for Rail Crossings Program: funds the installation of boom gates and other active rail crossing control mechanisms at high risk level crossings throughout Australia.

Regional Infrastructure Fund

The Regional Infrastructure Fund provides Australian Government funding for rail, road, and port infrastructure projects with potential partner funding from states, private investors and/or local governments.

Sources: PC (2011a); DIT (2011).

Table 12.3 **Road funding near airports**

Project	*Airport*	*Cost*	*Cwlth contribution*	*Completion*
		($m)	($m)	
Main South, Victor Harbor, Seaford Rds	Adelaide	12.0	3.5	2010
Monaro Highway duplication	Canberra	18.5	18.5	2012
Road Upgrade in Canberra Airport Precinct	Canberra	11.5	11.5	2012
Western Ring Rd Upgrade	Melbourne	980.0	789.0	2014
Majura Parkway	Canberra	288	144	2016
Feasibility Study for the M5 East Transport Corridor (urban congestion)	Sydney	15.0	5.0	Planning
Gateway WA Perth Airport & Freight Access	Perth	600.0	480.0	Planning

Sources: DIT (2011); Albanese (2011b).

Box 12.5 **The Gateway WA project**

On 1 May 2008, Perth airport released a $1 billion future investment plan, which among other things, stated that the domestic terminal would be consolidated with the existing international terminal at the other side of the airport precinct. Not only was this a significant development for the airport, but it was also going to have a major effect on the existing road network surrounding the airport.

Perth airport is located within close proximity of a freight rail line and the port of Fremantle. In light of these factors, coupled with Perth airport's announcement, the state government (through the Department of Main Roads) undertook a preliminary planning study to define the scope of the road works that would be required to facilitate the forecast traffic growth. The Department found that the:

- Kewdale, Forrestfield and Perth airport precinct is a critical gateway for the effective movement of freight and people
- consolidation of the airport terminals will require a major upgrade of the roads around the airport, including a new access point to the consolidated terminal area
- port of Fremantle handles 39 per cent of the State's imports and 16 per cent of its exports and that container trade is expected to double between 2005 and 2030
- development of the industrial area adjacent to Perth airport has increased freight traffic.

The estimated cost to complete the substantial road works was $600 million, of which Infrastructure Australia was to provide around $400 million, with the state government to provide the remaining $200 million.

In July 2010, a $6.85 million contract was awarded consultants to undertake an 18 month planning study for the project.

Construction is expected to commence in 2012-13 and is due for completion prior to the opening of the consolidated airport terminal.

Sources: Perth airport (2008), Department of Main Roads WA (2011).

In recent years, the Australian Government has also played a greater role in the strategic oversight of policy issues relating to Australian cities, including increasing the coordination between all levels of government. The Major Cities Unit, for example, provides advice to the Australian Government on issues of policy, planning and infrastructure that have an impact on cities and suburbs. In addition, Council of Australian Governments (COAG) has agreed that state and territory governments will have in place capital city strategic planning systems that meet new national criteria by January 2012. Of particular interest to this inquiry is the requirement of state and territory governments to provide nationally-significant economic infrastructure including transport corridors, international gateways and intermodal connections (criteria 3).

Furthermore, the Australian and New South Wales governments are currently working together on a joint study on aviation capacity for the Sydney region. While the joint study will consider aviation infrastructure needs, it will also focus on supporting land transport requirements of the Sydney region, and identify strategies to meet future needs. This study is expected to report in the second half of 2011.

Role of airports in funding infrastructure

Airport leases impose a general obligation on airport operators to continue to maintain their infrastructure at a standard expected of an airport in Australia (chapter 3). This includes the terminal access roads and facilities in landside areas.

As well as being responsible for funding on-airport infrastructure, airports have sometimes also made contributions to infrastructure outside the boundaries. For example, Canberra and Adelaide airports have provided funding contributions towards traffics studies and road upgrades near the airport, and Brisbane Airport has provided resources in the form of land. Brisbane Airport has contributed the land corridor across the airport for the Gateway Motorway in exchange for the Queensland state government funding the interchange access to the airport:

> BAC [Brisbane Airport Corporation] has contributed the land corridor across the airport for the duplication of the Gateway Motorway. In return for this contribution, the Queensland State Government funded the Gateway Motorway Northern Interchange, which provides access to the airport from the motorway. (sub. 40, p. 35)

Some airports believe that this type of funding is beyond their legal requirements with governments having the responsibility for the funding of infrastructure. For example, Canberra Airport noted that:

> … ultimately, responsibility for the design and implementation of sufficient transport links for a city rests with the relevant Local and State Governments. (sub. 50, p. 19)

Canberra Airport also argued that if it had not financed recent road upgrades around the airport, in partnership with the ACT government, the development would not have occurred:

> The point is this – if Canberra Airport had not undertaken to carry that construction risk and had not pushed hard for the development of these infrastructure links between Canberra City and the Airport, it was unlikely that those roads would ever have been developed. (sub 50, p. 19)

Like Canberra Airport, Adelaide Airport believed its financial obligations end at the airport boundary:

> AAL [Adelaide Airport] does not believe that it should be liable for road works beyond those needed to address the immediate impacts of the Airport along its boundaries. (sub. 12, p.12)

Despite this, Adelaide Airport has assisted the state government planning process by partially or fully funding a number traffic studies. In addition, it has also 'wholly managed and funded major intersection work outside the airports boundaries where the need for this has arisen from the impact of urban infill growth and airport activities' — at the request of the local government (sub. 12, p. 12).

The South Australian Government argued that the airport's obligation does extend beyond the airport land:

> The government expects AAL [Adelaide Airport] to either fund the traffic investigations required to enable the government to adjust its five year traffic forecasts or, in some cases, undertake them cooperatively with the government. Similarly, the government expects the cost of road infrastructure improvements required to support non-aeronautical commercial development on airport land to be borne by AAL or its developer rather than the general community. In this regard, the government recognises that AAL has already funded traffic light controlled access and left in/left out accesses at both Adelaide and Parafield Airports. (sub. 58, p. 4)

Similarly, local councils participants also believe airports should provide funding for infrastructure outside the airport boundaries through developer contributions (box 12.6).

Developer contributions

Developer contributions are upfront contributions (such as financial payments, work-in-kind or the transfer of land) to the local or state governments, for new or upgraded infrastructure (such as roads or drainage) required as a direct result of a new development. In Australia, the use of developer contributions has been common practice for over 50 years with the trend towards these contributions covering an increasing range of urban infrastructure (Chan et al. 2009).

Box 12.6 Local government calls for developer contributions from Commonwealth leased airports

A number of local governments have submitted that airports should provide financial contributions towards the cost of infrastructure upgrades near airports, particularly if they are required as a result of non-aeronautical development.

The Australian Mayoral Aviation Council believed there should be a sharing of the land access infrastructure costs, including public transport, between governments and airports:

> In order to address landside issues and the dearth of viable public transport alternatives in Sydney, all tiers of Government together with air and sea port operators need to be active at a senior level in developing an integrated land transport plan. The cost of implementation should be appropriately apportioned. (sub. 5, p. 7)

Similarly, South West Group noted:

> … Airport operators should be obliged to contribute to all infrastructure upgrades beyond their boundaries arising from transport demand particularly that emanating from non-aviation development. (sub. 24, p. 3)

City of South Perth claimed that as the traffic problems emanate from the growth in non-aeronautical development, Perth Airport should have made a contribution to the funding of the planned upgrade of roads surrounding the airport at the time of the development:

> Developer contributions in the form of a Highway upgrading levy should have been imposed on all new developments within the Perth Airport precinct to pay for the cost of improvement. (sub. 30, p.2)

Council of Capital City Lord Mayors (CCCLM) welcomed the recent planning changes to the *Airports Act* but considered that funding of infrastructure (not just transport) was an unaddressed issue:

> … the CCCLM would like to raise the issue of funding for the provision of infrastructure that may be required to support future development at airports. For example, a large development at a major airport may not only generate the need for the development of transport infrastructure, but also impact on things such as water and sewerage provision. (sub. 28, p. 1)

In regards to Jandakot Airport, the City of Melville believed that airport should be in involved in the planning, governance and financing of infrastructure:

> … airports should participate in the strategic planning, governance and financial regimes necessary to establishing and maintaining the increasingly complex and costly infrastructure associated with the establishment of new, major metropolitan centres. (sub. 25, p. 2)

Brisbane City Council noted that on airport developments are at an advantage as they are not required to pay developer contributions:

> … developments such as retail warehousing on Brisbane airport land are advantaged over other retail developments across the rest of the city … [as] [t]hey do not attract an infrastructure charge which would normally be required as a contribution to the additional infrastructure enhancements required to service the additional demand (e.g. additional users of the road network). (sub. 42, p.5)

Developer contributions are generally required as a condition of receiving planning approval from state, territory or local governments. Currently there is no legal basis for state and territory governments to mandate development charges on airports as the Airports Act explicitly sets aside state and local government laws. However, as discussed above, a number of airports have made contributions to infrastructure or undertaken traffic studies in partnership with the relevant government.

Efficient and equitable charging regimes for different types of infrastructure were discussed at length in the Commission's 2004 inquiry into *First Home Ownership.* Key findings from that inquiry included that:

- upfront developer charges were most appropriate where the associated infrastructure was used to service a specific development or location rather than being shared among the broader community
- where the upgrades to infrastructure in well-established areas provide comparable benefits to users (such as airport and non-airport related traffic), it would, in principle, be better funded out of borrowings and recovered through rates or taxes (PC 2004).

The application of a user pays approach to the upgrade of major infrastructure, where the benefits are not equally shared, is less straightforward as it requires apportioning of the benefits of any investment (in roads, for example) between those accessing on-airport development relative to other broader community uses.

The Commission's 2011 Benchmarking Studying into *Planning, Zoning and Development Assessment* compared the state and territory framework for developer contributions (PC 2011a). The study highlighted a number of findings.

First, it found that each jurisdiction's approach to determining the infrastructure eligible for developer contributions differed. Legislation in New South Wales and Queensland allows contributions to be levied for a wide range of infrastructure such as public transport, child care centres, libraries, community centres, recreation facilities and sports grounds. In contrast, South Australia confines its contribution to provisions for open space, access roads and hydraulic connections and car parking (where onsite provision is not available). Victoria, South Australia and Tasmania use a flexible arrangement whereby the amount of contribution and uses to which it may be put are negotiated. In the ACT — where a betterment tax applies instead of developer contributions — revenue generated by its betterment tax go to consolidated revenue and can be used to finance any infrastructure or objective.

Second, the study found that developer contributions were applied in different ways across jurisdictions. Contributions could include:

- levies — calculated either per lot, hectare or dwelling or as a proportion of development value depending on the location and type of development
- impact fees — which recognise the actual impact of the proposal on particular local infrastructure or amenities (typically for infill developments).

And third, the benchmarking study highlighted that industry and developers had concerns with the level of contributions and the nexus with the development, how contributions were calculated, and recent increases in developer contributions (box 12.7).

At face value, there appears to be an apparent imbalance in the requirements, with a potential competitive advantage conferred to development on airport land. However, the issue of investment in and funding of public infrastructure is complex and not straightforward. Consequently, the most appropriate action may not be to simply require airports to pay developer contributions for land transport infrastructure (such as arterial roads) when undertaking development on airport land.

Information request: The Commission seeks views on whether an airport should contribute to the cost of infrastructure outside its boundary as a result of future on-airport non-aeronautical development.

If funding is viewed as necessary, the Commission also requests information regarding:

- *the basis for funding such infrastructure including the benefits*
- *the form of funding (such as upfront financial contributions, rate payments or land transfers)*
- *the method of calculating contributions and how the contributions would relate to existing developer charges levied by local governments*
- *how such funding would align with the conditions under which airport leases were granted.*

Box 12.7 Some concerns regarding developer contributions in the broader community

In the Commission's study into planning, zoning and development assessments a number of participants raised concerns regarding the reliance of local governments on developer contributions to fund infrastructure. In regard to retail development, Woolworths had concerns regarding the increase in infrastructure charges in recent years, particularly in Queensland:

> … infrastructure charges for a neighbourhood shopping centre in an inner Brisbane suburb have increased from approximately $285 000 in 2005/2006 to $2 790 000 in 2009/2010. Increases of this magnitude have taken Queensland from being, on average, the most economical State from an infrastructure charges/contributions point of view to being the most expensive where it is now significantly more expensive (on average) than all other States. (PC (2011a), sub. 65, p. 11)

Woolworths also had concerns regarding how these charges are set:

> … there is currently little or no clarity as to the how these infrastructure charges/contributions are levied by Councils. This means that similar Woolworths' developments have been subject to somewhat varied infrastructure charges — not just in different states but also within the same local government areas. For example, it is estimated that in the case of supermarket based infrastructure charges/contributions across Australia [these] range from $260/100m2 of gross lettable area (GLA) to $75 000/100m2 of GLA. (PC (2011a), sub. 65, p. 11)

The Housing Industry Association summarised the situation where the jurisdictions charge for a wider range of developer contributions in the following terms:

> Although state and local governments have sought to justify development charges as 'user charges', increasingly new residential development has been called upon to carry the cost of community infrastructure the benefits of which are consumed across the broader community and may not accrue to the same individuals who bear the cost of the development charges. In such circumstances, the development charges are more akin to a tax on development as distinct from a user charge. (PC (2011a), sub. 42, p. 35)

Similarly, the Urban Taskforce Australia focused on the situation in New South Wales and the incentives created by regulated council rates in that jurisdiction:

> Local councils are being asked to do more with less funding, and councils across the state are being forced to make some very hard decisions when it comes to service and infrastructure provision. Without appropriate funding, local councils are either forced to leave existing infrastructure to deteriorate, not provide additional services and/or facilities or seek an alternative source of revenue.
>
> Finding an alternative source of funding has been the preferred option of local councils and unfortunately, the preferred vehicle has been development levies. (PC (2011a) sub. 59, p. 94)

The South Australian branch of the Urban Development Institute of Australia noted:

> [South Australia's] [l]ocal planning authorities typically negotiate additional developer contributions during the development assessment process. This means a high level of uncertainty is experienced by both parties to these negotiations. (PC (2011), sub. 53, p. 11)

Source: PC (2011a), pp. 208–209.

13 Other matters

Key points

- Airlines have raised concerns about the conduct of rural and regional airports. Local councils' airport charging practices differ across regions, depending on geographic and market circumstances.
  - If local councils wish to pursue broader community objectives — such as increasing tourism — this should be done through transparent funding arrangements, rather than distorting airport charges.
- General aviation activities, such as charter flights and pilot training, are being 'priced out' of major airports — continuing a trend that has been evident for around 60 years.
  - The Australian Government should consider the role of general aviation in any proposal to change the lease conditions at secondary airports.
- Under the current 'user pays' system, per passenger aviation security charges are lower at airports with higher passenger volumes.
  - To justify a change to a uniform (or network) price involving cross-subsidisation, identification of the benefits (and their magnitude) to the broader community from aviation security would be required.
  - State or territory governments concerned about the affect these security charges have on inbound tourism are able to subsidise such charges directly.
- Aircraft noise imposes costs on residents near airports. Curfews are a blunt policy for addressing noise costs, and given improvements in aircraft technology, performance-based restrictions could improve overall community welfare.
  - Airport efficiency might be improved if unused slots reserved for regional airlines could be leased to non-regional users.
- Some airports charge a fuel throughput levy in addition to the land rent charged for refuelling facilities. Airlines consider fuel throughput levies unfair, but these levies can represent a sharing of risk between airports and airlines, and there is little evidence to indicate charging throughput levies are an abuse of market power.

During this inquiry, matters have been raised with the Commission that, while not strictly covered by the terms of reference, are relevant to Australia's broader aviation framework. This chapter considers such matters, including:

- pricing and conduct at rural and regional airports

- general aviation at major capital city airports
- aviation security charges across Australia's airport network
- airport noise issues, curfews and the Sydney airport runway movement cap
- aircraft refuelling facilities and charges.

13.1 Conduct of rural and regional airports

As noted in chapter 1, Australians are served by a wide range of airports. Besides the major capital city airports (which are the focus of this inquiry), there are many smaller airports providing an important link for more remote communities in rural and regional Australia. Indeed, the Australian Government highlighted the role of such airports in the Aviation White Paper, stating that:

> Airports and aerodromes are a critical part of the transport infrastructure of regional and remote Australia, often providing the only means of reliable year round transport to other centres and cities. Without them, many Australians and local economies, already disadvantaged by distances from major markets, would be denied access to essential goods and services. (DITRDLG 2009a, p. 24)

Regional, local, rural and remote airports (hereafter collectively referred to as 'regional airports') provide the local (and sometimes surrounding) community with access to major regional centres and capital cities. This can allow residents to access education, medical and other services not provided locally, as well as facilitating out-bound tourism. Regional airports also allow for medical or other specialists to provide services in remote locations on a fly-in/fly-out basis, without having to have a permanent presence. It allows for the movement of skilled labour for particular purposes (such as mining), as well as the inward movement of goods and tourism to regional and remote areas of Australia.

Recognising this importance, the Australian Government supports regional air services, even where some of those services may not be commercially viable (Australian Government 2009, p. 53). For example, the Aviation White Paper suggests that by the end of 2013 the Government will have provided:

- $44.7 million as part of the Remote Air Services Scheme
- $20 million for remote aerodromes and services through the Remote Aerodrome Safety Program
- $3 million to begin the process of updating remote airstrips through the Remote Aviation Infrastructure Fund.

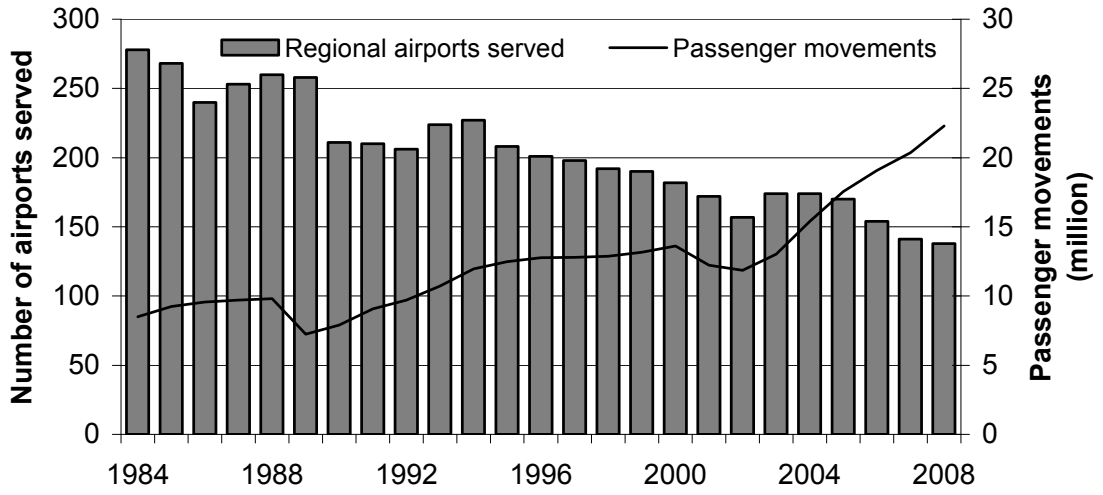
Additionally, the Government provided nearly $2 billion of untied funding to local councils in 2009-10, as well as allocated some of the separate $1 billion of local community infrastructure funding to airport-related projects (DITRDLG 2009a, pp. 24, 54).

The changing landscape

Since 1958, the Australian Government has gradually sold its regional airports to local council authorities under the Aerodrome Local Ownership Plan. Local councils acquired their airports under a freehold agreement with the Government, rather than a long-term lease. During the transfer period, each local council was eligible for financial assistance from the Government, with an equal split for both maintenance and approved development. The Government finalised the transfer of all regional airports by 1993. Subsequently, some airports have been sold to private (that is, non-government) owners, the largest being Cairns airport in 2009.

There have been changes to the number of regional airports in operation, the number of passengers flying on regional routes, the number of airlines flying to regional airports and the nature of the flights taken from regional airports. While the number of regional airports receiving passenger services halved from approximately 280 in 1984 to 140 in 2008, passenger numbers on regional routes nearly tripled (figure 13.1).

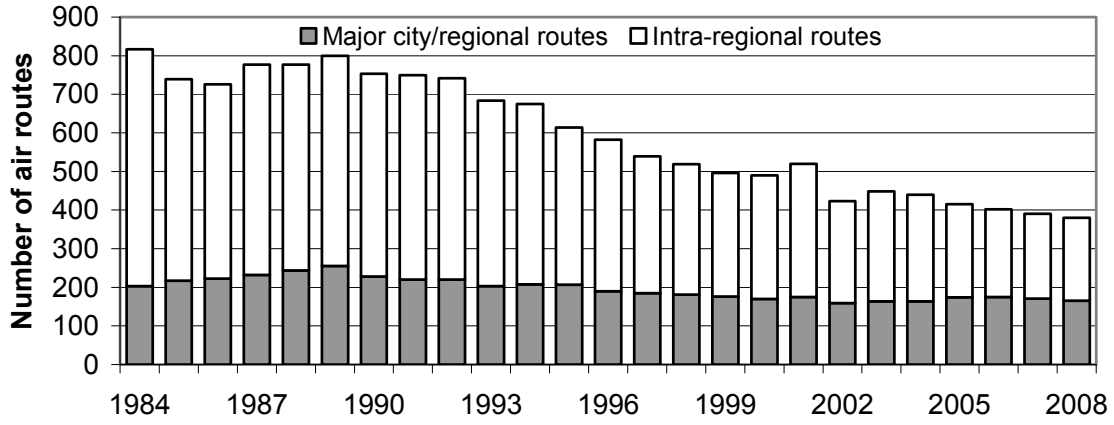
Figure 13.1 **Passenger movements at regional airports and number of regional airports served, 1984 to 2008**



Data source: BITRE (2009).

Over that same period, the number of regional air routes has approximately halved, with most of this decline being air routes between regional centres (figure 13.2). However, the number of services between regional centres and capital cities has remained relatively stable over the period.

Figure 13.2 **Regional air routes, 1984 to 2008**



Data source: BITRE (2009).

Concerns about the conduct of regional airports

Several airlines raised concerns about the conduct and operation of regional airports. These concerns largely echoed complaints made about the major capital city airports (with similar solutions often proposed for both groups of airports). Much like for their larger counterparts, airlines argued that regional airports have market power, and misuse that power through:

- inappropriate pricing of services and revaluation of assets, including over-recovery of investment and 'unjustified increases' in prices over time
- lack of commercial agreements with airlines and the use of 'take-it-or-leave-it' conditions of use.

Qantas outlined a range of concerns with regional airports (sub. 52), while the Regional Aviation Association of Australia provided around 16 examples of claims by airport users about various regional airports (sub. 49). As all of these claims were made in confidence, the Commission is not in a position to verify them.

Illustrative of the airline industry's concerns, box 13.1 outlines some of the complaints made by Regional Express (Rex) regarding regional airport conduct.

Box 13.1 **Rex's view on some regional airports**

Rex is one of Australia's largest regional airlines, operating across a number of regional airports. In commenting on its experience with some of these airports, Rex noted that:

> … the most prevalent issue for Regional Express (Rex) with respect to these other airports is the unjustified increase in airport charge that do not consider the significant activity growth (passengers and aircraft activity) that by default has increased airport revenues significantly greater than CPI.
>
> In FY10/11 alone Rex has encountered significant passenger head tax increases at Burnie Airport (20 per cent increase), Mt. Gambier Airport (46 per cent increase which followed a 9 per cent increase and a 8 per cent increase during FY08/09) and Mildura Airport (12 per cent increase). Such significant and unjustified increases in passenger head taxes (in spite of the fact that airport revenue have already risen significantly because of more passengers brought in by Rex) costs have a direct impact on ticket pricing and subsequent negative impact on demand. In regional environments where air services are already marginal, there is no ability to pass these costs on to passengers. As a result the increased costs are a direct impact to the airlines bottom line and affect the viability of continued air services to these communities.

Source: Regional Express Holdings, sub. 65, p. 16.

While Rex outlined complaints about a number of regional airports, it also provided examples of the positive relationship it has with others. For example, its partnership with Parkes Shire Council (owner of Parkes airport) has:

> … grown passenger numbers from around 12,000 passengers per year to 32,000 passengers per year. The partnerships have involved setting passenger thresholds that, once exceeded, result in lower airport charges. This has provided Rex with the necessary incentive to undertake a longer term approach to grow the market through making significant additional investment that it otherwise would not have made under the more typical council methodology … (sub. 65, p. 18)

Rex gave similar positive reviews of the conduct of Griffith and Wagga Wagga airports, again on the basis of the airport charges that have allowed increased passenger growth on those routes.

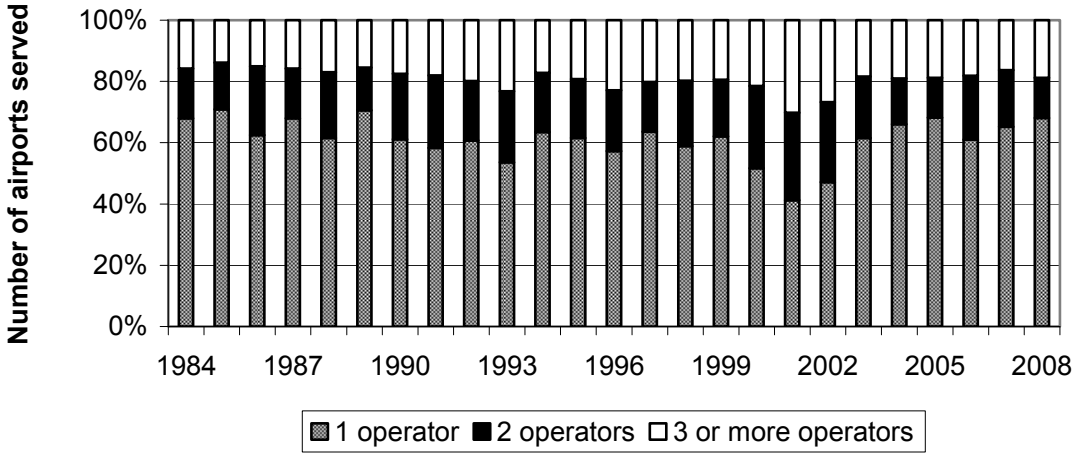
Do regional airports have market power?

In responding to the claims made by participants about the conduct of regional airports, it is useful to consider the extent to which such airports are able to exercise any market power.

Unlike the major capital city airports, which often have multiple airlines flying each route, the majority of regional airports operate with only a single airline service.

While varying across the period 1984 to 2008, the proportion of airports with a single operator was approximately equal in 1984 and 2008, at 68 per cent (figure 13.3). As noted previously, across this period routes involving regional airports have changed from intra-regional to a larger proportion of flights originating or terminating in a capital city.

Figure 13.3 **Number of airlines serving regional airports, 1984 to 2008**



Data source: Adapted from BITRE (2009).

In commenting on the respective market power of regional airports and airlines, the owner of Mount Isa and Townsville airports stated that:

> … whilst to some extent these airports may be seen as monopoly providers in their regions the reality is they are generally heavily dependent on one or two airlines. These airports have had experience where the airline dictates what it will pay. The airports are heavily constrained as [there] is often no alternative carrier and airport lease conditions make it extremely difficult to deny access to an airport for non-payment even if the airport had the will to do so. (Queensland Airports Ltd, sub. 67, p. 11)

Newcastle Airport Ltd — the only local council-owned airport to put a submission into the inquiry — discussed the changing market for rural and regional airports, driven by the demand of low cost carriers (LCCs) to open 'non-traditional' routes, often on the back of lower regional aeronautical charges. It noted that:

> … the LCC's are more focussed on developing non-traditional routes; this can lead to a bidding war between airports to gain these services, with, in most cases, the lowest charges winning. If an airport is being run as a business, it needs revenue to not only survive but to maintain and upgrade facilities. If revenue is not forthcoming from airlines then ancillary revenues need to be maximised, but not at the risk of exploiting the passengers … Once again the power and market dominance of an airline, particularly on domestic routes, should not be underestimated. This can affect pricing

> and contract negotiations leading to a greater dependency on ancillary revenue for an airport to thrive and expand, and provide flow on economic benefits to regional economies. (sub. 14, p. 2)

The proposition that regional airlines do not have countervailing power in negotiating with regional airports seems difficult to sustain when, for the majority of those airports, the negotiating airline will be the sole operator. In the Commission's view, while local council airports may be monopolies in their regional area, their market power is likely to be curtailed by the airlines' market power, particularly, given that many regional routes are in fact licenced and/or 'conferred monopolies'.

However, there may remain circumstances where council airports pursue objectives that are contrary to maximising 'national level' efficiency. In part this derives from the fact that local councils are responsible to their local residents. For example, a council might:

- set its airport charges lower than an efficient level in order to increase throughput, if such increased throughput allowed it to increase its revenue in other ways. Notwithstanding the implied cross-subsidy from other sources of revenue, a council might consider that increased tourism could result in increased revenue from council-owned tourist attractions and regional businesses
- charge above the aeronautical price that would be 'efficient' were the airport a standalone entity, in order to provide local council services to residents, which they value more.

As discussed in chapter 4, while increasing prices when the demand for an airport's services is price inelastic (such as might be the case for fly-in/fly-out workers) is consistent with economic efficiency, this would still set an upper bound on the efficient level of charges.

Similarly, while council airports may choose to hold their aeronautical charges artificially low in order to pursue broader community objectives (such as encouraging tourism), non-transparent or distorting policies that result in prices not reflective of the long-run incremental cost of the airport are likely to reduce welfare. This is because efficient prices communicate information to both airport operators and consumers, about the value of the services being demanded and the costs and benefits of investment in additional capacity. Prices not reflective of long-run incremental cost are likely to result in deferred maintenance, or the mistiming of investment decisions, which itself can result in congestion or underutilisation of capacity.

Where regional or other social policy goals are being pursued, this should be done directly, rather than through practices that impose economic costs.

In the Commission's view, the goal of airport policy should be to achieve efficient outcomes, both for major capital city airports and council-owned regional airports. Given the diversity of councils across Australia, regulating the 'efficient' level of investment and services at each regional airport would be problematic. And given the likely countervailing power that a single airline operator will have with a regional airport, it is not clear that such concerns carry the same weight as when levelled against the major capital city airports. Ultimately, this should be a matter for negotiation between airlines and the airport operator.

Nonetheless, there may be scope to improve the 'quality' of negotiations between airlines, regional airports and/or local councils — recognising that 'generalist' Council officers may have very limited experience with the intricacies of commercial negotiation with airlines. For example, the Commission heard in meetings with both airlines and the major airports that the Pricing Principles had provided useful guidance as to the types of matters that should be negotiated between the parties, as well as some direction on how negotiations should be conducted (notwithstanding the views from both sides that the Principles could be improved). Additionally, both groups reflected that the 'line in the sand' process had removed the tension from pricing negotiations, as revaluations no longer fed through to higher pricing expectations.

In the Commission's view, the Pricing Principles could play a role in negotiations between airlines and regional airports, and some application of a line in the sand for regional airport asset revaluations might similarly yield benefits. However, other than having some advisory status, it is unclear what enforcement mechanisms could apply in the event that either party breached the Pricing Principles, or a regional airport (most of which are owned by local councils) revalued its assets.

Information request: The Commission seeks information on the potential costs and benefits of extending the Pricing Principles to regional airports. How might the principles be applied, and is the problem of sufficient magnitude to warrant any potential enforcement mechanisms?

13.2 General aviation at major capital city airports

The term 'general aviation' refers to:

> ... a range of aviation-related activities and businesses, primarily using smaller aircraft and using secondary airports … General aviation performs an essential role within the broader aviation industry and in providing air services such as charter flights, aerial agriculture, aeromedical services, search and rescue, firefighting, surveying and aerial photography, pilot training, aircraft maintenance and repair work. It also includes private and recreational flying. (Australian Government 2009, p. 62)

During this inquiry the Commission met with, and received submissions from, a number of general aviation operators. Much of the information was provided to the Commission in confidence. In broad terms, operators raised a number of complaints, including:

- increases in fees and charges for airport infrastructure that is not used — or needed — by general aviation operators
- increases in property lease charges, making hangars, parking, maintenance and other operations unviable at major airports.

Pressures on the sector are not new

Some general aviation operators raised concerns about the movement of smaller operators to secondary airfields. But this is not new. Reflecting on this history, Airservices Australia noted that:

> Following World War II primary capital city airports experienced a significant increase in airways activity that placed pressure on the safety and efficiency of aircraft operations in and out of capital city ports. In response, incentives were provided to operators to move flying training and smaller operations to secondary airfields. The incentive program helped shift smaller private and training aircraft operations to secondary capital city ports and provided Regular Passenger Transport (RPT) services prime access to capital city ports, improving safety for airport users and increasing operational efficiency. (ASA 2011, pp. 19–20)

Recognising that the sector faced pressure, in 2006 the Australian Government established an 'Industry Action Agenda' group to propose actions and reforms to improve the performance of general aviation more generally. In its 2008 final report, the those pressures that had been impacting general aviation operators at major airports (box 13.2).

Box 13.2 **Findings of the General Aviation Industry Action Agenda**

The Australian Government's General Aviation Industry Action Agenda considered the pressures faced by general aviation (GA) operators since airport privatisation had commenced. In its final report, the group noted that:

> … the privatisation of secondary airports has resulted in GA operators being exposed to a commercial charging regime never fully experienced under the previous system of government ownership. This has exposed vulnerabilities in the business models of many General Aviation businesses that had not been evident previously. Many small airport - based GA operators realise a lack of market power in their dealings with airport lease holders. Their businesses often rely on being on an airport site and they will often have the choice of only one or two airports in each capital city. Airports require significant capital investment and, as such, they tend to be geographically dispersed.
>
> In many circumstances, rents levied on hangars, commercial premises and land have been increasing, particularly at the major metropolitan GA airports. The leases concerned are commercial agreements between airport lessees and their tenants and are therefore a relatively new development in the industry. It is likely that these price changes will have lead to a reorganisation of GA activity. Participants in the industry who are sensitive to changes in the price of airport access may have moved away from higher cost aerodromes, trading off reduced costs for a less convenient location and perhaps more limited infrastructure. The costs of relocation can be significant as some tenants may lose sunk capital costs, such as the buildings situated on the site of their lease, if they choose to relocate.
>
> Generally rents at GA airports have increased significantly since privatisation, reflecting the fact that former FAC [federal airports corporation] rents were unrealistically low. Also, commercially driven airport lessees adopted rents more commensurate with commercial rates at off - airport locations. However, this is not uniform or solely the result of airport privatisation. Rents vary greatly between airports and tenants. Although operators understand the need for airport managers to derive a commercial return from their assets, some stakeholders believed that the drive for rental increases at some airports has been to such a degree that animosity has been generated. Airport tenants often focus on comparisons between the old FAC rents and current rents with little regard to movements in general capital city real estate prices. Airport lessees have pointed out that the value of real estate in capital cities has increased markedly over the last decade and airport values will to some extent reflect that.

Source: DITRDLG 2008a, pp. 42–3.

Continuing the themes raised by the group, the Australian Government has recognised that small general aviation operators may be particularly ill-equipped to negotiate with large capital city airports. The White Paper noted that the:

> … skills required to meet the technical, operational and regulatory needs of small aviation businesses have sometimes not translated to the business skills required to manage the rapidly changing modern commercial environment. This is a continuing challenge. (DITRDLG 2009a, p. 62)

The White Paper reiterated some of the concerns of general aviation operators, including:

- access certainty at major capital city airports at a reasonable cost
- the pressures put on general aviation operator's use of airport land by commercial development
- treatment at regional airports seeking to attract regular public transport (RPT_ services by low cost carriers.

The Australian Government encouraged all airport tenants — including general aviation operators — to engage in the airport master plan process, but did not make specific recommendations regarding general aviation in the future (DITRDLG 2009a).

The grievances of the general aviation sector reflect the outcome of an inexorable trend towards major airports focussing primarily on RPT services, rather than general aviation. The issues have been addressed recently through the Industry Action Agenda as well as the Aviation White Paper. Given the lack of public information by participants, the Commission has not found additional evidence that would lead it to recommend policy initiatives in this area.

However, the Commission notes that the Australian Government does exercise some control over many secondary airports through its leases. It is important that viable alternatives for regional and general aviation in capital cities be considered whenever changes in lease conditions are being contemplated for these secondary airports. And at capital city airports where there is no secondary airport (for example, Canberra), the needs of general aviation users should be considered in their master plans.

13.3 Aviation security charges

Darwin International Airport (sub. 7) and the Northern Territory Government (sub. 10) expressed concern about the level of security charges at Darwin airport, and advocated an alternative method for recovering security costs at Australian airports. Given the 'demographic, geographic, climatic and economic characteristics of the Northern Territory', the Northern Territory Government suggests that the aviation industry forms 'a considerably more significant input into the Northern Territory economy — across all industries — than it does to the national economy' (sub. 10, p. 2). The Northern Territory Government contends that security charges (resulting from mandatory security requirements) impose a disproportionate cost burden on airports with lower passenger numbers.

What aviation security requirements apply at major airports?

Section 3.27 of the Aviation Transport Security Regulations 2005 (Cwlth) specifies those airports that are 'counter-terrorism first response' (CTFR) airports — currently Adelaide, Alice Springs, Brisbane, Cairns, Canberra, Darwin, Gold Coast, Hobart, Melbourne, Perth and Sydney airports. Other airports face lesser security requirements.

In addition to the general aviation security requirements (such as passenger and baggage screening), designation as a CTFR airport imposes the highest level of aviation security requirements on airport operators. Airport operators are required to provide deterrence measures within their airport, such as continuous patrolling within the airport boundaries, with particular emphasis on:

- terminal areas, and approaches to terminals
- barriers that separate publicly accessible and operational parts of the airport
- baggage, cargo and freight sorting and holding areas
- airside parts of the airport used for the movement and holding of aircraft.

Airports must also be capable of responding to a terrorist act, including having procedures to evacuate people in danger (or potentially so), to contain such an act if it is occurring or has occurred, and to cordon off the area involved. Airport operators must also be able to transfer control of the situation to responsible law enforcement authorities.

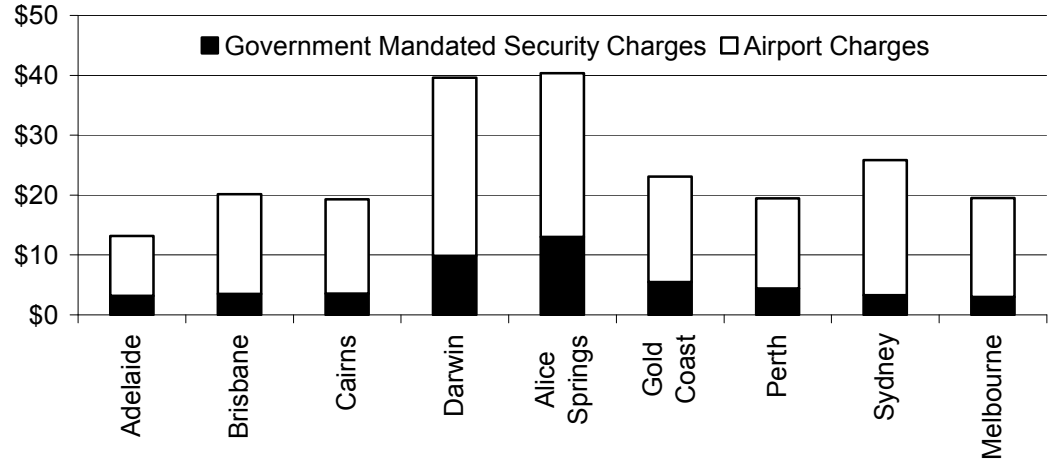
The regulations do not require airport operators to undertake this security work directly; instead, operators must enter into an agreement with a CTFR service provider for the provision of these services. The service provider is then responsible for the implementation and operations of the security requirements.

In addition, Brisbane, Melbourne and Sydney airports are to ensure their CTFR providers have two explosive-detection trained dogs available at all times.

Regulation 7.02A of the Airport Regulations 1997 specifies that for the purposes of charging and reporting in the regulatory accounts, airside safety and security services and facilities are 'aeronautical'. Airport operators recover such charges from airlines, with the charge for security requirements being a component of the per passenger charge. Given that there are a number of fixed security costs that will not necessarily vary according to airport size, per passenger prices at any airport are heavily determined by passenger throughput.

As a result of its lower passenger numbers, Darwin and Alice Springs airports have the highest per passenger security charges of any CTFR airport (figure 13.4).

Figure 13.4 **Per passenger charges domestic return trip**



Data source: Darwin International Airport, sub. 7, p. 11.

Proposed reforms

The Northern Territory Government put forward proposals to lower the security charges at a number of airports (including Darwin and Alice Springs):

- Uniform (or network) pricing, which would distribute the total cost of security at Australia's CTFR airports across all passengers using those airports. This would have the effect of lowering the charge at some airports, while raising it at others, to achieve a 'uniform' price at all airports. A variation of this is to have partial network pricing, where the security costs of a subset of CTFR airports are distributed across the passengers at those airports.
- Direct funding assistance, where the Australian Government would contribute to the security costs at CTFR airports. A number of options exist within this proposal.

In 2008, the Northern Territory Government received analysis of the expected changes in airport security charges from the introduction of both a full and partial network pricing model for security charging. Table 13.1 shows that for airports with a large passenger throughput, a full network pricing arrangement would increase per passenger security charges between 2 per cent and 39 per cent. For those airports with lower passenger numbers, charges would fall between 11 per cent and 62 per cent.

As the Northern Territory Government noted, a partial network pricing model that excludes the 'gateway' airports of Sydney, Melbourne, Brisbane and Perth would reduce the gains to the smaller airports, as well as reduce the allocative efficiency of the system (sub. 10, p. 2). Under this partial model, Adelaide airport would face a 62 per cent increase in charges.

Table 13.1 **Network pricing models: domestic airport security charges**

Airport	*Domestic passengers 2007-08*	*Estimated security charge*	*Full network pricing*	*Change*	*Partial network pricing*	*Change*
	('000)	$	$	%	$	%
Sydney	20 053	3.40	4.21	24	3.40	0
Melbourne	18 579	4.75	4.21	-11	4.75	0
Brisbane	13 360	4.12	4.21	2	4.12	0
Perth	5 975	3.36	4.21	25	3.36	0
Adelaide	5 633	3.02	4.21	39	4.90	62
Gold Coast	4 062	5.50	4.21	-23	4.90	-11
Cairns	2 772	3.55	4.21	19	4.90	38
Canberra	2 261	5.00	4.21	-16	4.90	-2
Hobart	1 757	5.00	4.21	-16	4.90	-2
Darwin	1 285	9.87	4.21	-57	4.90	-50
Alice Springs	627	13.00	4.21	-68	4.90	-62

Note that such comparisons are indicative only as differences in accounting methodologies across airports, limit the extent to which security charges are a true reflection of the full security cost.

Source: Access Economics (2008).

Pricing rationale and conclusion

As noted above, the current regulations require individual CTFR airports to meet a range of security outcomes, which are charged by those airports to the individual passengers that travel through them. In general, such a 'user pays' system should deliver the desired security outcomes in the most efficient way, as airport operators face the incentive to meet their regulated obligations at least cost. Given that the security outcomes for the CTFR airports are the same, the resulting price will differ according to the number of passengers passing through.

The issue is whether the benefits of an airport's security measures accrue solely to those passengers travelling through that airport, or whether there are broader benefits for all air travellers, or the community more generally. There are two broad ways that security benefits might accrue to individuals other than direct passengers at an airport:

- Firstly, airline passengers might benefit from knowing that all Australia's major airports have high-level security processes, even if they are only travelling through a subset of those airports (eg a passenger travelling from Melbourne to Sydney might benefit from knowing that flights from Perth to Darwin were secure). As a result of the procedures at all CTFR airports, passengers may not need to make assessments about the individual level of security on any particular route they wish to fly.
- Secondly, the general non-travelling public may receive a benefit from aeronautical security arrangements. While the primary beneficiaries of aviation security are those travelling on aircraft, following the 11 September 2001 attacks in the United States, the public is more aware that aircraft can be used to cause harm and damage to the public more broadly. Thus, someone who is not travelling in an aircraft likely receives (at least) some benefit from knowing that it is less likely an aircraft can be used to harm them.

While these rationales provide a theoretical basis for a move to network charging (in the first case), or even some form of government contribution (in the second case), in practice, the extent of any benefit is an empirical question. Altering the current user-pays charging arrangements in a way that made the Australian community better off overall would require analysis of all the costs and benefits of the various options. That work is outside of the scope of this draft report.

In its submission, the Northern Territory Government expressed concern about the effect on tourism within the Territory from higher security charges. If the Northern Territory Government wishes to increase tourism, it could subsidise the security charges at Darwin and Alice Springs airports, in order to reduce the charges levied directly on passengers. This is likely to be a more efficient outcome if the territory government believes that this would deliver a net benefit to the territory as a whole, such as from increased tourism (i.e. increased revenue from additional visitors).

Should Australia's aviation security arrangements be systematically reviewed in the future, consideration should be given by the review body to the incidence of costs and benefits of security arrangements, ensuring that all those who receive benefits contribute to the overall costs of the system.

Charges for navigation and aviation firefighting and rescue

The South Australian Government also discussed the impact of Air Services Australia's charges for en route and terminal navigation and aviation fire and rescue services at Adelaide airport, arguing that its location specific pricing results in airports with fewer passengers paying higher costs (sub. 58, p. 2), akin to the

pricing arrangements for security discussed above. However, as Air Services Australia responded (sub. 68), its services are already subject to the more intrusive price notification scheme, with the ACCC approving price structures and levels.

It is evident that differential passenger volumes among airports mean that location-specific pricing and network pricing would have a different incidence. However — somewhat different to the situation with CTFR security requirements — on efficiency grounds, there is no rationale for breaking the direct link between costs and prices for navigation, fire and rescue services at Adelaide airport. Moreover, these matters are subject to ongoing consultation following the ACCC's March 2011 Draft Price Notification on these services.

13.4 Noise management at airports

Aircraft noise is an unavoidable part of aviation activity, and a management issue for airports across the world. Aircraft noise tends to be the greatest when aircraft are taking-off or landing, and thus noise issues are particularly acute for people living close to airports (although residents outside the 'typical' flight path may be affected if aircraft are circling above the airport awaiting an arrival slot).

As noted in chapter 3, there are currently four Australian airports subject to noise curfews: Adelaide, Essendon, Gold Coast and Sydney. The curfew at each airport operates from 11 pm to 6 am the following day, and restricts passenger-carrying aircraft from arriving or departing from the airport, excluding emergencies. In some circumstances the curfew arrangements provide an exemption for aircraft that meet noise standards and are under a specified weight. For example, at Sydney and Adelaide airports, specified aircraft less than 34 tonnes that meet noise standards are exempt from the curfew.

As part of the master plan process, airports provide future anticipated noise exposure forecasts. As the controller of Australian airspace, Airservices Australia has a role in affecting the degree of noise at an airport (for example, through changes to flight paths) and also is responsible for monitoring aircraft noise complaints. The Aviation White Paper, among other things, established the Aircraft Noise Ombudsman, whose role is to independently review noise complaint procedures and make recommendations for improvements (DITRDLG 2009a). The Ombudsman also aims to increase the general public's awareness of aircraft noise issues.

Noise concerns at airports arise because the costs and benefits of operating a particular flight are not borne solely by the airline; rather, there are 'spillover' noise

costs that affect the surrounding community. If these costs are not factored into the decision to operate a flight, there may be a sub-optimal level of flight activity at an airport. Such 'externalities' are well covered in the economic literature. Box 13.3 considers the rationale for curfews.

Box 13.3 **Economic rationale for noise curfews**

'Time of day' curfews attempt to reduce the inconvenience experienced by residents close to an airport, resulting from the noise caused by aircraft. This noise 'externality' causes a loss of amenity to the residents who live in close proximity to the airport flight path.

Economic literature suggests that community wellbeing can be improved if such external costs (in this case, the loss of amenity suffered by nearby residents) are factored in to the initial decision by airlines to operate a flight. As the additional 'costs' are considered, the quantity of flights would likely decrease, balancing the benefits of flying with the costs experienced by the community.

One way that governments reduce the loss of welfare caused by a negative externality is through the imposition of a tax on the consumption of the good in question. Taxes will generally raise the costs of goods or services, with the resulting price increase reducing the quantity consumed, thus reducing the loss of wellbeing to the community.

In practice, it can be difficult to get the tax level right so that the socially desirable level of noise occurs. Curfews are a 'blunt' instrument when dealing with an externality, given that they constitute a total ban on flights during the curfew period. However, a government may have determined (on behalf of its citizens) that for a period of time during the day (and usually during the night time) no amount of aircraft noise is acceptable. In this case, a curfew is likely to have the same outcome as a tax levied at a rate that prevents all flights during the night.

In its 2009 Annual Review of Regulatory Burdens on Business: Social and Economic Infrastructure Services, the Commission considered the anomaly between the *Sydney Airport Curfew Act 1995* (Cwlth) and the regulations operating under that Act, suggesting that:

> Aligning the Sydney Airport curfew regulations with the Act would allow additional aircraft to utilise the shoulder period between 5.00 and 6.00 am. Nevertheless, performance based regulation based on a permissible level of noise for all aircraft using the airport between certain hours could provide a more effective means of protecting the amenity of surrounding airport communities than the current prescriptive arrangements. This would ensure that a specified noise level was met during the late evening/early morning hours, provide an incentive for the operation of lower noise aircraft and remove the anomalies in the current arrangements. (PC 2009, pp. 271–2)

In line with this previous consideration, it is the Commission's view that, given the changing mix of Australia's aircraft fleet as new and quieter aircraft begin

operations, it might be possible to improve overall community welfare if airport curfews were based on the noise performance of aircraft, rather than prescriptive bans. If airlines could achieve noise outcomes that left nearby residents no worse off (such as through adjustments to thrust levels or ascent/descent profiles), airport efficiency could be improved through better utilisation of the existing infrastructure.

In addition to the curfew, Sydney airport has a restriction of 80 aircraft movements per hour during its operating hours. In commenting on the impact of the restrictions in terms of its operational capacity and efficiency, Sydney Airport Corporation observed:

> The arbitrary limit of 80 aircraft movements in an hour is below the demonstrated capabilities of Sydney Airport and artificially limits the effective capacity of the airport. As a consequence:
>
> - the theoretical long term capacity of the airport is limited
> - strategic slot hoarding by airlines in the morning and evening peaks results/occurs
> - capacity constraints increase in morning and evening peaks, when the majority of international and domestic services wish to arrive at and depart from Sydney Airport. (sub. 46, p. 17)

As Sydney Airport Corporation also noted, the movement restrictions were introduced 15 years ago, when aircraft were noisier than the current fleet. The Sydney Business Chamber commented on the impact that the regulatory constraints have on the efficient operation of Sydney Airport, noting that:

> … Collectively, these artificial constraints result in the airport being forced to operate well below the capacity that would otherwise be provided by its infrastructure. While some of these constraints are of course quite properly intended to ensure the airport operates in an environmentally acceptable manner, others are based on no apparent logic and came about following what can only be described as historic ad hoc and politically driven decision-making processes. It is in the national interest that significant pieces of economic infrastructure like Sydney Airport be operated as efficiently as possible, particularly before governments start spending the several billions of dollars that would be necessary to build a second airport … (sub. 23, pp. 2–3)

In the Commission's view, to the extent that the movement cap is a result of noise concerns outside of the curfew hours, welfare might be improved through a move to noise-based outcomes, rather than a prescriptive movement cap.

Alternatively, in relation to the movement cap at Sydney airport, the Commission observes that overall airport efficiency might be increased by allowing regional airlines to voluntarily lease their 'ring-fenced' slot allocation. This could increase the capacity of the airport (particularly at peak times) while simultaneously providing a financial boost for regional airlines.

The Associate Commissioner resides within an area directly affected by the movement and noise restrictions applying to Sydney airport. Owing to conflict of interest considerations he 'stands aside' on the curfew and movements per hour issues discussed above.

13.5 Fuel throughput levies

Practices regarding aircraft refuelling, including the charging of fuel throughput levies, were an issue raised by airlines in the Commission's 2002 and 2006 reports. Qantas (in particular) again raised the issue in this inquiry.

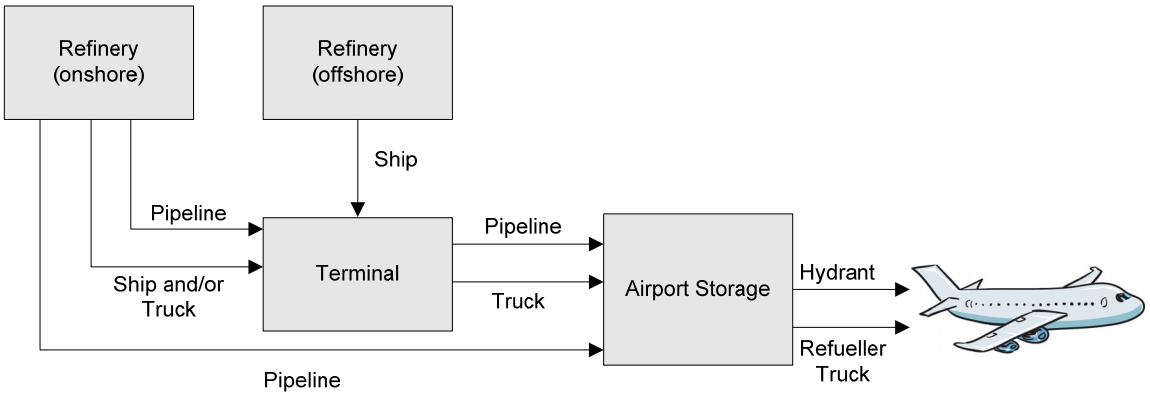
As the Commission found in 2002, airports have some market power in the provision of refuelling facilities given their control of airport land, and the desire by users to have refuelling facilities on the airport site itself (PC 2002). For some airlines, the ability to refuel after each flight is essential — long-haul international flights being one such example. For larger aircraft undertaking many short domestic flights per day, it may not be essential to refuel at each landing. And for weight (and thus cost) reasons, airlines may have a preference to refuel more often than is technically required. An airport's market power thus derives from the degree to which an airline must refuel at a particular airport. However, most airports in Australia do not own or operate refuelling infrastructure directly.

Refuelling facilities

Aircraft refuelling facilities at each of Australia's major airports are known as Joint User Hydrant Installations (JUHI). These are typically a single joint-venture operation between several oil companies (and at Sydney airport, several oil companies and Qantas). As shown in figure 13.5, a combination of refineries, terminals, pipelines and on-airport storage are used to deliver and store aviation fuel at different airports, while a combination of hydrants and trucks are used to refuel aircraft.

The JUHI negotiates the land lease with the airport for those aspects of the supply chain that take place on airport property. Typically, such lease charges are passed on to airlines in full.

Figure 13.5 **Jet fuel product flow**



Data source: Adapted from Qantas (sub. 52, p. 48).

Throughput levies

As noted in the Commission's 2006 report, the treatment of fuel 'throughput levies' has differed under the various regulatory regimes applying to airport pricing (PC 2006). Such levies are generally a charge on the volume of fuel that travels across the airport land, as opposed to a fixed lease. Not all airports charge a throughput levy.

In its 2009-10 monitoring report, the ACCC explained the different treatment of aircraft refuelling revenue over time:

> Under the arrangements that applied until 30 June 2007, aircraft refuelling was classified as an aeronautical service under direction 27, while it was not included within the definition of aeronautical services under the Airports Act. In addition, clause (3) of direction 27 provided an exemption for the provision of services that, on the date the airport lease was granted, were the subject of a contract, lease, licence or authority given under the common seal of the Federal Airports Corporation. (ACCC 2011, p. 11)

Part 7 of the Airports Regulations defines aeronautical services to include 'ground handling (including equipment storage and refuelling)' and 'aircraft refuelling (including a system of fixed storage tanks, pipelines and hydrant distribution equipment)'. Specifically, Regulation 7.03(6) states that in preparing the regulatory accounts for aeronautical and non-aeronautical services:

> … the costs and revenue for the provision and use of aeronautical services and facilities … must include those recovered directly or indirectly from airlines (such as fuel throughput levies recovered through third party suppliers).

In its submission, Qantas indicated that Canberra airport had begun charging a fuel throughput levy in 2006, and that Sydney airport had indicated it would begin to do

so in 2011. Qantas contended that ' … despite clearly being related to aeronautical services the revenue from these aeronautical facilities is also not offset against the aeronautical charges … ' (sub. 52, p. 49).

The Commission considered whether the imposition of fuel throughput levies constituted an abuse of market power in its 2002 report, noting that:

> Of itself, the restructuring of the charge is not evidence of an abuse of market power. A two-part pricing structure may be a more efficient way of pricing the service. It also may indicate a change in attitude to risk by airport operators. (PC 2002, p. 168)

In that report, the Commission weighed up the likelihood that airports were exercising market power:

- At that time, airports indicated that they were merely exercising contract clauses that existed between the FAC and the JUHI at the time of privatisation. The Commission noted that the presence of a contract does not, of itself, preclude an abuse of market power.
- A lack of cost justification similarly does not indicate an abuse of market power, but may indicate a more efficient way to structure the charging for fuel services at airports.

In sum, the key issue is whether the levy charged by an airport is above the efficient levy price, and the Commission concluded that ' … on balance, the extent to which airport operators have abused their market power is unclear' (PC 2002, p. 169). Moreover, there was no evidence presented to the Commission in this inquiry to indicate an abuse of market power by any airport.

However, given the possibility for airports to abuse any market power they have in relation to fuel throughput levies, it is appropriate that the provision of refuelling facilities and services continue to be considered aeronautical for the purposes of price monitoring, and reported in the aeronautical services accounts.

APPENDIXES

A Conduct of the inquiry

A.1 Conduct of the inquiry

The Commission received the Terms of Reference for this inquiry on 15 December 2010. As required by the Terms of Reference, and in line with its normal inquiry procedures, the Commission has encouraged maximum public participation:

- on 21 December 2010 it placed advertisements in national newspapers and sent a circular to individuals and organisations likely to have an interest in the inquiry
- on 25 January 2011 it released an issues paper to assist participants in preparing their submissions. Some 81 submissions were received in response to this paper from a wide range of interested parties (section A.2). The public parts of those submissions are available on the Commission's website (www.pc.gov.au)
- it held informal discussions with airports, airlines, representatives for regional and international airlines, surface transport providers, governments, regulators, academics, local councils and community groups (section A.3)
- it conducted an airlines roundtable on 30 June 2011 and an airports roundtable on 21 July 2011 (section A.4).

Presiding Commissioner Wendy Craik and Associate Commissioner John Sutton thank participants for their contributions to this draft report.

A.2 Submissions received

Participant	*Submission number*
Adelaide Airport Consultative Committee — Planning Coordination Forum	38
Adelaide Airport Limited	12, 75
Aerial Capital Group Limited	4
Airport Link Company Pty Ltd	15
Airservices Australia	68
Andrew's Airport Parking — Brisbane Airport	62
Andrew's Airport Parking — Melbourne Airport	64
Australian Airports Association	18, 78
Australian Competition and Consumer Commission	3,76
Australian Mayoral Aviation Council	5
Australian Services Union	26
Australian Taxi Industry Association	35
Avalon Airport Pty Ltd	51
Barton Chauffeurs, Specialised Security Transport Pty Ltd and Omega Chauffeur Cars	17
Biggar, Dr Darryl	1
Board of Airline Representatives of Australia	19, 59, 66
Brisbane Airport Bicycle User Group (Airport Bug)	60
Brisbane Airport Corporation Pty Limited	40, 74
Brisbane City Council	42
Bus Industry Confederation of Australia	45
Canberra Airport	50
City of Melville	25
City of South Perth	30
City of Sydney	71
Colonial First State Global Asset Management	16
Council of Capital City Lord Mayors	28
Darwin City Council	8
Darwin International Airport	7
Department of Infrastructure and Transport	43, 80
Forsyth, Professor Peter and Professor Hans-Martin Niemeier	6
Geschke, Norman	37
Government of South Australia	58
Hastings Funds Management Limited	33
Hertz, Europcar, Thrifty, Avis and Budget	47
Hobart International Airport Pty Ltd	56
Horneman, Anthony	63
Industry Funds Management Pty Limited	27
Infrastructure Partnerships Australia	36
International Air Transport Association	9
MAp Airports Limited	22, 72
Melbourne Airport	29, 70
National Competition Council	21
Newcastle Airport Limited	14
Northern Territory Government	10
New South Wales Taxi Council Limited	11

Participant	*Submission number*
Overnight Airfreight Operators Association	13
Perth Airports Municipalities Group Inc	34
Qantas Group, Virgin Blue, Regional Aviation Association of Australia (RAAA) and the Board of Airline Representatives Australia (BARA)	55
Qantas	52, 77
QIC Limited	32
Queensland Airports Limited	67
Regional Aviation Association of Australia	49, 61
Regional Express Holdings Limited	65
Shire of Kalamunda	69
SkyBus	31
South West Group	24
Stanhope, Jon MLA Chief Minister	57
Starkie, David	44
Sydney Airport Corporation Limited	46, 79, 81
Sydney Business Chamber	23
The Village Building Company Limited	20
Toll Group	48
Tourism and Transport Forum	53
Tyrrell, William	2
Virgin Blue Airlines	54
Westralia Airports Corporation (Perth Airport)	41, 73
Wilson, Eric	39

A.3 Visits and discussions

New South Wales

Australian Consumers Association (Choice)

Airport Coordination Australia

Airport Link Company Pty Ltd

Australian Business Aircraft Association Inc

Board of Airline Representatives of Australia

Department of Infrastructure and Transport — Major Cities Unit (Australian Government)

Infrastructure Australia (Australian Government)

Macquarie Airports

Qantas Group

Regional Express Holdings Ltd

Sydney Airport Corporation Limited

Transport NSW

Virgin Blue

Victoria

Airport Parking Australia

Australian Competition and Consumer Commission (Australian Government)

BusVic

Department of Business and Innovation (Vic)
Department of Planning and Community Development (Vic)
Department of Premier and Cabinet (Vic)
Department of Treasury and Finance (Vic)
Department of Transport (Vic)
Essential Services Commission (Vic)
Melbourne Airport
National Competition Council (Australian Government)
Port of Melbourne Corporation
Professor Peter Forsyth
VicRoads

Queensland
Brisbane Airport Corporation Pty Limited
Brisbane City Council
Department of Transport and Main Roads (Qld)
Department of Employment, Economic Development and Innovation (Qld)
Department of Local Government and Planning (Qld)
Queensland Airports Limited
Pegasus Transfers
Professor Douglas Baker
Tourism Queensland

Western Australia
Department of Main Roads (WA)
Department of Transport and Planning (WA)
Gateway WA
Perth Airport Municipalities Group Inc
Skywest Airlines
Westralia Airport Corporation (Perth Airport)

South Australia
Adelaide Airport Limited
Department for Transport, Energy and Infrastructure (SA)
Office of Major Projects and Investment (SA)

Australian Capital Territory
ACT Planning and Land Authority
Airservices Australia
Australian Airports Association
The Treasury
Canberra Aerial Hire Cars
Canberra Airport
Corporate Air

Department of Infrastructure and Transport (Australian Government)
Dr Harry Bush (formerly of the Civil Aviation Authority)
National Capital Authority (Australian Government)
Qantas
QIC Limited
Regional Aviation Association of Australia

Tasmania
Hobart International Airport Pty Ltd

Northern Territory
Darwin International Airport/NT Airports
Department of Business and Employment (NT)
Department of Lands and Planning (NT)
Northern Territory Treasury
Tourism NT

International

New Zealand
Air New Zealand
Auckland Airport
Board of Airline Representatives of New Zealand
New Zealand Commerce Commission
New Zealand Taxi Federation
New Zealand Airports Association
Wellington Airport

United Kingdom
Civil Aviation Authority

A.4 Roundtables

Airport Roundtable, 30 June 2011, Canberra

Adelaide Airport
Australian Airports Association
Brisbane Airport
Melbourne Airport
Perth Airport
Sydney Airport

Airline Roundtable, 21 July 2011, Canberra

Board of Airline Representatives of Australia
Pel-Air Aviation
Qantas Airways
Regional Aviation Association of Australia
Regional Express Holdings Ltd
Virgin Australia

B Airports and related information

B.1 Statistical information

Table B.1 **Growth in passenger and aircraft movements at major[a] airports, 2003–04 to 2009–10**

Airport	*03–04*	*04–05*	*05–06*	*06–07*	*07–08*	*08–09*	*09–10*	*Total growth over period*	*Average annual growth since 2006–07*
Passengers	'000	'000	'000	'000	'000	'000	'000	%	%
Adelaide	4 893	5 363	5 767	6 181	6 619	6 784	7 016	43.4	5.0
Brisbane	13 780	15 358	16 016	17 380	18 298	18 721	18 897	37.1	4.3
Canberra	2 303	2 479	2 550	2 687	2 853	3 062	3 258	41.5	6.3
Darwin	1 073	1 211	1 219	1 404	1 562	1 539	1 569	46.2	6.7
Melbourne	18 631	20 274	21 041	22 157	23 943	24 448	25 918	39.1	5.4
Perth	5 889	6 525	7 005	7 977	8 952	9 359	9 993	69.7	9.4
Sydney	26 090	27 954	28 996	31 016	32 701	32 346	34 462	32.1	4.5
Total	69 282	75 474	78 825	84 711	90 513	91 659	96 285	39.0	5.2
Aircraft movements									
Adelaide	67.1	70.8	69.7	71.3	73.7	73.7	72.4	7.9	1.0
Brisbane	124.0	140.0	138.8	140.9	147.0	154.1	154.3	24.5	2.7
Canberra	39.4	38.5	37.0	36.9	39.6	44.1	43.3	9.9	4.2
Darwin	16.5	16.5	15.9	17.1	18.4	22.2	25.5	54.5	12.7
Melbourne	157.5	176.0	170.6	169.8	180.5	184.0	187.9	19.3	2.5
Perth	51.3	56.4	57.3	60.7	68.2	77.8	80.9	57.7	9.1
Sydney	241.8	257.6	255.4	260.3	271.0	267.4	275.1	13.8	1.9
Total	641.5	700.9	691.9	703.1	740.4	757.1	770.6	20.1	2.7

a Regular passenger traffic (RPT) only.

Source: DITRDLG (2010a).

B.2 Airport information

Table B.2 **Adelaide airport**

OWNERSHIP	
Structure/parent/operating company	Fully privatised — Adelaide Airport Limited
Major shareholders	UniSuper Ltd (39%); Motor Traders Association of Australia Superannuation Fund Pty Ltd (28%); Local Government Superannuation Board (16%); Other (17%)
DEMAND CHARACTERISTICS	
Aircraft movements (2009-10)[a]	72 400
Passengers (2009-10)[a]	7m
Main market segments (percentage of overnight visitors in 2010)	Holiday 23%; VFR[b] 27%; Business 44%
Passenger forecast (2029-30)	14.1m
COMPETITION CHARACTERISTICS	
Destination substitution possibilities	Relatively low, given the dominance of business and VFR travellers.
Modal substitution possibilities	Low for business travellers. For VFR and holiday travellers, some modal substitutes appear viable, particularly for visitors from Victoria and parts of New South Wales. Nearly half of total overnight arrivals to Adelaide arrive by private vehicle.
Airport substitution possibilities	Low. There are no proximate RPT airports.
Curfew/Slot management	Yes: 11pm to 6am. The curfew only affects international aircraft movements. It prescribes that there is to be a maximum of zero take-offs and 8 landings per week. The maximum movements prescribed for low noise heavy freight aircraft during curfew periods is 15 take-offs and 25 landings per week.
BUSINESS CHARACTERISTICS 2009-10	
Aeronautical revenue	$83.8m
Non-aeronautical revenue	$65.5m
Percentage of non-aeronautical revenue	43.8 per cent
Earnings before interest, tax and amortisation (EBITA)	$78.3m
Earnings before interest, tax and amortisation (EBITA) on average tangible non-current assets	13 per cent
Profit/(loss) after interest and tax	$9.4m

[a] Regular passenger traffic (RPT) only. [b] VFR—visiting friends and relatives.

Sources: Adelaide Airport (2010); ACCC (2011); DITRDLG (2010a); DRET (unpublished).

Table B.3 **Brisbane airport**

OWNERSHIP	
Structure/parent/operating company	Fully privatised — Brisbane Airport Corporation
Major shareholders	QIC Infrastructure Management Pty Ltd (25%); Schipol Australia Pty Ltd (16%); National Asset Management Limited (13%); Gateway Investments Corporation Pty Ltd (13%); Citycorp Nominees Pty Ltd (10%); JP Morgan Nominees Australia Ltd (8%); Other (31%)
DEMAND CHARACTERISTICS	
Aircraft movements (2009-10)[a]	154 000
Passengers (2009-10)[a]	19m
Main market segments (percentage of overnight visitors in 2010)	Holiday 22%; VFR[b] 28%; Business 44%
Passenger forecast (2029-30)	51.2m
COMPETITION CHARACTERISTICS	
Destination substitution possibilities	Relatively low, given the dominance of business and VFR travellers.
Modal substitution possibilities	Low for business traffic. However, for VFR and holiday travellers, modal substitutes (particularly private vehicle) may be viable. Nearly two-thirds of overnight arrivals to Brisbane arrive by modes other than air.
Airport substitution possibilities	Moderate. There are relatively proximate growth airports in the Gold Coast and Maroochydore that are taking some business away from Brisbane (especially the former since the rail link was finished). But such competition is limited by the scale of Brisbane Airport, the extent of its business traffic and its ability to service international traffic.
Curfew/Slot management	No.
BUSINESS CHARACTERISTICS 2009-10	
Aeronautical revenue	$180.2m
Non-aeronautical revenue	$243.5m
Percentage of non-aeronautical revenue	57.5 per cent
Earnings before interest, tax and amortisation (EBITA)	$247.9m
Earnings before interest, tax and amortisation (EBITA) on average tangible non-current assets	9.7 per cent
Profit/(loss) after interest and tax	$114.7m

[a] Regular passenger traffic (RPT) only. [b] VFR—visiting friends and relatives.

Sources: Brisbane Airport (2009); ACCC (2011); DITRDLG (2010a); DRET (unpublished).

Table B.4 **Canberra airport**

OWNERSHIP	
Structure/parent/operating company	Fully privatised — Capital Airport Group
Major shareholders	George Snow and family interests.
DEMAND CHARACTERISTICS	
Aircraft movements (2009-10)[a]	43 300
Passengers (2009-10)[a]	3m
Main market segments (percentage of overnight visitors in 2010)	Holiday 17%, VFR[b] 18%, Business 59%
Passenger forecast (2029-30)	6.3m
COMPETITION CHARACTERISTICS	
Destination substitution possibilities	Relatively low, given the dominance of business and VFR travellers
Modal substitution possibilities	High. Despite the proportion of business and VFR visitors, 70 per cent of visitors arrive in Canberra by car. This may reflect the fact that total travel times by air and car are similar on the Sydney-Canberra route. Also, many of those flying overseas, or to other domestic destinations for holiday purposes, first travel by car or coach to Sydney.
Airport substitution possibilities	Low. There are no proximate RPT airports.
Curfew/Slot management	No.
BUSINESS CHARACTERISTICS 2006-07	
Aeronautical revenue	$19.2m
Non-aeronautical revenue	$77.6m
Percentage of non-aeronautical revenue	80.1 per cent[c]
Earnings before interest, tax and amortisation (EBITA)	$69m
Earnings before interest, tax and amortisation (EBITA) on average tangible non-current assets	6.4 per cent
Profit/(loss) after interest and tax	$203.3m

[a] Regular passenger traffic (RPT) only. [b] VFR—visiting friends and relatives [c] Canberra airport recorded revenue from terminal services as non-aeronautical revenue.

Sources: Canberra Airport (2011); ACCC (2008c); DITRDLG (2010a); DRET (unpublished).

Table B.5 **Darwin airport**

OWNERSHIP	
Structure/parent/operating company	Fully privatised — Airport Development Group
Major shareholders	Industry Funds Management Managed Funds (56%); Hastings Fund Management (28%); Palisade Investment Partners Limited (16%)
DEMAND CHARACTERISTICS	
Aircraft movements (2009-10)[a]	25 500
Passengers (2009-10)[a]	1.6m
Main market segments (percentage of overnight visitors in 2010)	Holiday 40%, VFR[b] 23%, Business 33%
Passenger forecast (2029-30)	4.1m
COMPETITION CHARACTERISTICS	
Destination substitution possibilities	High. Although the proportion of business travellers to Darwin is higher than for the rest of the Territory, most travellers go for a holiday. Therefore, Darwin and surrounding areas compete with other tourist destinations, including other areas in the NT.
Modal substitution possibilities	Low for business travellers and other travellers visiting Darwin only, given the relative isolation of Darwin. For holiday travellers who visit several regions in the Territory, the potential for modal substitution appears to be more significant (40 per cent visitors to the Territory arrive by modes other than air).
Airport substitution possibilities	Vary by market segment. Low for those visiting only the 'Top End', but higher for those visiting several areas within the Territory.
Curfew/Slot management	No.
BUSINESS CHARACTERISTICS 2006-07	
Aeronautical revenue	$35.1m
Non-aeronautical revenue	$8.7m
Percentage of non-aeronautical revenue	19.8 per cent
Earnings before interest, tax and amortisation (EBITA)	$17.7m
Earnings before interest, tax and amortisation (EBITA) on average tangible non-current assets	10 per cent
Profit/(loss) after interest and tax	$40.9m

[a] Regular passenger traffic (RPT) only. [b] VFR—visiting friends and relatives.

Sources: Northern Territory Airports (2010); ACCC (2008c); DITRDLG (2010a); DRET (unpublished).

Table B.6 **Melbourne airport**

OWNERSHIP	
Structure/parent/operating company	Fully privatised — Australia Pacific Airports Melbourne
Major shareholders	AMP (25%); Industry Funds Management (21%); Hastings Funds Management (20%); Deutsche Asset Management (18%); Future Fund (17%)
DEMAND CHARACTERISTICS	
Aircraft movements (2009-10)[a]	188 000
Passengers (2009-10)[a]	25.9m
Main market segments (percentage of overnight visitors in 2010)	Holiday 33%; VFR[b] 24%; Business 40%
Passenger forecast (2029-30)	57.7m
COMPETITION CHARACTERISTICS	
Destination substitution possibilities	Relatively low, given the dominance of business and VFR travellers.
Modal substitution possibilities	Low for business traffic. However, for VFR and holiday travellers, modal substitutes (particularly private vehicle) appear to be viable for visitors from some areas, including South Australia and New South Wales. More than 50 per cent of interstate overnight travellers arrive in Victoria by modes other than air.
Airport substitution possibilities	Generally low, although Avalon Airport in Geelong is being used by low-cost carriers as an RPT substitute for Melbourne Airport for some of its flights.
Curfew/Slot management	No.
BUSINESS CHARACTERISTICS 2009-10	
Aeronautical revenue	$212m
Non-aeronautical revenue	$291m
Percentage of non-aeronautical revenue	57.8 per cent
Earnings before interest, tax and amortisation (EBITA)	$327.5m
Earnings before interest, tax and amortisation (EBITA) on average tangible non-current assets	16.7 per cent
Profit/(loss) after interest and tax	$158.9m

a Regular passenger traffic (RPT) only. **b** VFR—visiting friends and relatives.

Sources: Melbourne Airport (2009); ACCC (2011); DITRDLG (2010a); DRET (unpublished).

Table B.7 **Perth airport**

OWNERSHIP	
Structure/parent/operating company	Fully privatised — Westralia Airports Corporation Pty Ltd
Major shareholders	Utilities Trust of Australia (38%); Australia Infrastructure Fund (30%); Perth Airport Property Fund (17%); Others (15%)
DEMAND CHARACTERISTICS	
Aircraft movements (2009-10)[a]	81 000
Passengers (2009-10)[a]	10m
Main market segments (percentage of overnight visitors in 2010)	Holiday 24%; VFR[b] 26%; Business 45%
Passenger forecast (2029-30)	24.8m
COMPETITION CHARACTERISTICS	
Destination substitution possibilities	Relatively low, given the dominance of business and VFR travellers.
Modal substitution possibilities	Low, given the isolation of Perth. In excess of 90% of interstate overnight arrivals in Western Australia arrive by air.
Airport substitution possibilities	Low. There are no proximate RPT airports. But there are some substitution possibilities for GA traffic, which represents 35% of aircraft movements.
Curfew/Slot management	No.
BUSINESS CHARACTERISTICS 2009-10	
Aeronautical revenue	$88m
Non-aeronautical revenue	$159.7
Percentage of non-aeronautical revenue	64.5 per cent
Earnings before interest, tax and amortisation (EBITA)	$140.4m
Earnings before interest, tax and amortisation (EBITA) on average tangible non-current assets	18.1 per cent
Profit/(loss) after interest and tax	$46.6m

[a] Regular passenger traffic (RPT) only. [b] VFR—visiting friends and relatives.

Sources: Perth Airport (2010); ACCC (2011); DITRDLG (2010a); DRET (unpublished).

Table B.8 **Sydney airport**

OWNERSHIP	
Structure/parent/operating company	Fully privatised — Sydney Airport Corporation Holdings
Major shareholders	MAp (83%); Hochtief Airport GmbH (12%); Ontario Teachers' Australia Trust (4.96%)
DEMAND CHARACTERISTICS	
Aircraft movements (2009-10)[a]	275 000
Passengers (2009-10)[a]	34.4m
Main market segments (percentage of overnight visitors in 2010)	Holiday 26%; VFR[b] 25%; Business 45%
Passenger forecast (2029-30)	72.9m
COMPETITION CHARACTERISTICS	
Destination substitution possibilities	Relatively low, given the dominance of business and VFR travellers.
Modal substitution possibilities	Relatively low for business traffic (except for the Sydney-Canberra route). However, for VFR and holiday travellers, modal substitutes (particularly private vehicle) appear to be viable for visitors from some areas, including the ACT, Queensland and Victoria. (Nearly two-thirds of overnight visitors to Sydney travelled by modes other than air.
Airport substitution possibilities	Low. There are no proximate RPT airports.
Curfew/Slot management	Yes: 11pm to 6am. Under the curfew regulations, no take-offs or landings are permitted between 11pm and midnight. Additionally, the maximum landings between 5am and 6am is 5 per day up to a maximum of 24 per week. Additionally, Sydney Airport has an 80 per hour aircraft movement cap (except when the curfew is in effect).
BUSINESS CHARACTERISTICS 2009-10	
Aeronautical revenue	$489.9m
Non-aeronautical revenue	$411.6m
Percentage of non-aeronautical revenue	45.7 per cent
Earnings before interest, tax and amortisation (EBITA)	$514m
Earnings before interest, tax and amortisation (EBITA) on average tangible non-current assets	14.9 per cent
Profit/(loss) after interest and tax	($146.4m)

[a] Regular passenger traffic (RPT) only. [b] VFR—visiting friends and relatives.

Sources: Sydney Airport (2010); ACCC (2011); DITRDLG (2010a); DRET (unpublished).

C Economic regulation of airports: an international comparison

Airport ownership forms and the regulatory environments in which they operate have implications for airport efficiency and productivity. These characteristics differ considerably across countries. This appendix examines ownership structures and regulatory instruments used by other countries, reviews the academic literature, summarises the evidence linking ownership and/or the regulatory environment to efficiency and productivity and considers the comparability of measures across airports.

C.1 Ownership forms

The ownership structure of an airport generally determines whether or not the airport is operated as a commercial enterprise. If it does operate as a commercial enterprise, then it is most likely that the operators have the objective of maximising shareholder returns.

Broadly, an airport can be owned and/or operated by the government, the private sector or a combination of both. As a result, the majority of major international airports can be broadly categorised as:

- publically owned and operated
- publically owned, and operated by independent not for profit corporations
- publically owned and operated (corporatised)
- concessioned
- partially privatised
- fully privatised.

Tables C.1, C.2 and C.3 summarise airport ownership structures around the world.

Table C.1 **Ownership forms of major European airports**

Publically owned and operated

Stockholm Arlanda International (ARN)
Barcelona International (BCN)
Dublin International (DUB)
Geneva Coitrin International (GVA
Helsinki Vantaa International (HEL)
Lisbon Portela (LIS)
Madrid Barajas International (MAD)
Munich International (MUC)

Corporatised

Manchester International (MAN)
Oslo International (OSL)

Concessioned

Istanbul Ataturk International (IST)

Partially privatised

Amsterdam International Schiphol (AMS)
Athens International (ATH)
Brussels International (BRU)
Paris Charles de Gaulle International (CDG)
Rome Ciampino (CIA)
Copenhagen Kastrup International (CPH)
Flughafen Dusseldorf International (DUS)

Partially privatised — continued

Rome Fiumincino International (FCO)
Frankfurt Main International (FRA)
Hamburg International (HAM)
Milan Malpensa International (MXP)
Paris Orly International (ORY)
Vienna International (VIE)
Zurich International (ZRH)

Fully privatised

Birmingham Internationl (BHX)
Edinburgh (EDI)
London Gatwick International (LGW)
London Heathrow International (LHR)
London Stansted (STN)

Source: ACI (2010), Jacobs Consultancy (2010), ATRS (2010).

Table C.2 **Ownership forms of major Asia Pacific airports**

Publically owned and operated

Jakarta Soekarno-Hatta International (CGK)
Dubai International (DXB
Hong Kong Chek Lap Kok Inmternational (HKG)
Incheon International (ICN)
Ninoy Aquino International (MNL)
Shanghai Pudong International (PVG)
Shanghai Hongqiao International (SHA)

Corporatised

Singapore Changi International (SIN)
Christchurch International (CHC)

Concessioned

Phuket International (HKT)
Kuala Lumpur International (KUL)

Partially privatised

Auckland (AKL)
Guangzhou Baiyun International (CAN)
Osaka Kansai International (KIX)
Tokyo Narita International (NRT)
Beijing Capital International (PEK)
Wellington International (WLG)

Fully privatised

Adelaide (ADL)
Brisbane (BNE)
Melbourne Tullamarine International (MEL)
Perth (PER)
Sydney Kingsford Smith International (SYD)

Source: ACI (2010), Jacobs Consultancy (2010), ATRS (2010).

Table C.3 **Ownership forms of major North American airports**

Publically owned and operated	**Publically Owned, and Operated by Independent Not for Profit Corporations**
Hartsfield-Jackson Atlanta International (ATL)	Montreal-Pierre Elliot Trudeau International (YUL)
Denver International (DEN)	Vancouver International (YVR)
Dallas/Fort Worth International (DFW)	Calgary International (YYC)
Fort Lauderdale Hollywood International (FLL)	
New York John F. Kennedy International (JFK)	
Washington Dulles International (IAD)	
Los Angeles International (LAX)	
Chicago O'Hare International (ORD)	
Miami International (MIA)	
San Francisco International (SFO)	

Source: ACI (2010), Jacobs Consultancy (2010), ATRS (2010).

Publically owned and operated airports

Publically owned and operated airports are owned and operated by the government of the country in which the airport is located. This definition makes no distinction between the level of government (for example, municipal or federal) or if ownership and/or operation of the airport is shared between multiple levels of government. This definition also includes public yet independent authorities to whom the government has transferred ownership or the responsibility for the operation of the airport.

The objectives of airports which are publically owned and operated are generally different from airports that are privately held. The focus, at least partially, may be on non-commercial objectives such as the protection of a national airline or economic development within the region. These objectives may encompass the welfare of different stakeholders, rather than simply the maximisation of returns to the airport owner. For such airports, Gillen (2010) contends that 'there is an observed lack of consistency between aviation policy and the efficient use of airport assets'.

This ownership structure applies to entire systems of airports in countries such as Spain, Portugal, Sweden, Norway and Finland, while, despite a degree of private airport ownership, one or more airports in Switzerland, China, Indonesia, Bahrain, Qatar, Dubai, Japan and Singapore remain publically owned. Brazil's airports have been concessioned, but exclusively to the state owned airport operator. In Germany, Munich Airport remains one of the only publically owned airports.

Airports in the United States (US) are also publically owned and operated. However, the airport operator effectively contracts out the majority of operations and undertakes few functions itself. In many cases, as Gillen (2010) notes, this has resulted in vertical integration with regard to the market for air transport, with the airlines effectively engaged in joint ventures with the airport.

Publically owned, operated by independent not-for-profit corporations

The operation of airports by independent not-for-profit corporations is a model unique to Canada. Canadian airport authorities (CAA) operate the airports under 60 year lease agreements. In return, the not-for-profit organisations pay an annual ground rent to Transport Canada. (Some airports remain under the direct control of Transport Canada.)

The objective of maximising returns to shareholders is explicitly absent from airports which are publically owned and operated by not-for-profit corporations. These airports have objectives specified in their contracts with the government that largely mirror those of a publically owned airport. These include the maintenance of a revenue base and non-monetary objectives such as promoting the growth of air travel, regional development and sound financial and environmental management.

Publically owned and operated airports (corporatised)

In many cases, airports remain publically owned, but have been corporatised. This implies that the airport operates as a commercial enterprise and aims to earn a return on investment relative to market returns. Examples of this include Singapore's Changi Airport, and Norway's Avinor AS (the operator of Oslo International Airport).

There are some striking examples of highly profitable publically owned airport and airport operators. While Manchester Airport in the United Kingdom (UK) is entirely owned by entities such as the City of Manchester and various local councils, it explicitly has an objective of maximising shareholder returns and, as a result of its profitability has expanded and it has purchased stakes in other airports around the world.

Concessioned airports

Concessioning involves the sale by the government of the right to operate an airport for a period of time to a private sector airport operator. It is of particular use where

the government seeks to transfer the right to operate, but not to own, the airport to the private sector.

Despite the airport remaining publically owned, the operator seeks to earn a return to its shareholders. In effect, the airport operator is only constrained by the terms of the concession. In all other regards, they can charge for the supply of air services much as an owner would.

Concessions are particularly common in South America where Argentina, Chile, Uruguay and Peru have all sold the right to operate one or more of their airports to the private sector. Elsewhere, Istanbul Ataturk Airport in Turkey, Cairo International Airport in Egypt and King Khalid International Airport in Saudi Arabia have also been concessioned.

A variation on an airport concession is a build-operate-transfer concession, which gives a private company the right to build or upgrade an airport as well as operate it for a pre-agreed period before ownership reverts to the government. In India, build-operate-transfer concessions have been awarded for both New Delhi Indira Gandhi International Airport and Mumbai International Airport.

The right to concession can last for a relatively short period such as a few years, or considerably longer, such as in Mexico, where Aeropuertos del Surerste de Mexico (ASUR) was granted a 50 year operating concession over nine airports including Cancun. In India, both New Delhi Indira Gandhi International Airport and Mumbai International Airport are operated by private companies with 30 year leases. The Airports Authority of India owns a quarter of both of these companies.

In some cases, the right to operate the airport can be indefinite. In such instances, the right of the company to manage, rather than own, the airport is explicit. In Asia, this ownership structure is becoming increasingly popular and is often linked to the partial privatisation of the airport operating company. Ultimately, though, the airport remains a public asset. Malaysia Airports Berhad, which operates, but does not own 20 airports including Kuala Lumpur International Airport, is approximately three quarters state owned. In Thailand, the government owns approximately 70 per cent of the shares in the company Airports of Thailand which operates Thailand's five main international airports.

Partially privatised airports

The partial privatisation of airports involves the partial transfer of airport ownership from public sector to private sector control. This can be achieved through an offering on a public market or through a private bidding process. Given that private

sector involvement is contingent on a return on investment, the airports' necessarily focus on earning returns for shareholders.

In the case of Ciampino and Fiumicino International Airports in Italy, Vienna International in Austria, Domodedovo International in Russia, Brussels Airport in Belgium, Copenhagen International in Denmark and Auckland and Wellington International Airports in New Zealand, the private sector interest in the airports is a majority, while the respective government is a minority shareholder.

On the other hand, most major airports in Germany retain the state as majority and the private sector as minority shareholders. This is also the case with Charles de Gaulle International (France), Malpensa International (Italy), Birmingham (United Kingdom) and Athens International (Greece). Approximately a third of the shares in Beijing Capital Airport were privatised through an initial public offering early in the millennium. The Canton and the City of Zurich hold a cumulative stake of just under 40 per cent in Zurich International Airport, but with private stakes restricted to five per cent, the state effectively remains in control.

Partial state ownership does not necessarily restrict the profit motive. Despite being more than 50 per cent state owned, Fraport Ag (the owner and operator of Frankfurt International Airport) has expanded into the operation of airports in Bulgaria, India, Saudi Arabia, China and Peru. Amsterdam Schipol Airport, as well as other airports in Holland, are owned by the Schipol Group, which itself is owned by the Dutch state and the cities of Amsterdam and Rotterdam with around eight per cent owned by Aeroports de Paris *(*AoP*)*. The Schipol Group has extensive airport interests in North America, Europe and Australasia.

Privatised airports

An airport is fully privatised if the entirety of its ownership has been transferred to the private sector. Again, this can be achieved through an offering of shares on a public stock market or through a private bidding process. Airports entirely owned and operated by the private sector have the obligation to maximise returns to shareholders. As a result, management decisions are generally focused on ensuring that the airport generates a profit in the short term, and the need to continue to generate profits into the medium term. In most cases, the transfer of an airport to the private sector is subject to specific conditions and the ongoing operations of the airport are generally regulated. The majority of UK airports have been fully privatised. This includes Heathrow, Gatwick, Stansted, Birmingham and Edinburgh, while Manchester Airport, as mentioned previously remains in the control of various levels of government.

The recent trend towards privatisation has slowed (ACI 2010). This can be attributed to the recent global economic environment, which has adversely affected the cost and availability of finance for large projects and driven down the expected sale prices. For example, a 30 per cent stake in Spain's airport operator (AENA) was offered in 2008, but later postponed pending the improvement of market conditions. Likewise, the question of whether the government will accept a proposal to sell off more of its share in Amsterdam Schipol International Airport is yet to be resolved. A deal to privatise Chicago's O'Hare International Airport collapsed in 2009. However, the global financial crisis has not hindered the recent partial privatisation of several publically owned Chinese airports.

C.2 Regulatory regimes

Detailed information on the regulatory environments in which these airports operate is, in several cases, not readily available. In particular, there is a notable lack of information on Asian and Latin American regulatory regimes. As a result, in presenting examples of international regulatory regimes in order to establish the global context of Australia's system of price monitoring, this appendix focuses on North American, European and Australasian regimes.

North American regulatory regimes

United States of America

The Federal Aviation Administration (FAA) was established in 1958 by the *Federal Aviation Act 1958* (USA) (now recodified as Title 49 of the United States Code). This Act outlines the responsibilities of the FAA regarding the safety and efficiency of the nation's airport system. The regulatory instruments include direct regulation and contractual obligations on airports in return for the use of federal grant-in-aid funds.

In 1990, a Passenger Facility Charge (PFC) program was enacted to fund investment and improve airport infrastructure. New charges are subject to FAA approval. PFCs can be applied for three stated purposes — projects that:

- preserve or enhance safety, security or capacity
- reduce noise or mitigate its impacts
- enhance competition.

The intent of a recent FAA policy statement on rates and charges is to encourage negotiation between airport operators and the suppliers of air services, to minimise the need for direct Federal intervention in the case of fee disputes.

The policy specifies that, under the terms of grant agreements for airport approval (administered by the FAA), all aeronautical users may access the airport on fair and reasonable terms and without discrimination. These terms are specified in six principles. Aside from encouraging airport operators to set charges with regard for economy and efficiency, the document is not prescriptive, stating that rates and charges are best addressed through commercial negotiation.

Jacobs Consultancy (2010) reported that pricing in the U.S. is generally set according to the residual after all commercial revenues have been exhausted (analogous to an ex-post single till).

Canada

There are no Transport Canada regulations governing economic matters given the 'not-for-profit' status of local airport authorities (LAA) and the nature of their rental agreements with the Federal government. The airports' only target is their contractually specified revenue levels.

The airports that remain under the direct purview of the Minister for Transport are regulated according to the Air Services Charges Regulations specified by the *Aeronautics Act 1985* (Can). For these airports, Transport Canada uses discretionary charging to ensure that over time local revenues broadly equate to local costs.

Gillen and Morrison (2001) contend that contractually specified revenue levels are analogous to a price-cap as they provide little incentive for the LAA to price efficiently. The combination of specific contractual obligations with an obligation to the ongoing development of their local area provides LAAs with an appropriate framework for pricing and consulting with users without regulatory oversight.

European regulatory regimes

European Union

In March 2009, the European Union (EU) issued a Directive on Airport Charges. This directive establishes a general framework for the setting of airport charges and builds on International Civil Aviation Organisation (ICAO) policy on airports and air navigation services.

The directive stipulates that charges should be non-discriminatory and transparent and applies to all EU airports that handle more than five million passengers per year (as well as the largest airport in each member state). This transparency requirements apply not only to the charge but to the charge's method of calculation. In addition, charges should only be determined after a mandatory consultative process that involves the users of airport services, with recourse to an independent arbiter in the event that the final charge is contested. This consultation should include any major investment and capital expenditures. Discussion of economic regulation of air services in European countries is summarised in table C.4.

Table C.4 **Regulation of European Airports**

Country	*Airport*	*Independent Regulatory Authority*	*User Consultation*	*Type of Regulation*	*Single or Dual Till*
Austria	Vienna	Yes	Yes	Price cap	Single
Belgium	Brussels	No	Yes	Rate of return	Single
Denmark	Copenhagen	No	Yes	Price cap	Dual
Finland	Helsinki	No	Yes	No regulation/cost recovery	n/a
France	Paris	n/a	n/a	Price cap	Adjusted single
Germany	International Airports	No	Yes	Various	Various
Greece	Athens	No	Yes	Airports sets charges	Dual
Hungary	Budapest	No	n/a	Price cap	Single
Ireland	Dublim	Yes	Yes	Revenue based	Single
Italy	Rome	No	Yes	Airports set charges	Dual
Netherlands	Amsterdam	Yes	Yes	Rate of return	Dual
Norway	Oslo	No	n/a	Cost based	Single
Portugal	ANA	Yes	No	Revenue based	Single
Slovenia	Ljubljana	n/a	n/a	No regulation	n/a
Spain	AENA	No	No	Cost based	Single
Sweden	Stockholm	n/a	Yes	Price cap	Single
Switzerland	Zurich, Geneva	n/a	n/a	No regulation	n/a
United Kingdom	BAA	Yes	Yes	Price cap	Single

a Portugal used cost based regulation. This has been subsequently revised to revenue based regulation.

Source: Adapted from Gillen & Neimeier (2006).

United Kingdom

Price cap regulation applies to designated airports in the UK. For an airport to be designated, it must be determined that:

- the airport is able to acquire substantial market power
- EU competition law is deemed not sufficient to address the risk of persistent pricing above competitive levels
- the benefits of designation exceed the costs of price regulation.

Currently designated airports are Heathrow, Gatwick and Stansted.

Once designated, the *Airports Act 1986* (UK) stipulates that airports are subject to two conditions. These two conditions are:

- a charges condition, which requires that the Civil Aviation Authority (CAA) set price caps on airport charges generally every five years on designated airports.
- an accounts condition, which requires that the airports provide financial information in addition to that stipulated by the *Companies Act 2006* (UK) and submit to the scrutiny of the Competition Commission.

Designation, and the subsequent regulation, are intended to correct the abuse of market power. If an airport is determined to not meet any of the three criteria stated above, the CAA may recommend to the Secretary of State for Transport that the airport be de-designated.

Prior to January 2008, Manchester Airport had been designated. However, on a recommendation by the CAA that neither Manchester nor Stansted Airports had appreciable market power, the Secretary de-designated Manchester Airport, effectively deregulating the airport. Price controls, however, remain in use at Stansted Airport.

Germany

As yet, the EU Directive of 2009 is still in the process of being implemented in Germany. Currently, under Section 43 of the Air Traffic Licensing Regulations, airports must have their charges for aviation services approved by the relevant regulatory authorities — the air transport authorities in each of Germany's 16 federal states. Because of this decentralised regulatory regime, there is not yet a national regulatory authority for airports and their charging policies in Germany.

Major airports in Germany employ varying methods for the setting of charges. When the Federal government sold its minority stake in Hamburg airport to the

private sector, a condition of the sale was that regulation 'be implemented by a legal contract between the airport and the Regulator' (Littlechild 2011, p. 4). This contract instituted price cap regulation. The cap is set at the Consumer Price Index minus an efficiency factor (CPI-X) on a dual till basis for that airport. This regulation also includes a price-quality monitoring component.

At Frankfurt Airport, both the airport operator and the airlines entered into a framework agreement, facilitated by the regulator. The agreement specified a risk sharing model in which charges could be raised proportional to passenger growth and called for the establishment of a Review Board. Subsequently, framework agreements have been struck in Hannover and Dusseldorf. All of these agreements contain aspects of service level agreements and the development of a user council has become standard.

With regards to other airports in Germany, over time, an informal consultative process has evolved, in which the state regulatory authorities in Germany generally work with the airport before approving proposed new charges from the airport operator. However, their authority to amend the proposed charges or to change existing charges is limited.

In surveying the regulatory framework for German airports, Muller et al. (2008) find that the certainty of the current arrangement appeals to airports, but the lack of transparency does not sit well with users. Users also contend that there is a conflict of interest in cases where regulators are also airport owners. Given market power in airport services is limited in Germany because of competition between regional airports, the regulators consulted reported that they believe the current level of regulation to be unnecessary. Also, given the regulator's inability to penalise recalcitrant airport operators, the procedure is also, to a degree, problematic.

The Netherlands

In the Netherlands, the airport operator sets the charges and conditions related to aviation activities in accordance with an established system authorised by the board of the Netherlands Competition Authority (NCA). Charges are calculated on a dual till basis and are to never exceed the Weighted Average Cost of Capital (WACC) applicable to aviation activities. The formula for the WACC is specified in the Amsterdam Airport Schiphol Operation decree of 2006.

Complaints must be received in writing by the board of the NCA. On receipt of a complaint, the board may request from the airport operator all information and data that it may need to execute its duties.

The airport is obliged to report every three years to the Minister for Transport on the operations of the airport. This report includes all pertinent data and an account of measures taken to 'properly handle airport air traffic and the associated passenger and goods transport at the airport' (as stated in section 8.25a).

Compliance with aviation and competition regulations is monitored by the NCA. However, the Minister for Transport retains the power to investigate airport operators in order to ascertain whether or not the operator is complying with the regulations that govern the provision of airport services.

Legislation in the Netherlands stipulates that within four years of the enacting the amendments to the Act, the Minister for Transport and the Minister for Economic Affairs must report on the effectiveness of the regulatory regime.

Ireland

The economic regulation of airport charges in Ireland is the responsibility of the Commission for Aviation Regulation. Currently, with regard to Dublin Airport, Ireland employs incentive regulation in the form of a price cap, applied to a single till. The Commission sets a cap on the total revenues per passenger that the Airport Authority may collect.[1] The cap remains in place for a period of four or five years.

If the Airport Authority can successfully reduce its costs below the level of the cap, the airport operator may keep the balance. Subsequently, the Commission considers the new cost structure of the airport operator when setting the next price cap. As a result, the benefits of increased productivity or efficiency are shared between the airport operator and the airport users.

The information required to calculate the price cap are drawn from 'regulatory building blocks'. The Commission calculates these at the time of a price cap determination. These building blocks are:

- the regulatory asset base, which in any given year is the sum of existing capital stock and a forecast of efficiently incurred new capital stock
- a return on an efficient capital stock
- a depreciation charge on that capital stock
- an estimate of efficiently incurred future operating expenditures.

1 Revenue per passenger controls are uncommon, with Portugal the only other country in Europe that uses this form of price cap.

An estimate of future non-aeronautical commercial revenues is subtracted from the sum of these building blocks, which is then divided by a forecast of passengers to give the maximum per passenger airport charge.

Portugal

Similar to Ireland, Portugal uses a revenue per passenger price cap. In September 2009, a new legal framework for the economic regulation of airports ensured that Portugal complied with the EU directive of 2009. Notable attributes of Portugal's regulatory regime, in addition to the revenue per passenger price cap, include:

- the use of an adjusted single till system
- an independent regulatory agency, the Civil Aviation Authority
- legislated consultation and information provision to stakeholders
- a review period of five years
- the potential levying of a tariff for the specific purpose of mitigating increases in airport charges.

The government entity that operates Portugal's airports, Aeroportos de Portugal, is committed to the ongoing cross subsidisation of all of Portugal's airports.

France

Paris' two main airports, Charles De Gaulle and Orly are operated by Aeroports de Paris. The airport charges that Aeroports de Paris can set on a per annum basis are restricted by a price cap. This cap is based on an adjusted single till and incorporates assumptions about capital expenditure and passenger growth and remains in place for a period of five years. The cap is negotiated between Aeroports de Paris and the Government and involves user consultation. The results of the negotiations are formalised in an economic regulation agreement between the two parties before being made public.

The current economic regulation agreement spans 2011 to 2015, and the average increase in airport charges equates to 1.38 per cent plus CPI. This compares to an estimated increase in airport charges of 2.15 per cent plus CPI over the preceding five year period. The projected price cap path may be subject to change, pending annual consultations between Aeroports de Paris and the Government. France does not have an independent airport regulator.

Denmark

In Denmark, airport charges are calculated on a dual till basis. Regulation is equivalent to a price cap for a period of five years. For the five year period to 2015, charges are able to be increased by one per cent plus CPI (as published by Statistics Denmark). Caps are primarily based on negotiations between the airport and airlines, without an independent regulator.

Australasian regulatory regimes

New Zealand

New Zealand's *Commerce Act 1986* (NZ) specifies that suppliers of airport services be subject to information disclosure (ID) regulation. The Act also details the meaning of specified airport services and states that the suppliers of airport services are the companies operating Auckland, Christchurch and Wellington International Airports. ID is effectively a stand alone regulatory tool in the case of these airports.

In December of 2010, the Commerce Commission released the Commerce Act (Specified Airport Services Information Disclosure) Determination 2010. The requirements for specified airports under the Act include disclosure of information as well as the compliance with auditing, certification and verification standards. The determination came into force on January 2011.

The determination is prescriptive, with precise definitions and a series of schedules to be completed by airport service suppliers. The schedules comprise financial, quality, revenue and pricing information. This information needs to be verified either by an independent auditor or certified by two of the airport service supplier's directors.

The purpose of the ID is to ensure that sufficient information is available to interested persons to assess whether an abuse of market power has occurred. The Commerce Commission considers that, as such, ID is intended to provide 'a means for regulators and other interested persons to assess whether regulated suppliers face incentives to achieve outcomes consistent with outcomes produced in workably competitive markets'.

The *Airport Authorities Act 1966* (NZ) specifies that the three major airports consult with substantial customers on charges and major capital expenditures. Once the Commission's ID determination came into effect, the obligation to consult was

maintained although several low-level disclosure provisions contained in the Act were repealed.

Airlines have argued that the obligation to consult on pricing is not equivalent to an obligation to negotiate. In the absence of genuine agreement, it is common for issues of contention to be resolved through litigation. Despite the publishing of input methodologies that detail the process and vital inputs into the calculation of return on investment metrics, such as the weighted average cost of capital (WACC) and the return on investment (ROI), the Act places no constraints on the level of airports' prices.

In the Airports ID Reasons Paper, the Commission stated 'that information disclosure regulation will likely have an effect on the incentives faced by regulated suppliers'. Given the consultation process for the next pricing period has just commenced — or is yet to commence — for the three major airports, there is no evidence yet as to whether or not future airport charges will be calculated in accordance with the Commerce Commission's published Input Methodologies. Given the timing of the Commerce Commission's reporting duties — they are required to report to Minister in or around 2012 — it may be that the results of future price consultations will better establish whether the threat of a pricing inquiry and subsequent re-regulation is credible.

While ID is used as a stand alone regulatory tool, where outcomes are distinctly different to price levels expected in workably competitive markets based on the input methodologies, the Commission retains the authority to conduct an inquiry either at the behest of the Minister or at its own initiative. The implication of this is that the Minister may subsequently recommend re-regulation.

Other regulatory regimes

India

In 2008, India established a statutory body to act as an independent regulatory agency. The function of the Airports Economic Regulatory Authority of India (AERA) is to determine airport charges, development fees and passenger service fees or the process for their calculation and to monitor a set of performance standards.

After an extensive public process, AERA outlined their preferred philosophy for the economic regulation of major Indian airports in 2011. This included single till price cap regulation in addition to stipulating guidelines for the estimation of a fair rate of

return, the regulatory asset base, depreciation as well as conditions for capital expenditure, traffic forecasting and quality of service.

South Africa

The *Airports Company Act 1993* (SA) establishes a statutory authority, the Regulating Committee, to manage the economic regulation of the operating company of ten of South Africa's major airports. This operating company, the Airports Company of South Africa (ACSA), is partially government owned, but operates commercially.

The principal objectives of the Regulating Committee include:

- restraining ACSA from abusing market power, without placing undue restrictions on their commercial activities
- promoting the interests of airport stakeholders
- enabling efficient and profitable operations at ACSA airports
- ensuring ACSA can finance its operations and earn a commercial return
- ensure investment in airport facilities anticipates demand.

The Regulating Committee uses a price cap as it major regulatory instrument. This price cap is calculated on a single till basis, according to a CPI-X+K formula in which the 'X' component of this cap reflects an efficiency factor and the K component is a correction factor that is used to take into account lumpy, infrequent investments made by the airport.

The regulated categories of airport charges are landing charges, passenger service charges, and aircraft parking charges. Aeronautical charges are set for periods of five years, subject to a review after the third year. At the review, the airport operator may apply to the Regulating Committee for a change to the airport charges. Minimum service standards also apply.

Latin America

Information on regulatory regimes in Latin America is not readily available. Serebrisky et al. (2011) note that many Latin American nations have created independent regulatory authorities to design and implement effective and efficient regulation in the airport sector (table C.5).

Table C.5 **Independent Regulatory Authorities in Latin America**

Regulator	*Country*	*Independent / Non-Independent*
Organismo Regulador del Sistema Nacional de Aeropuertos	Argentina	Independent
Department of Civil Aviation	Bahamas	Non-Independent
Superintendencia de Transportes	Bolivia	Independent
Agencia Nacional de Aviacao Civil	Brazil	Independent
Direccion De Aeropuertos, Ministerio De Obras Publicas	Chile	Non-Independent
Unidad Administrativa Especial De Aeronautica Civil	Colombia	Non-Independent
Direccion General De Aviacion Civil	Costa Rica	Non-Independent
Direccion General De Aviacion Civil	Ecuador	Non-Independent
Autoridad De Aviacion Civil	El Salvador	Non-Independent
Direccion General De Aviacion Civil	Guatemala	Non-Independent
Autoridad De Aeronautica Civil	Panama	Non-Independent
Organismo Supervisor De La Inversion en Infraestructura De Transporte De Uso Publico	Peru	Independent
Comision Aeroportuaria	Dominican Republic	Non-Independent

Source: Serebrisky et al (2011).

Of the Latin American countries, the most recent and comprehensive information is available on Brazil and Argentina.

- In Brazil, airport charges are regulated by the Economic Regulation Division of Agencia Nacional de Aviacao Civil. In 2005, a new law provided for a deregulated pricing regime in the provision of air services. However, the regulator is bound by the same law to report any abuses of market power to the Government. The latitude in pricing afforded can be explained by the fact that the airport operator is entirely state-owned.
- In Argentina, a private consortium owns the concession to operate 33 airports. As a result, the regulator, Organismo Regulador del Sistema Nacional de Aeropuertos, has implemented a single till approach with a price cap mechanism to ensure that the operator does not extract monopoly rents from the consumers of air services. The price cap is calculated according to a CPI-X formula in which the 'X' component reflects an efficiency factor. There are also minimum investment requirements. At an airline's request, the regulator can also acts as a mediator in any dispute between the concessionaire and the airline.

C.3 Empirical research

Empirical studies into the benchmarking of airport efficiency and productivity have yielded mixed results. The body of research, which has been undertaken largely over the last decade, has focused more on the importance of airport ownership forms and less on the regulatory regime. As a result, while there is some evidence to support the idea that ownership forms have implications for airport efficiency and productivity, there are currently few empirical studies estimating the impact of regulatory regimes.

Productivity and Efficiency

One of the first studies into airport productivity was undertaken using a sample of Australian airports. Hooper and Hensher (1997) estimated productivity over the period 1988-89 to 1991-92 of Adelaide, Brisbane, Hobart, Melbourne, Perth and Sydney airports. This period was prior to privatisation and over the period in question, the airports were under the control of the FAC. Hooper and Hensher consider their study 'indicative of the potential for and desirability of more detailed investigation' (p. 258).

Since then, a second study by Abbott and Wu (2002) has estimated the productivity and efficiency of 12 Australian airports for the period 1990-2000. The study concludes that, over the given period, the productivity of all sampled airports has improved at a rate that appears to exceed that of the rest of the economy. When benchmarked against eleven international airports in the year 1998-99, it is also found that Australian airports, as a group, are relatively efficient.

A more recent study by Assaf (2011) focuses on a post privatisation period from 2002 to 2007. From a sample of 13 Australian airports, the study concludes 'most Australian airports have improved their TFP over the study period, while few airports have gone through a period of performance decline'(p. 844). The study also finds that efficiency and technological change has generally remained constant or increased. In addition, Assaf demonstrated that productivity increases with increasing market share, while the use of an airport as a hub also increases productivity.

In discussion, Assaf contrasts the results of his study with those of Abbott and Wu. While noting that a direct comparison between the two should be treated with caution, Assaf highlights the fact that the increase in productivity over the post-privatisation period was more substantial than the increase over the pre-privatisation period and suggests that privatisation may be one reason for this discrepancy.

Ownership structure

One of the first empirical investigations of the impact of ownership forms on efficiency was undertaken by Parker (1999). After investigating a sample of British airports before and after privatisation, Parker found no evidence of improvements of improvement in technical efficiency between the pre and post privatisation periods. A separate study by Yokomi (2005) contradicted these findings.

Perelman and Serebrisky (2010) found that privately operated airports in Latin America have not outperformed publically operated airports. The authors estimate that there were no appreciable improvements in the productive capabilities throughout the industry over the period 1995 through to 2007 and any changes in productivity were largely due to adapting well known technologies and production processes.

Vogel (2006) investigates the impact of ownership structure on partial factor productivity (PFP) and financial ratios (FRA). The study concludes that publically owned airports may be able to capitalise on the fact that they are government backed. By focusing on that tax deductibility of interest payments, Vogel contends that publically owned firms have the ability to assume higher leverage in the financing of productive assets.

Oum et al. (2008) investigate whether ownership forms matter for airport efficiency using a sample of 109 airports from around the world. The study finds that average efficiency is higher when the airport is owned by the private sector. A second finding suggested that airports with mixed ownership were less efficient than airports operated solely by either the public or the private sector. It also asserts that competition improves the efficiency of all airports in a region, when one of the local airports is privately owned.

Regulatory regimes

An empirical analysis undertaken by Oum et al. (2003) investigates the effect of regulatory regimes on prices and efficiency. The results of their study largely substantiate the theoretical arguments of Starkie and Yarrow (2000) and Starkie (2001) that, in terms of overall economic efficiency, dual till price-cap regulation would have a more positive impact than single-till price cap or the single till rate of return regulation.

Oum et al. (2003) also demonstrated analytically that airport charges at an unregulated airport with the objective of maximising returns to shareholders would be higher than at a publicly owned airport operating under a breakeven financial

constraint. However, data limitations prevented this analytical result from being tested empirically.

Eichinger and Engert (2006) conducted efficiency analysis of Brazilian airports, however the data set is limited in a number of ways. Since the sample comprises airports from the same regulatory system, no comparison of how the regulatory regime contributes to efficiency is possible. In addition, the available data series spans a relatively short period. In light of these limitations, Eichinger and Engert suggest their study may form the basis of a future program in benchmarking of efficiency across Brazil's airports.

Other analyses

In reviewing the environment for UK airports, Starkie (2008) asserts that competition is the key to efficient outcomes. Furthermore, in the presence of competition, 'the effect of regulation may be to crowd out the efficient solution' (p. 18). As a result, Starkie concludes that policy responses should focus on the promotion of competition rather than regulation.

Malighetti et al. (2007) estimate the relative efficiencies of a sample of Italian airports. The authors find that there is a positive relationship between the size of an airport and its efficiency. This result confirms the findings of an earlier study by Gillen and Lall (1997) in relation to US airports, although Malighetti et al. go on to assert that since large airports are operating under decreasing returns to scale, further increases in the activities of large airports are likely to lead to further increases in their average costs. Malighetti et al. also find that if an airport has a dominant airline, it is more efficient — as it obtains what the authors refer to as a hub premium.

Bel and Fageda (2010) analysed the 100 European airports with the highest volumes of air traffic in order to identify the determinants of aeronautical charges. The study found that airports 'charge higher prices when they move more passengers' (p. 2). The authors also find that increasing the domestic air traffic as a proportion of total passenger movements puts downward pressure on aeronautical charges. Since they also find that island based airports have higher charges, the authors suggest that intermodal competition and competition from nearby airports may countervail potential abuses of market power. This study also finds that there is little difference between single and dual till regulation or between rate of return or price cap regulation in explaining airport charges.

In a recent study, Bilotkach et al. (2010) used a sample of 61 European airports to analyse the impacts of various regulatory policies and privatisation on airport

charges. The authors conclude that recent changes in airport regulation and privatization have not resulted in increased market power for airports nor in welfare reductions for the community. Furthermore, Bilotkach et al. argue that price-cap regulation has not led to significantly lower aeronautical charges, but rather that charges are lower at privatised airports and, contrary to the findings Bel and Fageda, in regimes that use single till as opposed to dual till regulation. In addition, the study also found that the presence of ex-post regulation does result in lower aeronautical charges.

Constraints on effective benchmarking and efficiency analysis

There are considerable constraints on effective benchmarking of airports which curtail its reliability as an estimate of performance. While these constraints make benchmarking difficult across areas that can be quantified — such as prices, profits, costs and efficiency, the benchmarking of quality of service across airports across airports is even more challenging. The difficulties associated with effective benchmarking are explored in detail below.

A critique of airport benchmarking and efficiency analysis is provided by Barros (2008). Barros emphasises that airports are multi-product firms with considerable differences in the services they provide to consumers of air services. The study concludes that many of the empirical studies fail to accommodate these differences and that there are considerable limitations in current data sets.

In attempting to benchmark airport performance across its portfolio of investments, MAp Airports Limited (Martyn Booth pers. comm. 2011) found comparisons difficult. Specifically, broad indicators failed to account for specific differences between airports that had considerable effects on performance. In addition, MAp Airports Limited also noted that since airports, airlines, other companies and government organisations jointly supply a product, the performance of parties other than the airport may also contribute to an airport's measured performance indicator. Whereas an airport may supply check in desks, an airline may staff the desks. In this case, the effectiveness of the airline will contribute to how well passengers are processed and thus to the perceived performance of the airport under these broad indicators (Martyn Booth pers. comm. 2011).

Differences between airports

Airports differ in many ways. These include differences in business strategies that result in airports across the sector engaging in activities that are not identical. Differences may arise from variations in laws and regulations across the sector

either within or across countries, and other unavoidable differences that are beyond an airport's control such as the geographic and demographic characteristics of its catchment area. Each of these differences influence an airports ability to supply air services efficiently.

Often differences between airports may arise from differences in the way airports conduct business. Airports provide a variety of services which are priced uniquely. Each airport produces a different mix of these services, depending on the markets in which it is participating. For example, facilitating the movement of a business traveller requires a different level of airport service to the movement of an economy-class passenger. As a result, airports that move a higher proportion of business travellers (for example Canberra airport) will use a different quantity and mix of inputs in the production process than airports that move a lower proportion of business class travellers (for example Gold Coast airport) for the same total passenger movements. Since each airport operates according to its own business model, the choice of model affects the target market, capacity utilisation and the level of outsourcing. Appendix B provides a more complete summary of airport characteristics.

While, for the most part, the Federal regulations governing airport activities are consistent, there are a few specific exceptions. An example of this may be the imposition of a curfew at an airport. Since Sydney airport has a curfew, whereas Melbourne, Brisbane and Perth airports do not, there is a constraint on Sydney airport's ability to efficiently supply air services that isn't shared by its competitors. Differences like these are particularly prominent when it comes to benchmarking against international airports.

In some instances, there may be substantial differences in the operating environments across the sector. These differences may be beyond the control of the airport. Notable examples are the physical constraints (imposed by an airport's historical activities) and geographical constraints (imposed by an airport's surroundings). This can be seen in the contrasting terminal configurations at Sydney and Melbourne airports. Sydney airport's terminals are dispersed, whereas Melbourne airport's terminals are more consolidated. By affecting an airport's capacity to adapt with market conditions, these differences may also adversely affect an airports ability to efficiently supply air services.

Reliable comparisons of airports through benchmarking studies must account for these differences. If not, the benchmarking study may not accurately represent the performance of the airport, severely limiting the ability of the study to accurately inform regulatory policy.

Data limitations

Despite the differences between airports, it may still be possible to benchmark effectively. Each of the differences between airports can be accounted for if either the airports are benchmarked against airports of similar characteristics or if their differences are accounted for in the data set. To accomplish this, the data set should incorporate data on inputs, outputs, prices, quality of inputs and outputs and the production environment.

While existing data sets capture information on outputs, prices, physical capital and, to an extent, inputs, they do not adequately describe the inputs used in the production process and are also limited with regard to the quality of inputs and outputs and the production environment. Improving data sets would require that existing data be disaggregated as well as the collection of additional data.

In the presence of considerable data limitations, the risk of producing unreliable or inaccurate estimates compromises the potential for benchmarking to add information to the current debate. Unless current datasets can be significantly improved at reasonable cost, the role of benchmarking to shape the regulatory process (either by a regulator or as a part of a review process) will be limited.

Competing methodologies

With regard to the benchmarking of airport productivity or efficiency, most existing studies choose to apply one of three approaches total factor productivity analysis (TFP), data envelopment analysis (DEA) and stochastic frontier analysis (SFA).

Since each approach may be undertaken in a variety of ways, there are 'competing methodologies' (Morrison 2008, p. 145) rather than a single, widely used method. Existing studies have accounted for the problems associated with the differences across airports to varying degrees.

A prominent example of conflicting results involves the efficiency benchmarking of UK airports. As noted earlier, one study found that there is no evidence that privatisation has improved technical efficiency (Parker 1999), whereas another study over a comparable period estimates that efficiency has been positively affected by privatisation (Yokomi 2005).

C.4 Summing up

Over the past two decades, there has been a trend towards including the private sector in the ownership and management of airports. Regional patterns in ownership forms have emerged. Privatised airports are common in Australia and New Zealand, while partial privatisation is more common in Europe. In Latin America, many countries have chosen to sell airport concessions. In Asia, the state has traditionally played a large role in the airport sector, however the level of private sector involvement has increased. In North America, many airports remain under public ownership. Since the advent of the difficult economic conditions of the past few years, the trend towards private sector involvement has slowed for several reasons.

In many cases, an airport may be owned by one entity and operated by another. In the event that an airport is publically owned and operated or publically owned and operated by a not-for-profit organisation, it is highly likely that the airport will pursue non-monetary objectives in addition to earning a return for shareholders.

Information on the regulatory regimes around the world is harder to obtain. However, it is clear that there is a wide variety of regulatory systems in use around the world.

In Europe, price regulation of airports varies from country to country. There is little regional agreement on the pricing methodology, the till basis for calculating prices and independent regulators. Given the EU has accepted a recent Directive on Airport Charges, there may be increased agreement on issues covered by the general framework such as user consultation.

The US and Canada offer considerable latitude to airports in the setting of charges. This is attributable to the fact that the state and not-for-profit organisations are heavily involved in the airport sector. As a result, airports are at least partially focused on objectives other than the earning of a return to shareholders.

New Zealand has recently implemented Information Disclosure requirements designed to influence the incentives faced by the supplier of air services. By detailing the Input Methodologies that the regulator will use to assess whether there has been an abuse of market power, it can be argued that the new regime may constitute shadow regulation.

The productivity of Australian airports has increased over time. Studies (Abbott and Wu 2002, Assaf 2011) have found that, over several different periods that span 1990 to 2007, in addition to improved productivity, Australian airports have exhibited increased technological change and where there have been changes in technical efficiency, these changes have been positive. While these studies have not

examined whether the regulatory environment has affected airport performance, the most recent study (Assaf 2011) contrasts the changes in productivity before and after Australia's airports were privatised and notes that the rate of productivity growth has been greater over the post-privatisation period.

Although there has been some empirical research on the effects of ownership forms, few studies have estimated the impacts of regulatory regimes on efficiency and productivity. Results have been mixed. Several studies have suggested that the lack of robust evidence may, in fact, result from the existence of competing approaches to the analysis, the substantial differences between airports and the limitations of current datasets in accounting for these differences. These issues limit the effectiveness of benchmarking studies as a tool for comparing outcomes across airports.

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