

AIRLINES: HELPING AUSTRALIA'S ECONOMY SOAR

A REPORT FOR A4ANZ

9 SEPTEMBER 2019



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OVERVIEW

Airlines make a notable contribution to the Australian economy by moving passengers and high-value freight to where they're needed. The air transport sector contributes **AUD\$104bn** to the Australian economy, and directly and indirectly supports 716,000 jobs.²

In addition, air transport is a critical input into business activities in nearly all other industries. Ensuring efficient air transport links and good air connectivity with the rest of the world is a powerful means of enhancing Australia's prosperity. More direct and frequent connections provided by Australian airlines:

- · reduces travel time for passengers
- reduces freight logistic costs
- enhances international competitiveness
- enables Australian businesses to expand into new markets and
- ensures regional and rural communities can continue to access essential services

In this report, we highlight and quantify how airline connections help facilitate extra trade and investment – boosting Australian GDP and employment.

It is well recognised by the Australian Government that the best way to drive ongoing gains in efficiency and productivity is through effective competition, and where competition is not feasible, effective regulation to mimic the outcomes of competitive markets.

"Competition is one of the surest ways to lift long-term productivity growth. Competition energises enterprise and encourages business to pursue efficiencies, rewarding the innovative and dynamic businesses that provide the best services at the lowest cost..."

Australian Government response to the Harper Competition Policy Review In the air transport sector, elements of the supply chain are exposed to competition, while other elements are not:

- **Airlines** in Australia are exposed to domestic and international **competition**. Over the past 10 years, competition has driven improvements in efficiency and the passing on of these gains to passengers. Australian airlines reduced their cheapest domestic airfares by 25% in real terms.³
- Unlike airlines, Australia's major **airports** face **no competition** and **minimal regulation**. The outcome has been high airport charges and profits.⁴

A sector can contribute to the economy and employment both directly and indirectly. Directly through the activities they undertake and the staff employed in the sector and indirectly as a result of the demand generated, by the sector in question, for goods and services produced in other sectors.

² Air Transport Action Group (2018), Aviation Benefits Beyond Borders, October 2018

Change in Australian Domestic Air Fare Index - Real best discount for the period 2007-08 to 2017-2018 (Source: BITRE, Aviation statistics. Available at https://www.bitre.gov.au/statistics/aviation/domestic.aspx)

Frontier Economics, Market power and the profitability of Australian Airports, a response, a report prepared for A4ANZ, December 2018.

Australian airlines' highest cost after staff and fuel expenses are airport charges. High airport charges can reduce the economic viability of new routes and reduce the frequency of connections. Ultimately, unreasonably high airport charges act as a drag on the Australian economy.

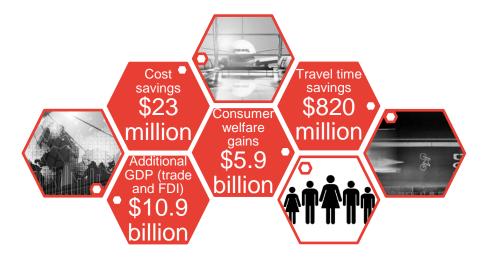
If airports were subject to more effective regulation which reduced airport charges – without increasing administrative or other costs – it could substantially improve Australia's domestic and international air connectivity and reduced fares. Benefits to the economy would follow.

"Providers of key monopoly infrastructure such as the major airports are typically regulated to ensure that they will not exploit their market power to the detriment of consumers and the broader economy. This is not currently the case with Australia's major airports."

ACCC Chairman Mr Rod Sims, September 2018

The potential benefits that could flow from better connectivity and lower fares are shown in **Figure 1** and discussed further in Section 2. In our view, these potential gains are simply too big to ignore.

Figure 1: Potential benefits from improving Australian airport regulation



Source: Frontier Economics (2018), Economics evaluation of an alternative approach to airport regulation, prepared for A4ANZ Figures are expressed in net present value terms, calculated over 15 years.

1 THE CONTRIBUTION OF AIRLINES TO THE ECONOMY

1.1 Air transportation is a critical link in the economy

Air transport is an important sector for the Australian economy and airlines have a key role to play, moving passengers and freight domestically and internationally.

Some of these links are more obvious – for example, Australia's \$57 billion⁵ tourism industry relies heavily on air service. However, other linkages are less obvious but just as critical for the economy. For example, airlines enable businesses to better connect and share ideas both within and outside Australia. By enabling businesses to forge better links with wider domestic and international markets, airlines help facilitate trade and foreign direct investment (FDI).

Airlines also serve an important social function, enabling Australians to connect with friends and family.

In 2018, over 100 million passengers were carried by commercial aviation to, from, or within Australia⁶

Air freight is an important, and often overlooked, component of the freight and logistics sector. Although it makes up only a small part of Australia's overall freight task, by volume, it represents a significant percentage of Australia's international trade movements, when considered in value terms. This is because air freight is predominantly used to transport high-value, time-critical goods.⁷ This includes pharmaceuticals, high-end manufacturing products, and highly-perishable goods such as seafood.

1 in every 5 dollars of Australia's goods trade travels via airfreight, even though it is less than one percent of trade volume⁸.

ABS estimate of direct tourism GDP in 2017-2018, from the Australian National Accounts: Tourism Satellite Account, 2017-18 (available at https://www.abs.gov.au/AUSSTATS/abs@.nsf/MF/5249.0).

Data from Bureau of Infrastructure, Transport and Regional Economics, 2019.

In the 10 years to 2015-16, international air freight volumes rose 37 percent to almost a million tonnes. The volume of domestic air freight reached 435,000 tonnes in 2016 (source: Bureau of Infrastructure Transport and Regional Economics data https://bitre.gov.au/publications/ongoing/files/Domestic aviation %20Dec 2016.pdf.

⁸ Infrastructure Partnerships Australia (2019), International airfreight indicator, Data and measurement series.

1.2 Air transport sector's economic contribution

Economic studies have found that the air transport sector makes a significant economic contribution⁹ to Australia. This arises from:

- the direct contribution of airline' operations; and
- the indirect contribution the air transport sector makes to flow-on activities in the wider economy.

An analysis undertaken by Oxford Economics in 2018 found that the air transport sector contributed **\$104 billion** to the Australian economy and supported 716,000 jobs.¹⁰

Figure 2 shows the outcomes of analysis by Deloitte Access Economics which quantified the economic contribution of the broader Australian airport and aviation sector in 2016-17. It highlighted that:

- The airline industry is a significant source of economic activity on its own, contributing **\$9.4 billion** to the economy¹¹ and supporting 50,000 jobs.¹² This economic contribution is almost twice the size of the contribution from the core operations of Australian airports.
- Activities occurring at Australia's airport precincts that rely on aviation activity were estimated to contribute \$34.6 billion to the economy or around 2.0% of Australia's GDP. This activity includes the airport itself, retail and tourism services located at the airport, headquartered operations, general aviation and aircraft maintenance, and logistic operations. Overall employment at airport sites was estimated to be around 206,400 full-time equivalent staff.¹³
- Tourism activity (both domestic and international) facilitated by air transport contributed \$32.3 billion to the economy and supported 339,700 jobs¹⁴.

We note that these economic contribution figures are for the air transport sector and so are not wholly attributable to airlines. However, the impacts of the air transport sector and airlines are inexorably linked.

Economic contribution is a measure of the share of economic value added within a given region attributable to a particular activity, firm or industry. This analysis reflects the fixed make-up of the economy at a particular point in time, and tracks the relevant expenditures through a series of relationships between industries in the economy. Contribution analysis does not account for opportunity cost of spending or the alternative use of resources.

¹⁰ Air Transport Action Group (2018), Aviation Benefits Beyond Borders, October 2018.

This, and other figures mentioned in these dot points, are measures of 'total value add' which measures the value of output generated by an entity or a sector as measured by the income going to its factors of production (i.e. labour income and capital – measured as EBITDA). The sum of value added across all entities in the economy equals gross domestic product.

Deloitte Access Economics (2018), Connecting Australia: The economic and social contribution of Australia's airports, piii.

ibid. The report states that "...[the] airport precinct which may include airline and charter operations, retail and tourism services and landside transport and logistics"

ibid., piii.

Tourism industry
\$32.3 billion
339,700 jobs

Airport precinct activities
\$34.6 billion
206,400 jobs

Aviation
industry
\$9.4 billion
50,000 jobs

Figure 2: Economic contribution of air transport in Australia

Source: Frontier Economics presentation of analysis in Deloitte Access Economics (2018), Connecting Australia: The economic and social contribution of Australia's airports

1.3 Efficient air transport supply chains enable prosperity

Transportation is a required input to most goods and services in the economy. Efficient transport supply-chains lower the cost of goods and services, which in turn improves the international competitiveness of Australian businesses. This drives economic growth, tourism, investment and trade and is true whether considering road, rail or air transportation.

The links between good transport connectivity and economic performance are well established. A comprehensive study into this was undertaken for the UK Government by Sir Rod Eddington. He pointed towards the importance of a high performing transport network as "an important enabler of sustained economic prosperity" and noted that, historically, new connections have played a pivotal role in periods of rapid economic growth in many economies.

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UK Department of Transport (2006), The Eddington Transport Study. The case for action: Sir Rod Eddington's advice to Government, p5.

"A good transport network is important in sustaining economic success in modern economies: the transport system links people to jobs; delivers products to markets; underpins supply chains and logistics networks; and is the lifeblood of domestic and international trade." 16

The Eddington review also cautioned that "in mature economies with well-developed transport networks it is transport constraints that are most likely to impact upon a nation's productivity and competitiveness."¹⁷

Given Australian populations are dispersed, transportation costs can be a more significant cost input than in other countries. For example, while the transport and warehousing sector contributes 4.9% to Australia's GDP measured in value added terms, it contributes only 2.7% to the US economy. ¹⁸ This increases the imperative to ensure these operate efficiently.

The prosperity of regional and rural communities is particularly dependent on air transport, as it connects residents with government and medical services, and enables business and social activity. Without it, many regional communities would struggle to survive.

1.4 Good connectivity is important for the economy

While it is intuitive that better air connectivity will increase economic growth, it is helpful to outline the specific connections which underpin our analysis:

- Reduced travel time: By better air transport connections, we mean an increase in the number and
 frequency of direct links between different locations. This reduces travel time, particularly where
 passengers no longer need to undertake a multi-stop journey to reach their final destination. Time is
 valuable, and improved connectivity provides passengers with more time for leisure and work.
- Reduced logistics costs: In an airfreight context, improved connectivity also reduces time involved
 in freighting goods between suppliers and customers. Quicker, lower-cost supply chains directly
 reduce business input costs and which increases profits and/or lowers prices.
- Catalytic impact from connectivity: Catalytic impacts are those that are enabled or facilitated by better connectivity. The major influences arise from the relationship between improved air connectivity and business trade and investment¹⁹, which together boost GDP and employment.
- Wider agglomeration effects: Efficiencies can be expected when businesses and people are
 effectively more accessible (or closely located) as a result of improved air connections.²⁰ This is
 particularly relevant in the service sector, for businesses which specialise in high-value market
 offerings or rely on a greater degree of collaboration between staff, suppliers and consumers. In this
 context, greater connectivity can result in:

ibid.

¹⁷ Ibid, p5.

For Australia, see ABS, 5204.0 Australian System of National Accounts, Table 5. Gross Value Added (GVA) by Industry. For the US, figures are available at: https://www.bts.gov/browse-statistical-products-and-data/transportation-economic-trends/tet-2017-chapter-2.

Foreign direct investment, which is an investment made by a firm or individual from outside Australia into Australian business interests.

Productivity Commission (2017), Realising the productive potential of land, Supporting paper no 10, p3.

- improved access to labour or specialised suppliers: Efficient transport linkages can improve
 productivity by providing firms with better access to specialised firms or labour. This can increase
 productivity by providing firms with specialised inputs or expertise more efficiently, a larger choice
 of suppliers, and an improved capacity to select the best supplier for each specific task.
- knowledge transfer: Efficient transport connections can increase interaction within interstate firms and between firms and customers, and therefore facilitate learning and knowledge transfer within and across businesses.
- Gains associated with creating more competitive markets: In markets for which air transport is
 a significant input, efficient transport links may enable businesses to expand into new markets, in
 turn increasing competition and efficiency.

Together, airlines and airports play a significant and interlinked role in the air transport industry, and the efficient operation of both is critical for Australia realising the benefits associated with good air networks.

1.5 Air connectivity is particularly critical for regional Australia

Given Australia's geography and distances between major cities, it is no surprise that Australia relies on an extensive domestic air network. In 2018, there were 121 million domestic passenger movements, compared to 41.5 million passenger movements on international links.²¹ The wider benefits for Australia from improved air connectivity are likely to be more significant in relation to domestic links. This is not only because the domestic air travel market is larger, but also because benefits are captured by Australian businesses.

Domestic routes not only provide links between Australian capital cities, but also provide a vital service for rural, regional and remote communities. Passenger movements²² through regional airports totalled 24.9 million in 2018 which represents approximately 16% of total Australian domestic air passengers movements in Australia.²³

The economic contribution of the air transport industry in regional and remote Australia has been estimated to be approximately \$2.3 billion annually, and to provide employment for 15,000 full time equivalents.²⁴ This is a significant contribution when considering the populations of regional areas.

The further connectivity benefits were identified in the recent Senate Committee Inquiry into the Air Route Service Delivery for Rural, Regional and Remote Communities.²⁵ The Western Australian Department of Transport (DoT) concluded that air connectivity delivers significant positives for regional economies, businesses and communities:

Data from Bureau of Infrastructure, Transport and Regional Economics, 2018, Airport Traffic Data 1985 to 2018, Statistical report, DIRDC, Canberra.

Represents total passengers that arrive and depart from airports.

Data from Bureau of Infrastructure, Transport and Regional Economics, 2019. Data only includes routes that provide a minimum of 8,000 passengers a month and have two or more airlines operating in competition over the route.

Deloitte Access Economics (2018), Connecting Australia: The economic and social contribution of Australia's airports.

Rural and Regional Affairs and Transport References Committee (2019), Operation, regulation and funding of air route service delivery to rural, regional and remote communities, June 2019 (**Senate Inquiry**).

... aviation provides transport for both communities and businesses and plays a key role in connecting remote and rural areas in WA...regional regular public transport (RPT) air services, a key aspect of which includes affordable airfares, are central both to the community's lifestyle and wellbeing as well as regional development.²⁶

The benefits of better air connectivity are likely to be particularly significant for regional and rural areas compared to major cities as air transport services are less substitutable for road transport, given the distances involved and where road transport is unviable due to seasonal factors.

Take, for example, a regional business that offers specialist technical services. Better regional air connectivity will reduce the travel time for the business in dealing with its existing customers, and increase the ability of this businesses to supply new regional areas and larger cities – that is, it would be able to access a larger geographical market.

The linkages between connectivity and market growth is supported by the academic literature. For example, in a 2015 study, Baker Merkert and Kamruzzaman analysed the relationship between regional air service and economic growth in Australia.²⁷ This study noted that, as expected, regional economic growth lead to an increase in air traffic. However, the analysis also picked up evidence of "...causality running from air transport to economic growth", indicating that improvements in regional air services was independently causing benefits for local economies.

There are also significant social aspects of air connectivity in regional and rural areas. Virgin Australia has previously highlighted the vital role airlines play in providing local residents access to essential medical, financial and educational services: (see also **Box 1**)

In many regional centres, the existence of air services plays a key role in reducing isolation from capital cities and metropolitan areas and enhancing the quality of life in such communities. Air services connect regional centres not only to the rest of Australia, but to the rest of the world. This is important for passenger transport and the carriage of freight, whether it be medical supplies or time-sensitive exports. ²⁸

Ultimately, however, airlines further caution that the distribution of benefits to regional communities is contingent on the extent to which airlines can remain commercially viable on regional routes. It notes that there is a critical role to be played by all levels of government in supporting regional air services.²⁹

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Government of Western Australia, January 2018, Submission by the Western Australia Department to Transport to the Senate Inquiry into the operations, regulation and funding of air route service delivery to rural, regional and remote communities – Submission 75, pg. 3.

Baker, D., Merkert, R. and Kamruzzaman, M. (2015), Regional aviation and economic growth: cointegration and causality analysis in Australia.

Virgin Australia, 2018, Submission to the Senate Inquiry into the operations, regulation and funding of air route service delivery to rural, regional and remote communities – Submission 109.

²⁹ Ibid., p. 3.

Box 1: What are airlines doing in regional areas?

Australian airlines appear to recognise that their businesses and the vitality of regional communities are linked. Airlines provide discounted air travel for residents in some regions of Australia where it is costly for airlines to provide services. These programs help to make air travel more affordable for residents and sustain demand, making it possible for airlines to continue to provide more frequent services. This includes:

- Rex's community fare program is available across 30 destinations in Australia significantly reducing the cost of travel per sector. Indeed, it is estimated that around 30% of all Rex passengers fly on community fares.³⁰
- Virgin indicated to the recent Senate Inquiry into regional air routes that it offered discounted fares for a number of key capital-regional flights for more than 50% of the year in 2017.
- Qantas has also been expanding its reduced fare programs on routes across Australia.³¹

In addition to discounted or reduced fares, Australian airlines also contribute to the community through charitable donations and grants. As examples:

- Rex has provided \$1 million of assistance to drought affected communities, and a further \$2 million in support to communities affected by the recent floods in North Queensland.
- The <u>Qantas Regional Grants</u> program offers a total of \$5 million in grants over five years to Australian-based not for-profit community groups, individuals, projects and organisations that provide a direct service or benefit to regional Australia. The grants will include a combination of flights, cash and marketing support.

Source: Frontier Economics and company websites, Virgin Australia submission to the Senate Inquiry

See http://www.rex.com.au/Products_promo/LocalFareScheme.aspx.

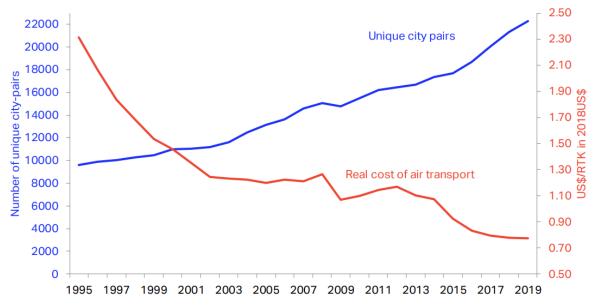
See https://www.qantasnewsroom.com.au/media-releases/qantas-invests-10-million-in-bigger-discounts-for-regional-australia/.

2 THERE IS UNTAPPED POTENTIAL

2.1 The global view shows significant gains from reforms in the sector

Figure 3 shows that globally, over the past 25 years, the number of cities directly connected by airplane has more than doubled. Over the same period, real prices have more than halved.

Figure 3: Unique city pairs and real cost of air transport (global data)



Source: International Air Transport Association (2019), Airline industry outlook update

The changes in connectivity and fares have been spurred by deep-rooted reforms to route and operator regulations. This has promoted competition: it has freed airlines to improve fuel efficiency from new aircraft fleets and operational improvements, introduce lower-cost operations (low cost carriers) and improve utilisation of fleets through dynamic pricing.

2.2 Australian airlines are competitive and efficient

Australian airlines compare well to these global trends; strong competition since airline deregulation in 1990 has spurred Australian airlines to invest and innovate to reduce costs, and deliver benefits for consumers in the form of lower prices, better services and more choice.

There is recent evidence which shows Australian airlines to be relatively efficient. A 2015 benchmarking study ranked Qantas in the top 20 of 150 airlines in terms of efficiency.³² This study took into account

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Merkert, R. and Pearson, J. (2015), A Non-parametric Efficiency Measure Incorporating Perceived Airline Service Levels and Profitability, Journal of Transport Economics and Policy, Volume 49, Part 2, April 2015, pp. 261–275.

passenger numbers, seat kilometres flown, aircraft fleet uniformity and the number of aircraft, staffing levels, perceived services levels and profitability.

Australian airlines have been investing to increase the efficiency of their operations. For example, Qantas has increased capital investment over the last 10 years to \$1.9 billion in 2018. Major investments include the introduction of 5 new Dreamliner aircraft and Qantas lounge upgrades for customer experience. This is driven by improved operating cash flow from more efficient operation.³³

This investment has allowed Australian airlines to realise service efficiencies and provide more sustainable air services domestically and internationally:

- Qantas Group's controllable costs have fallen 4% since FY15 in real terms, driven by the Qantas Group's Transformation Program that aimed to reduce capital and procurement expenditure and increase aircraft utilisation that resulted in a \$2 billion cost reduction.³⁴
- Rex have maintained profitability in the last 15 years whilst expanding services and reducing average fares in real terms.³⁵

Airlines have also invested in regional Australia. For example, Rex has a well-established pilot training academy in Wagga Wagga. Furthermore, to meet the increasing need for skilled pilots, Qantas Group has announced Pilot Academy sites in Mackay and Toowoomba in Queensland,³⁶ with Virgin Australia establishing an airport "centre of excellence" in Tamworth.³⁷

2.2.1 Airlines face ongoing challenges in serving regional routes

As noted in Section 1, airlines can only serve markets where they can generate sustainable levels of traffic and revenue. Indeed, over the last two decades many small regional airlines have been forced to cease operation – leading to some communities across Australia losing access to essential air services.

In offering a route, an airline will incur a number of costs which don't vary with the number of passengers actually carried, known as "fixed costs". The more significant fixed costs are associated with ground staff and facilities, airport charges, and some marketing (e.g. advertising) and operating (e.g. maintenance) costs. Where there are fewer passengers flying, the fixed costs per passenger are higher and the return earned by the airline is commensurately lower. To some degree, airlines can adapt to lower demand by using smaller planes; however, we observe that many fixed costs do not vary with the size of the plane.

In regional and rural areas, the combination of passenger and plane fixed costs increases the average costs of serving passengers compared with larger domestic routes, which use larger planes and are more highly utilised. The Senate Inquiry concluded that "it could not form the view that there was 'price gouging' or other market manipulation taking place by airlines operating in regional areas." ³⁸ In fact, the

³³ Qantas Annual Report, 2018.

Qantas Group, 2018, Qantas Group Submission - Productivity Commission Inquiry into Economic Regulation of Airports (submission 48).

Average fares across all Rex routes have increased 1.1% per annum since 2002 compared to an approximate average inflation rate of 2.5% over the same period. Rex, 2018, Regional Express Submission to the Senate Inquiry into the operations, regulation and funding of air route service delivery to rural, regional and remote communities – Submission 63.

https://www.gantas.com/au/en/about-us/our-company/pilot-academy/fags.html

https://newsroom.virginaustralia.com/release/virgin-australia-group-announces-world-class-pilot-training-centretamworth

Senate Inquiry, at 10.15.

inquiry considered that airfares charged by airlines on regional routes were mainly driven by genuine market forces, including economies of scale from high fixed costs.³⁹

The ongoing challenge of serving rural and regional areas and achieving the accessibility and connectivity benefits from doing so is one that attracts government attention. An obvious analogue is the heavy support which governments give public transport in cities.⁴⁰ It would see reasonable that some regional routes be considered part of the wider subsidised public transport network in order to maintain connectivity. This already occurs in some regions. For example, Rex has Deeds of Agreement with the Western Australian government that enable it to provide Regular Public Transport networks services in Western Australia, including to Esperance and Carnarvon.⁴¹

2.3 Room for improvement

Australian airfares and airport prices have been moving in opposite directions (see **Figure 4**). Over the past 10 years Australian, airlines have eked out efficiencies and **reduced their cheapest airfares by 25%**.⁴²

Meanwhile, over the same period, Australia's major airports have **increased aeronautical revenue per** passenger by 29% in real terms.⁴³



Figure 4: Change in air fares and airport average aeronautical revenue per passenger

Source: Frontier Economics analysis of BITRE, Aviation statistics and ACCC monitoring data

³⁹ ibid 10.15 - 10.16.

Noting that subsidies to public transport in cities are also justified on the grounds of road network congestion, which is less relevant to rural and regional areas.

See Regional Express Submission to the Productivity Commission Economic Regulation of Airports, September 2018, p15.

Change in Australian Domestic Air Fare Index - Real best discount for the period 2007-08 to 2017-2018 (Source: BITRE, Aviation statistics. Available at https://www.bitre.gov.au/statistics/aviation/domestic.aspx).

Change in average aeronautical revenue per passenger for the period 2007-08 to 2017-2018 (Source: ACCC monitoring report data).

For Australian airlines, airport charges are the largest expense after staff and fuel. The share of cost varies by plane but it is significant: the Senate Inquiry concluded that "when combined with the other higher costs of operation into regional and remote areas, it may be that airport charges become more significant as a contribution to the total airfare." 44

2.3.1 Why have airport charges increased?

In contrast to airlines, airports are not commonly subject to competition. Nor, according to Australia's competition regulator and authority responsible for the monitoring of airport's behaviour, are they subject to effective regulation:

"Providers of key monopoly infrastructure such as the major airports are typically regulated to ensure that they will not exploit their market power to the detriment of consumers and the broader economy. This is not currently the case with Australia's major airports." 45

We consider that there is convincing evidence that Australian airports both have market power and have been exploiting this in their dealings with airlines and other airport users.

An examination of the economic characteristics of airports suggests that in most cases they will possess market power in providing aeronautical services, which stems from technical cost characteristics that make it difficult to have competing airports ("natural monopoly"⁴⁶). Our 2018 analysis of airport market power found that there were very few circumstances where Australian airports face any material competitive constraints.⁴⁷ Absent regulation, an airport facing minimal or no competitive constraints on will have the ability to sustain prices for its services above efficient costs or deliver a poor quality of service.

Our analysis of the profitability of Australia's monitored capital city airports (for which detailed data is available) provides evidence of exploitation of market power through excessive returns.⁴⁸

Further evidence comes from comparisons between Australian airports and those in other regions that are either effectively regulated, competitive or in government ownership that limits incentives to exploit market power. **Figure 5** shows airport charges as a percentage of airline revenues for carriers in Australia, the EU and US, and indicates that Australian airport charges represent a greater proportion of overall costs for Australian airlines compared to foreign carriers; this suggests that operating from Australian airports is a costly endeavour.

Senate Inquiry, at 10.49.

Comments attributed to Mr Rod Sims (Australian Competition and Consumer Commission Chairperson), available at: https://www.accc.gov.au/media-release/effective-airport-regulation-needed-note-reissued-with-amended-headline.

A natural monopoly is characterised by high fixed and sunk costs which mean a single provider is likely to be able to deliver aeronautical services more efficiently than multiple providers operating in competition.

Frontier Economics (2018) "The market power of Australian airports", prepared for A4ANZ.

Frontier Economics (2018) "The profitability of Australian price monitored airports", prepared for A4ANZ. See also Frontier Economics (2018), Market power and the profitability of Australian Airports, a response, a report prepared for A4ANZ, December 2018.

Figure 5: Airport expenses as a percentage of airline revenues



Source: Qantas Group, 2018, Qantas Group Submission-Productivity Commission Inquiry into economic regulation of airports p15

The excessive returns earned by airports prevents people travelling; either because the cost of air travel is higher than it needs to be, or because airlines can no longer profitably provide some services. This is not just a problem for airlines. It also acts as a drag on the economy. Higher airfares, resulting from higher airport charges:

- raises costs for business, hampering their ability to compete in Australia and abroad;
- reduces face to face connections between families, friends and communities;
- impacts on the economic viability of airlines opening new routes, impacting on air transport connectivity; and
- · constrains growth in both international and domestic tourism.

As noted earlier, despite these risks, Australian airports are not subject to effective economic regulation. The approach of merely monitoring airport prices and returns that has been followed in Australia provides airlines with no ability to object to high airport charges, and the regime is an outlier when looking at airport regulation in other countries and regulation applied to other Australian industries with similar levels of market power.

2.4 Lower airport charges would increase economic benefits to Australia

Our analysis shows that the potential magnitude of the economic benefit that could arise from a reduction in Australian airport charges, as a result of providing airlines with a recourse to object to high airport charges, is significant.⁴⁹ These impacts are summarised in **Figure 6**, with further details contained in the sections that follow.

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⁴⁹ Frontier Economics (2018), Economics evaluation of an alternative approach to airport regulation, a report prepared for A4ANZ.

Lower airport charges Reduced costs for airlines Additional direct Lower airfares connections Increase in air travel and connectivity ... more passengers able to facilitates connections .prices that better take a direct flight between between businesses reflect efficient costs locations .generating additional .reduction in passengers using ..reduced travel time FDI and trade for these passengers less efficient means of travel ...and increasing productivity increase in consumer welfare measured by GDP and .. travel time savings / reduction in dead weight loss employment \$820 million \$5.9bn / \$72 million \$10.9 billion

Figure 6: Impacts of a reduction in airport charges resulting from a strengthen threat of arbitration

Source: Frontier Economics, based on reformatted data from Frontier Economics (2018), Economics evaluation of an alternative approach to airport regulation, a report prepared for A4ANZ. Note: figures are expressed in net present value terms, calculated over 15 years.

To provide an indication of the possible benefits from a strengthened airport economic regulatory framework, we estimated how much lower airport charges would now be if airports were constrained to only earn returns equal to a reasonable or 'normal' risk-adjusted return on their investments across the airport (that is, we excluded any excessive returns). This return was an estimate of what we thought an economic regulator, like the ACCC, might set using estimates of Australian airports' weighted average cost of capital (WACC)⁵⁰.

2.4.1 Benefits from increases in travel

On existing routes, we found that a fall in airport charges (see **Box 2**) could lead to an average annual increase in demand for air travel of up to 1 million round trips per year (approximately a 1.9% increase in demand).

We estimate that removing airport 'overcharge' would create benefits (welfare) for passengers of around \$650 million per annum or around \$5.9 billion on a Net Present Value (NPV) basis, if this benefit persists for the next 15 years.

Unreasonably high airport charges are a particular problem for domestic travel. We found the vast majority of the gains to consumers (that would result from lower airport charges) would be generated on

The WACC is a commonly applied regulatory benchmark that represents the opportunity cost to a business of deploying funds, taking into account the inherent risks it faces. For details of our analysis see Frontier Economics (2018), Economics evaluation of an alternative approach to airport regulation, a report prepared for A4ANZ.

domestic flights. This is unsurprising, as the top 10 city-pair routes from Australian airports are all domestic. Such routes are more heavily affected by higher Australian airport charges because charges are incurred on both ends of the journey. Therefore, the benefit of lower airport charges would largely accrue to regional businesses looking to better connect into wider Australian markets, Australian businesses looking to work interstate and Australians looking to travel within Australia.

This fall in the price of air travel as a result of lower airport charges also improves the efficiency of the economy. People are more likely to choose to travel by air and less likely to take trips via a less efficient mode. Our analysis suggests that the removal of this inefficiency would deliver benefits of \$8 million per annum or \$79 million on a Net Present Value (NPV) basis, if this benefit persists for the next 15 years.

Box 2: The pass through of lower airport charges

Our analysis proceeds on the basis that the falls in airport charges will pass through to reduced airfares. The analysis of pass through of lower input costs in economics is complex and can depend on some market characteristics that are difficult to measure. However, in our analysis, there are factors which reduce the importance of how pass through occurs. In broad terms, there are three options: (i) lower airport charges might be passed through to passengers in the form of lower airfares, or (ii) it may lower an airline's costs per flight, and this improvement in route profitability will result in more flights or routes being served, or (iii) there is a combination of both. In any of these cases, we find there is a strong argument that there will be improvement in connectivity and therefore travel time savings, consumer gains and wider catalytic impacts.

Source: Frontier Economics

2.4.2 Travel time savings from improvements in connectivity

As discussed previously, higher airport charges impact the economic viability of airlines opening new routes or increasing the frequency of flights, and therefore Australia's air connectivity. We found that an increase in air travel of 1 million round trips per year would make some currently unserviced routes economically viable, increasing direct connections within Australia and between Australia and the rest of the world. These routes are shown in **Figure 7**. Our analysis suggests that:

Up to 35 new bi-weekly connections (centred on Asia) could become feasible with lower airport charges.

To establish the extent of new connections that might emerge from lower airport charges we consolidated demand from 'indirect' or 'multi stop' passengers that would otherwise have to fly from their origin airport to their final destination via a hub. This allowed us to identify routes where no direct connection currently exists, but where there would be enough passengers flying indirectly to the destination with lower airport charges, to justify adding a new direct connection.



Figure 7: International routes that may become viable with reduced airport charges

Source: Frontier Economics analysis using gcmap.com

These new routes and improvements in connectivity would generate travel time savings for passengers who would otherwise have had to travel to their destination indirectly. We value these **travel time savings** at almost \$90 million a year⁵¹, or \$820 million on an NPV basis. This benefit is in addition to those described in section 2.4.1.

2.4.3 Catalytic impacts for trade

Improved connectivity with the rest of the world would also help facilitate extra trade and Foreign Direct Investment (FDI), which together boost GDP. Put simply, businesses that have better connectivity to more destinations are more likely to meet with customers and suppliers face-to-face, which in turn increases the likelihood of retaining customers, expanding into new markets and managing the supply chain more efficiently, which in turn increases trade and FDI. We estimated the resulting increase in GDP to be \$1.2 billion annually, which equates to an 15-year NPV benefit of \$10.9 billion.⁵²

2.5 The benefits from strengthened regulation are significant and achievable

There is a clear opportunity for improved airport economic regulation to lead to lower, more efficient airport charges and as a result, significant economic benefits for Australia.

The existing regulatory arrangements for mitigating airport market power have been ineffective. However, airports are now perceiving a much lower threat of Government action to address their market power than they did in the past, and so we can expect continued poor outcomes.

A regime which provides a credible threat of regulatory intervention, such as through a right to arbitration in the event that airports cannot justify their prices, will help drive the benefits summarised in **Figure 8**.

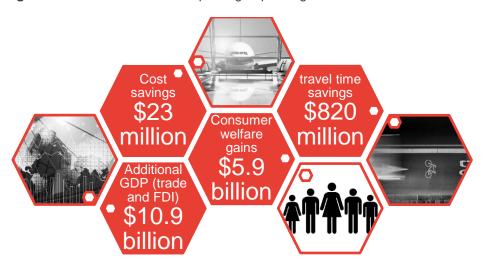
For each of the (feasible) new direct routes, we have used a fixed cruising speed (800kmh), a fixed take-off/landing time of around 40 minutes and a one our lay-over, then calculated the distance and time of a new direct route. Assumptions associated with the value of travel time savings, have come from the Australian Transport Assessment and Planning guidance documents.

Frontier Economics (2018), Economics evaluation of an alternative approach to airport regulation, a report prepared for A4ANZ.

We consider that such reforms could improve and streamline negotiation processes between airports and airlines, which would more than likely offset the additional incremental costs that may be incurred by a regulator in implementing a revised regime. ⁵³ This would stand even if the connectivity benefits we describe do not arise.

We estimate that each \$1 spent implementing and administering a reformed airport regulatory regime would deliver \$14 worth of value.⁵⁴

Figure 8: Potential benefits of improving airport regulation



Source: Frontier Economics (2018), Economics evaluation of an alternative approach to airport regulation, a report prepared for A4ANZ. Note: figures are expressed in net present value terms, calculated over 15 years.

These potential gains are simply too big to ignore. It is time for Australia to acknowledge the importance of the air transport sector and take the steps necessary to reign in airport market power. The resulting improvements in air connectivity both within Australia, and with the rest of the world, will be well worth it.

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For further details, see ibid.

This is based on an estimate of \$34 million in additional administrative and implementation costs for the ACCC and Airports over the next 15 years associated with a potential increase in arbitrations and the introduction of an enhanced information transparency and disclosure regime. Potential benefits of \$479 million were estimated arising from more timely negotiations, travel time savings and a reduction in dead weight loss. Note: travel time savings and dead weight loss were reduced by 50% to account for greater uncertainty around these values. For further details see Frontier Economics (2019), Submission to the Inquiry into economic regulation of airports, Submission to the Productivity Commission's draft report.

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