



ECONOMIC BENEFITS
FROM AIR TRANSPORT
IN CHILE
2006



EXECUTIVE SUMMARY

- Chile's average annual GDP growth of over 6% between 1990 and 2005 was far higher than other major Latin American economies and was also comparable to several fast-growing emerging economies in Asia. **The transport (including aviation) and tourism sectors have played a significant role in supporting this growth.** It reflects the transition of the Chilean economy away from manufacturing and mining towards a more service based economy.
- Chile is relatively isolated from major global markets in North America, Europe and Asia due to its geographical location. Therefore, **air transport provides an essential link between Chile and the global economy.** Air transport provides crucial connections to global markets for Chile's businesses as well as greater access to Chile for global tourists.
- Good and rapidly expanding air transport connections to global markets are vital for Chile's ability to attract and expand business investment. A survey of Chilean firms found that **28% of sales were directly dependent on good air transport links**, while 70% of Chilean firms found air transport important for their ability to serve a larger potential market.
- Since 2002, **air traffic has grown at an increasingly faster rate than the rest of Chile's economy.** As Chile does not typically act as a hub for transfer traffic, the significant benefits generated by increasing the level of business and leisure traffic will be received directly by the Chilean economy.
- The demand-side and supply-side benefits generated and supported by the air transport sector are shown in Table ES1.

Table ES1: Economic Benefits from Air Transport in Chile

	Impact (US\$m)	% of Chile's GDP
Economic benefits to passengers (consumer surplus)	\$1,120 million	0.8%
Supply-side benefits from a 10% increase in connectivity/GDP	\$105 million	0.07%
Demand-side benefits to GDP from air transport	\$4,707 million	3.2%
- Air Transport direct impact	\$687 million	0.5%
- Air transport indirect and induced impacts	\$1,072 million	0.7%
- Air transport facilitated tourism	\$2,948 million	2.0%
Jobs supported by air transport (inc. tourism impact)	198,539	3.2% of employment
Wage income generated by air transport (inc. tourism impact)	\$1,848 million	3.4% of income
Tax revenues generated by air transport (inc. tourism impact)	\$758 million	2.8% of revenues
Export earnings generated by air transport (inc. tourism impact)	\$1,908 million	2.9% of earnings

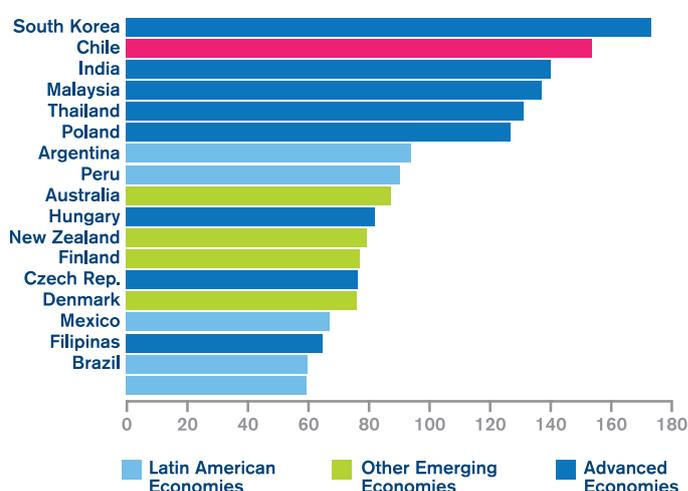
Source: Oxford Economics and IATA estimates

- The market for passengers flying to, from and within Chile totals \$2.24 billion. This is estimated to generate economic benefits to passengers (consumer surplus) of **US\$1.12 billion**, equivalent to 0.8% of GDP.
- For a geographically isolated and wide spread country such as Chile, air transport connections to key markets are vital for long-term economic development and growth. In terms of connectivity, i.e. weighting the number of available seats by the importance of the destination within the airline network, **Chile saw its connectivity rise by 14%** between 2002 and 2007. This rise in connectivity provides substantial wider economic benefits for Chile from its connections to the global air network.
- Increases in connectivity, relative to GDP, can create significant wider economic benefits. Each 10% rise in connectivity, relative to GDP, can increase long-term GDP by \$105 million (0.07%) per annum.
- Nevertheless, the connectivity of Chile remains relatively low (as a proportion of GDP) compared to other countries, such as small, well-connected countries like Panama. This highlights not only the constraint that relatively low connectivity can place on future economic growth, but also the **substantial economic benefits that can be available through further increases in Chile's connectivity levels.**

ECONOMIC GROWTH IN CHILE IS FORECAST TO REMAIN STRONG

The Chilean economy has grown strongly since 1990, boosted by economic liberalisation, stable macroeconomic policies and increased trade links and investment. Average annual GDP growth of over 6% between 1990 and 2005 was far higher than other major Latin American economies and was also comparable to several fast-growing emerging economies in Asia (see Figure 1). The outlook for growth is positive. GDP growth slowed to 3.9% in 2006, down from 5.7% in 2005, but is expected to rebound to around 5.5% over the next two to three years, led by an increase in exports and by higher domestic demand.

1990-2005 GDP Growth (accumulated % increase since 1990)



The transport (including aviation) and tourism sectors have played a significant role in supporting the strong economic growth in Chile. This reflects the transition of the Chilean economy away from manufacturing and mining towards a more service based economy. The transport sector has grown at around 5% per annum in 2005 and 2006 (see Table 1), and has increased its overall direct share of Chilean GDP from 5% in 1996 to 6.9% in 2006. Growth in transport, especially international aviation, also helps to support growth in the tourism sector. This is reflected in the above average growth in the retail, restaurants and hotel sector in 2005 and 2006.

- Air transport also has an important demand side contribution to Chile's GDP through the value-added it creates and the demand and employment that flows from that activity through its supply chain and other industries. Its direct impact is estimated to be **\$687 million** in 2006, with a total impact of **\$1,759 million** after indirect and induced impacts created by the demand it generates in other sectors are included. This total value-added has increased by **\$892 million** since 2001.
- Air transport also facilitates and supports the tourism industry. Over 2.2 million tourists arrived in Chile in 2006, of which at least 45% arrived by air. The impact from tourists is estimated to have boosted Chile's GDP by a further **\$2.95 billion** in 2006, equivalent to around 2% of its GDP.
- Adding the demand-side contributions from air transport to those facilitated in tourism gives a **total demand-side value-added of \$4,707 million, equivalent to 3.2% of Chile's GDP**. It also supports nearly 200,000 jobs in Chile and supports between 2.8% and 3.4% of Chile's wage income, tax receipts and exports.
- Looking forward, **we expect the contribution to increase in both absolute and proportionate terms**, especially as the Chilean economy diversifies away from commodity products towards more services-led growth. However, the employment level may continue to face downward pressure as both the air transport and tourism sectors look to deliver further productivity and efficiency improvements among their workforce.
- **The importance of investing in improved connections to major overseas markets is shown by an analysis of the addition of a new service from Santiago to Auckland and Sydney airports.** This service generated over 58,500 passengers each way in 2006, representing around 1.5% of overall traffic to, from and within Chile. This service is estimated to generate at least \$17 million in consumer surplus for passengers, \$26 million for GDP and supports at least 880 jobs. It also generates at least \$10 million in wage income and \$4 million in additional tax revenues for the government.
- **The importance of keeping airport charges and taxes in line with efficient costs is shown** by estimating the impact of a hypothetical 50% increase in departure charges from their current average level of \$19.3 per departing passenger. It is estimated that this would add 1.7% to the average return fare, reducing passenger numbers each way by 73,500. This would cause economic costs to passengers, due to higher travel costs, totalling \$21 million. There would also be wider costs for the Chilean economy, with GDP down \$33 million, a loss of over 1,100 jobs, wage income down \$13 million and tax revenues down \$5 million.

Table 1: Chilean GDP by Sector

Sector	Share of GDP, 2006	% growth 2005 (real)	% growth 2006 (real)
Agriculture and Fishing	5.0%	8.2%	3.5%
Mining	7.5%	-1.5%	0.5%
Manufacturing	16.5%	6.4%	2.5%
Electricity, Gas and Water	2.8%	5.2%	7.4%
Construction	7.0%	10.8%	3.9%
Retail, Restaurants, Hotels	10.1%	8.1%	5.2%
Transport	6.9%	5.1%	4.7%
Communications	2.5%	10.2%	9.9%
Financial Services	15.8%	7.7%	5.1%
Real Estate	5.4%	3.2%	3.4%
Public Administration	3.1%	2.9%	3.4%
Other	17.4%	3.6%	3.0%
Total	100%	5.7%	3.9%

Source: Central Bank of Chile

AIR TRANSPORT CAN SUPPORT NECESSARY DIVERSIFICATION

However, while Chile's economic outlook remains positive, its external trade and economic structure is currently over-reliant on a small number of commodity products, in particular copper. Nearly 60% of Chile's exports were accounted for by copper and copper products in 2006, providing a boost when the global copper price is high – as at present – but a vulnerability to future volatility in copper prices. As such, Chile's economic structure is given a higher risk rating than its political or debt repayment risks (see Table 2).

Therefore, the Chilean economy, in particular its exports, would benefit from greater diversification. Further growth in the aviation sector can play a key role in reducing its reliance on commodities. Air transport can provide a direct boost through higher foreign earnings from Chilean airlines as they expand services to other countries. It can also provide very significant indirect and wider economic benefits; helping to boost the tourism sector within Chile, increasing the attractiveness of investment in Chile and facilitating access to new and expanded markets for Chilean exporters across a range of industrial and service sectors.

Table 2: Chile Risk Rankings

	Sovereign risk	Currency risk	Banking sector risk	Political risk	Economic structure risk
May 2007	A	A	A	AA	BBB

Source: EIU; Range = AAA to D, where AAA is the least risky and D is the most risky

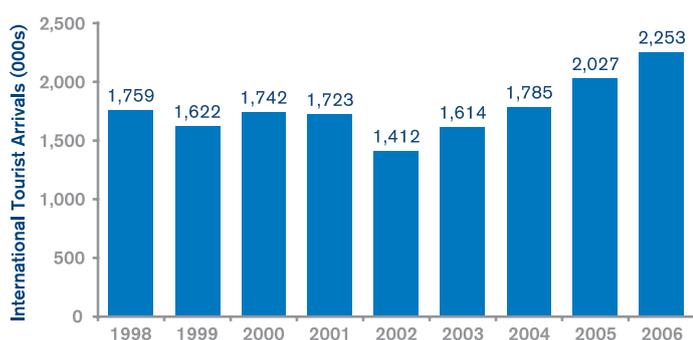
AVIATION PROVIDES AN ESSENTIAL GLOBAL LINK FOR CHILE'S ECONOMY

Chile is relatively isolated from major global markets in North America, Europe and Asia due to its geographical location. Therefore, air transport provides an essential link between Chile and the global economy, creating significant wider economic benefits that would not exist in its absence. Air transport provides crucial connections to global markets for Chile's businesses as well as greater access to Chile for global tourists.

Chile's geography also makes air transport essential for fast, efficient and reliable connections within the country itself. Chile has a land mass of 757,000 square kilometres, but it covers a long and thin area, with 6,435 kilometres of coastline on its western side and 6,339 kilometres of land borders on its eastern side. The capital, Santiago, is located 1,100 kilometres from Antofagasta in the north, 2,180 kilometres from Punta Arenas in the south and 3,750 kilometres from the Easter Islands. As such, air transport is vital for domestic connections for the 9 million of its 16.5 million population that live outside of the region around the capital. It helps to facilitate economic growth and the distribution of wider economic benefits beyond the capital city.

Chile's natural beauty helps to attract millions of international tourists each year. Arrivals fell significantly in 2002, following the economic downturn in neighbouring Argentina, but have grown by 840 thousand (60%) since then (see Figure 2). Direct tourism receipts are estimated to be US\$1.5 billion for 2006.

Figure 2: International Tourist Arrivals to Chile (000s)



Source: Servicio Nacional de Turismo

Air transport accounted for around 45% of international tourist arrivals in 2006. Further investment in air transport infrastructure and services can play a key role in developing significant further growth in tourism, especially from higher-spending tourists from outside Latin America. Air transport has already provided a strong boost to the sector. The number of tourists from North America, Europe and Asia has increased by 282,000 since 2000; more than offsetting the 175,000 decline in annual visitors from Argentina (see Table 3).

Table 3: International Tourist Arrivals by Origin

Thousands	2000	2003	2006
Argentina	859	536	684
Other South America	411	490	769
North America	173	201	280
Europe	230	293	382
Asia	21	27	44
Other	48	67	94
Total	1,742	1,614	2,253

Source: Servicio Nacional de Turismo

Business travel is also expected to expand significantly as Santiago continues to grow in importance within the Latin American economy. Over 40 major multinational companies have established their regional headquarters in Chile following the launch of an investment programme by the Chilean government in 2003. Taxation measures and other incentive measures help to attract multinational firms, but few would actually have moved to Santiago without good and rapidly expanding air transport connections to global markets.

In 2006, IATA surveyed 250 Chilean firms – across a range of sizes and industries – as part of its study into the wider economic benefits of air transport¹. The survey found that 28% of sales were directly dependent on good air transport links, while 70% of Chilean firms found air transport important for their ability to serve a larger potential market. Some 52% of firms expected to be quite or very badly affected, in terms of higher costs and lost sales, from any constraint on air services. Furthermore, 60% of firms expected to become significantly more dependent on air transport for their sales over the next 10 years, with only 12% expecting to be less dependent.

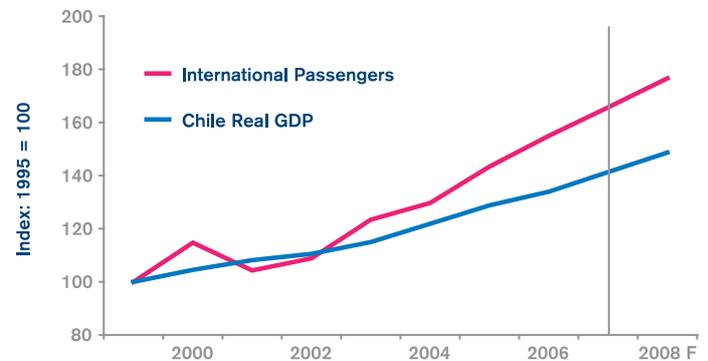
¹See IATA Economic Briefing (2006), "Airline Network Benefits"

AIR TRAFFIC IS GROWING AT A FASTER RATE THAN GDP

The number of international air passengers has increased by over 50% since 1999 and is expected to grow by a further 6.9% in 2007 and 6.6% in 2008. Since 2002, air traffic has grown at an increasingly faster rate than the rest of Chile's economy (see Figure 3).

Chile's geographical location means that it struggles to compete as a hub for international transfer and connecting traffic. As such, the vast majority of the additional international air passenger traffic has Chile as its final destination. Therefore, the significant benefits generated by increasing the level of business and leisure traffic will be received directly by the Chilean economy.

Figure 3: Chile's GDP and International Air Passenger Growth



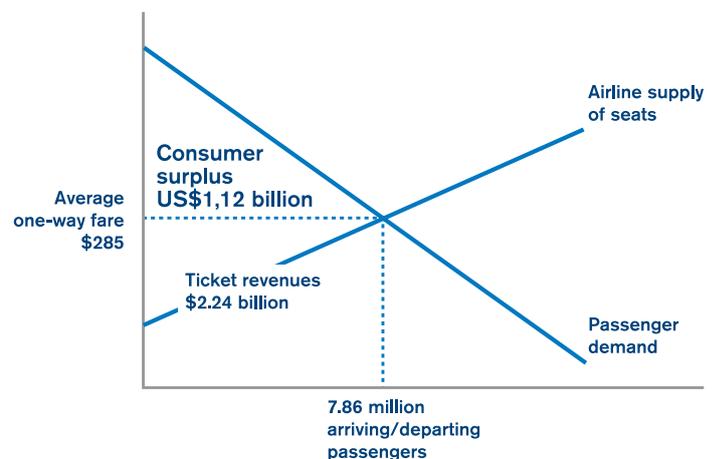
Source: EIU, ACI

SIGNIFICANT ECONOMIC BENEFITS TO AIRLINE PASSENGERS

The key economic value from air transport is the benefit received by airline passengers and shippers themselves. Passengers are obviously willing to pay their air fare. But a large number of passengers will also value the trip far more than the cost of the fare, for the pleasure of the tourist visit or for the value of the business contact achieved through the trip. Economists call the value received, over and above the cost of the fare, consumer surplus.

The market for passengers flying to, from and within Chile is estimated to total US\$2.24 billion, with an average one-way fare of \$285 and 7.86 million passenger enplanements. Using an average price elasticity for passenger demand of -1, the consumer surplus for passengers is estimated to be worth \$1.12 billion (see Figure 4).

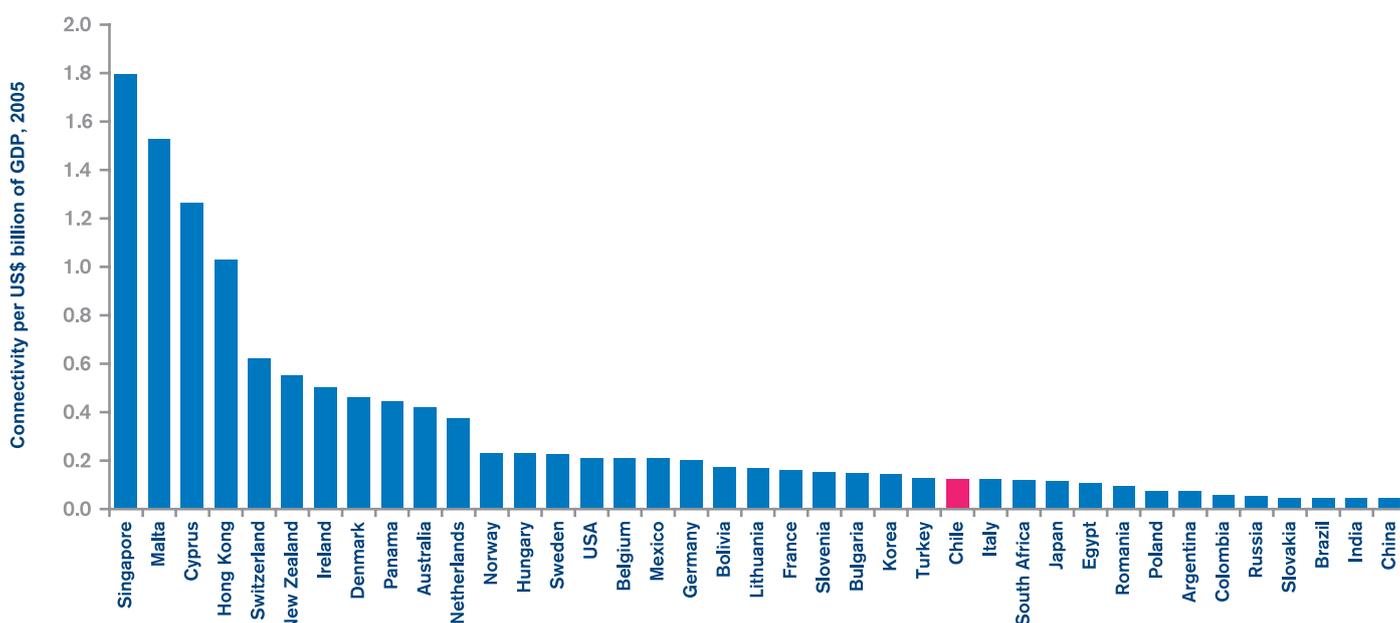
Figure 4: The Consumer Surplus for Passengers, 2006



Source: Pax-IS Plus

Nevertheless, though the connectivity of Chile has increased since 2002, it still remains relatively low (as a proportion of GDP) compared to other countries (see Figure 8). Chile's GDP-weighted connectivity within the global airline network is below other Latin American countries, including Mexico and Panama. However, it is higher than the two largest economies in South America; Brazil and Argentina.

Figure 8: Air Connectivity by Country



Source: SRS Analyser, IATA

There are several major economic factors that determine the long-run level and growth of a country's economy. Assets such as natural resources, larger well-educated populations and energy resources are critical. However, all other things being equal, the level of air connectivity can also have an impact on long-run economic performance. Each 10% increase in the level of connectivity, relative to GDP, can increase long-term GDP by US\$105 million (0.07%) per annum. This highlights not only the constraint that relatively low connectivity can place on economic growth, but also the substantial economic benefits that can be available through increases in Chile's connectivity levels.

Table 3: The Impact on Chile's Long-run GDP from its Level of Air Connectivity

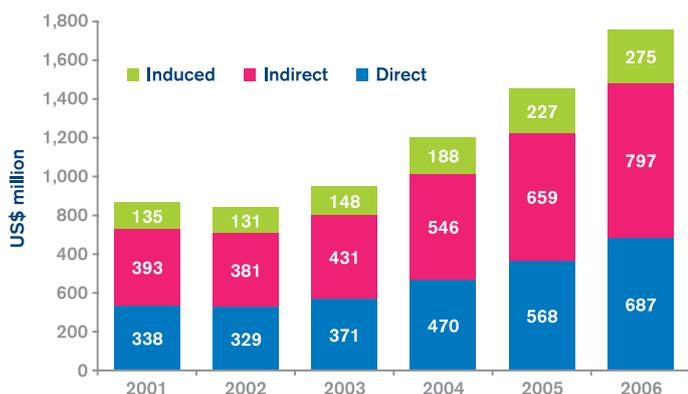
	Air connectivity per US\$ billion of GDP	Impact on GDP from a 10% increase
Chile	0.124	+ US\$105 million (0.07%)

Source: IATA

DEMAND-SIDE BENEFITS FOR CHILE'S ECONOMY

Air transport also has an important demand-side contribution to Chile's GDP through the value-added it creates and the demand and employment that flows from that activity through its supply chain and other industries.

Figure 9: Chile Air Services – Economic Benefits



Source: Oxford Economics

The contribution of air transport to the Chilean economy has increased significantly since 2001. Its direct impact – in terms of the benefits it creates through employment and economic activity in the airline industry – has more than doubled from US\$338 million in 2001 to \$687 million in 2006 (see Figure 9). This reflects the expansion of traffic within the Chilean aviation industry over the period.

In addition to the direct contribution to Chile's GDP from the airline industry, there are further impacts through the employment and economic activity that is stimulated within the industry supply chain (indirect impacts) and through the benefits generated by the spending of wage income earned within the aviation industry on goods and services in other industries (induced impacts). The total value-added created by air services in Chile – including the direct, indirect and induced benefits – is estimated to be \$1,759 million in 2006, equivalent to 1.2% of Chile's total GDP. This total value-added has increased by \$892 million since 2001 (see Table 6).

Air transport is highly capital intensive but nonetheless remains a large employer. It also generates a number of additional jobs in the supply chain and supports jobs in other industries through the induced impacts it generates. Air transport directly employs over 15,000 people in Chile, but supports a total of over 59,000 jobs within its economy.

The jobs that are supported by air transport are typically highly productive because of the high capital intensity of the industry and because of the specialist skills required in many job functions. Consequently, a large proportion of the employment generated also has relatively higher wages compared to many other sectors of the economy. Air transport is estimated to support 0.9% of employment within Chile but 1.3% of its wage income (see Table 7).

There is also a strong contribution towards taxation and therefore, to supporting government spending programmes. Direct payments of tax by the airline industry are estimated to be \$82 million in 2006. Adding indirect and induced impacts generates a total contribution to government tax revenues of \$263 million, equivalent to 1% of Chile's total tax revenues.

Air transport also makes a significant contribution to export earnings, both directly through the activity of airlines and indirectly through the facilitation of exports by other sectors of the economy. It was estimated to generate \$561 million of exports in 2006, equivalent to 0.9% of Chile's exports. Its share of exports has declined slightly from 1.5% in 2001 even though the total amount of exports it generates has increased. This reflects the impact of high global copper prices on increasing the share of copper exports from Chile.

Table 6: Chile Air Services: Economic Benefits

	2001	2002	2003	2004	2005	2006
GDP Summary (US\$m)						
Direct	338	329	371	470	568	687
Indirect	393	381	431	546	659	797
Induced	135	131	148	188	227	275
Total	867	842	950	1,204	1,453	1,759
Employment Summary (jobs)						
Direct	11,028	11,676	12,113	14,542	16,369	15,356
Indirect	15,606	19,674	26,344	27,481	28,766	31,864
Induced	10,752	10,844	11,616	11,673	11,774	11,819
Total	37,387	42,194	50,073	53,696	56,909	59,038
Wages Summary (US\$m)						
Direct	133	125	137	166	193	234
Indirect	165	160	181	229	276	334
Induced	57	55	62	79	95	115
Total	355	341	380	474	565	684
Tax Summary						
Direct	45	43	47	58	68	82
Indirect	65	63	68	85	111	134
Induced	22	22	24	29	38	46
Total	132	128	139	172	217	263

Source: Oxford Economics

Table 7: Chile Air Services: Economic Impact (includes direct, indirect and induced effects)

	GDP	Employment	Wages	Taxes	Exports
2001	867	37.387	355	132	347
2002	842	42.194	341	128	291
2003	950	50.073	380	139	383
2004	1.204	53.696	474	172	428
2005	1.453	56.909	565	217	471
2006	1.759	59.038	684	263	561
Contribution to Chile's Totals					
	GDP	Employment	Wages	Taxes	Exports
2001	1.3%	0.7%	3.3%	1.2%	1.5%
2002	1.2%	0.8%	3.3%	1.1%	1.3%
2003	1.3%	0.9%	3.2%	1.2%	1.4%
2004	1.3%	0.9%	3.4%	1.2%	1.1%
2005	1.2%	0.9%	3.4%	1.1%	1.0%
2006	1.2%	0.9%	3.5%	1.0%	0.9%

Source: Oxford Economics

AIR TRANSPORT PROVIDES FURTHER BENEFITS FOR TOURISM

In addition to the direct and multiplier economic impacts generated from air transport, the industry also plays a key role in facilitating growth in the Chile tourism industry. Over 2.2 million tourists arrived in Chile in 2006, of which at least 45% arrived by air. Average spending per tourist was around US\$680, though is likely to be even higher for those arriving by air and who have travelled from regions such as North America, Europe and Asia.

The impact from tourists is estimated to have boosted Chile's GDP by a further \$2.95 billion in 2006, equivalent to around 2% of its GDP (see Table 8). Tourism is labour rather than capital intensive. It is estimated to support almost 140,000 jobs, equivalent to 2.2% of the total in Chile. However, since labour in the tourism sector is typically less skilled than in the air transport sector, the wages are relatively lower and the total wage income generated by the tourism industry is \$1,164 million or 2.1% of the total, i.e. lower than its proportionate share of employment. Tax income generated by tourism is 1.9% of the total, while it also generates 2.1% of exports.

Adding the demand-side contributions from air transport to those facilitated in tourism gives a total demand-side value-added of \$4,707 million, equivalent to 3.2% of Chile's GDP (see Table 9). It also makes a contribution of between 2.8% and 3.4% of Chile's employment, wage income, tax receipts and exports.

The demand-side contributions have all increased in absolute terms since 2001, in some cases they have almost doubled. However, their proportionate impact has declined in some cases. This reflects the strong growth in the Chilean economy as a whole over the period rather than any decline in the importance of the air transport or tourism sectors.

Looking forward, we expect the contribution from both sectors to increase in both absolute and proportionate terms, especially as the Chilean economy diversifies away from commodity products towards more services-led growth. However, the employment level may continue to face downward pressure as both the air transport and tourism sectors look to deliver further productivity and efficiency improvements among their workforce.

Table 8: Chile Air Services: Tourism Impact (includes contribution of air travellers' expenditure)

	GDP	Employment	Wages	Taxes	Exports
2001	1.678	146.064	804	277	719
2002	1.897	171.496	895	315	808
2003	1.760	150.905	812	279	795
2004	2.322	158.691	996	362	1.034
2005	2.509	146.537	1.014	421	1.130
2006	2.948	139.501	1.164	495	1.347
Contribution to Chile's Totals					
	GDP	Employment	Wages	Taxes	Exports
2001	2.4%	2.7%	2.8%	2.4%	3.2%
2002	2.8%	3.1%	3.2%	2.8%	3.6%
2003	2.4%	2.6%	2.7%	2.4%	3.0%
2004	2.4%	2.7%	2.7%	2.4%	2.7%
2005	2.1%	2.4%	2.3%	2.1%	2.3%
2006	2.0%	2.2%	2.1%	1.9%	2.1%

Source: Oxford Economics

Table 9: Demand-side Contributions from Air Transport and Tourism

	GDP	Employment	Wages	Taxes	Exports
2001	2.544	183.451	1.158	410	1.066
2002	2.739	213.689	1.236	443	1.099
2003	2.710	200.978	1.193	419	1.178
2004	3.526	212.387	1.470	535	1.463
2005	3.962	203.446	1.579	638	1.601
2006	4.707	198.539	1.848	758	1.908
Contribution to Chile's Totals					
	GDP	Employment	Wages	Taxes	Exports
2001	3.7%	3.4%	4.1%	3.6%	4.8%
2002	4.1%	3.8%	4.4%	4.0%	4.9%
2003	3.7%	3.5%	3.9%	3.6%	4.4%
2004	3.7%	3.6%	3.9%	3.6%	3.8%
2005	3.3%	3.3%	3.6%	3.2%	3.3%
2006	3.2%	3.2%	3.4%	2.8%	2.9%

Source: Oxford Economics

ESTIMATING THE BENEFITS FROM NEW SERVICES

There has been a restructuring in international routes from Chile since 2000, but one of the more important changes has been a new route direct to Australasia, flying from Santiago to Auckland and then on to Sydney. New routes to North America (e.g. Atlanta) have had a large impact on overall connectivity, but the route to Australasia is also important in this respect, accounting for around 15% of the increase in Chile's connectivity since 2000. It provides a significant economic contribution within the overall totals (see Table 10).

Table 10: The Economic Contribution in 2006 of the SCL – AKL/SYD Route

	2006	Estimated contribution of the SCL-AKL/SYD route in 2006
Departing passengers	3,930,000	58,536
Economic benefits to passengers (US\$m)	1,120	17
Boost to GDP (US\$m)	1,759	26
Boost to Employment	59,038	880
Boost to Wage Income (US\$m)	684	10
Boost to Tax Revenues (US\$m)	263	4

Source: Oxford Economics, IATA

In 2006, the route from Santiago to Auckland and Sydney was estimated to have over 58,500 departing passengers (with a similar number on the return leg), representing around 1.5% of the overall total of passengers to, from and within Chile. As an important route, the benefits of this service are likely to be proportionately greater than an average service.

However, in the absence of more detailed estimates, assuming a linear impact for a change in passengers can provide an indication of the minimum benefits associated with the route. Table 10 shows that the SCL-AKL/SYD route creates at least US\$17 million of consumer surplus for passengers, \$26 million for GDP and boosts employment by at least 880 jobs. It also creates wage income of at least \$10 million and \$4 million of additional tax revenue for the government.

ESTIMATING THE ECONOMIC COST OF CHARGES

It is important that airport charges and taxes are kept closely in line with the efficient cost of providing services at the airport. Otherwise, increases in airport charges and taxes can have a negative impact in terms of offsetting any revenue through a significant reduction in the economic benefits that aviation generates. By way of illustration, we consider the impact of an hypothetical 50% increase in departure charges on passengers at Chilean airports (see Table 11). Currently, the charges are US\$30 per international departure and Peso 5000 (\$9.6) per domestic departure, equating to an average charge per departure of \$19.3, or 2.9% of the average return fare.

A 50% rise in departure charges would raise the cost of travelling to and within Chile by 1.7%. Best practice academic studies show that on average there will be an 11% fall in passenger numbers for every 10% rise in air fares. Therefore, a 1.7% increase in fares would see a reduction of 73,500 in passenger departures.

There would be an increase in revenues from the departure charge of \$37 million but this would be more than offset by the economic costs to passengers and the wider economy in Chile. The direct impact on passengers is estimated to be a loss of economic benefit (consumer surplus), due to higher travel costs, of \$21 million.

The impact of reduced air traffic and the reduced spending of these passengers is estimated to reduce annual GDP in Chile by \$33 million, cause a loss of over 1,100 jobs, reduce wage income by \$13 million, and reduce government tax revenues by \$5 million as a result of lower corporate and income tax payments.

Table 11: The Economic Costs of higher Airport Passenger Departure Charges

	2006	50% rise in Charges	Change
Aeronautical charge per passenger	19.3	28.9	+ 9.6
As a % of average return fare	3.4	5.1	+ 1.7
Departing passengers	3,930,000	3,856,500	- 73,500 (-1.9%)
Economic benefit to passengers (US\$m)	1,120	1,099	- 21
Boost to GDP (US\$m)	1,759	1,726	- 33
Boost to Employment	59,038	57,934	- 1,104
Boost to Wage Income (US\$m)	684	671	- 13
Boost to Tax Revenues (US\$m)	263	258	- 5

Source: Oxford Economics, IATA

METHODOLOGY

- Economic benefits to passengers are estimated as shown in Figure 4.
- Supply-side benefits from connectivity were estimated based on the methodology published in 'Airline Economic Benefits: IATA Economic Briefing No.8, July 2007'.
- Demand-side benefits to GDP and benefits from tourism were estimated by Oxford Economics using their global economic model and satellite models.
- The benefits from new services was estimated by measuring the addition to passenger numbers and using the analysis provided by Oxford Economics, assuming a linear impact from a percentage increase in passenger numbers.
- The economic cost of charges were estimated as explained in the last section together with the use of the analysis provided by Oxford Economics, assuming a linear impact from a percentage increase in passenger numbers.

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