

12 Net benefits

Having considered the competitive effects and public benefits arising from the JSA, we need to evaluate the net benefit from reauthorising the JSA. For the reasons detailed in sections 5 to 10 we believe there would be no competitive detriment associated with the reauthorisation of the JSA. Indeed, our analysis indicates that there would be a competitive benefit, through lower prices and higher output. Our analysis also shows that a reauthorised JSA would deliver substantial public benefits whatever level of capacity replacement is assumed, thereby making the case for authorisation compelling. Our analysis is summarised in Table 67.

Table 67: Summary of Australian net benefit estimates, \$ million 2003–2007

	Lost JSA capacity replaced	Lost JSA capacity not replaced
Cost Savings	\$43	\$43
Tourism	\$58	\$353
Net Exports	\$301	\$165
Total	\$402	\$561

We therefore believe that the continuance of the JSA would deliver significant net benefits to Australia, conservatively estimated at between \$402m and \$561m, and should thus be reauthorised.

Appendix A: ABS and MiDT data methodology

Australian Bureau of Statistics (ABS) data, which we have obtained from Qantas, is based on immigration cards completed by travellers departing from or arriving in Australia. In particular, based on these immigration cards, ABS data records a passenger's destination as the country in which the passenger intends spending or has spent the longest time, or the passenger's country of residence. ABS allocates passenger traffic to the carrier of the international flight that is departing/arriving Australia. As far as possible, the ABS endeavours to ensure that where codeshares occur, all passengers are attributed to the flight of the operating carrier. This does not always work correctly, and small numbers of passengers can appear against marketing carriers in the ABS figures. The ABS data set we have is for the Australian financial years 1994/95 to 2001/02.

MiDT (Marketing Information Data Transfer) data is collected through GDSs, the computerised information and reservation systems used by travel agents to book tickets. The data has been provided to us by British Airways which, like many airlines, uses this information to plan network development and drive commercial decisions.

MiDT O/D's are generated on the basis of journeys between stopover points within an individual passenger's itinerary. A traveller's itinerary is decomposed into O/D segments on the basis of connect duration between each segment of the itinerary. If a passenger has sequential segments and the connection time between these is greater than a predefined duration, then the segments are considered separate O/Ds. In the data presented, British Airways has imposed stopover conditions of 6 hours for short haul to short haul, 14 hours for short haul to long haul, and 20 hours for long haul to long haul. Through services between Australia-Europe O/Ds are considered to be non-connecting services as they are ticketed as a single flight number. Where a passenger is carried by two or more carriers in a journey, the MiDT data used will allocate passengers to carriers on the basis of the carrier for the longest sector of the O/D itinerary. Codeshare passengers are attributed to the marketing partner as opposed to the carrier actually operating the flight. The MiDT data set we have is for the UK financial years 1998/99 to 2001/02.¹²⁹ The very fact that the Australian and UK financial years have different periods will inevitably make it difficult to directly compare ABS and MiDT market shares.

¹²⁹ The UK financial year runs from 1 April to 31 March.

As is evident in sections 5.1.1 and 5.1.2, there are differences in ABS and MiDT passenger traffic share statistics, even putting aside the fact that the reporting periods for the two data sets differ. This is especially the case with respect to the Australia-Europe market. In contrast, ABS and MiDT measures of Australia-South East Asia passenger traffic shares are broadly similar. The fact that the use of ABS and MiDT data sets leads to differences in Australia-Europe passenger shares but reasonably similar Australia-Asia market shares, can be explained by the different ABS and MiDT methodologies. Specifically:

(1) ABS and MiDT differ in the way they define O/D journeys.

Both ABS and MiDT data sets are origin destination data sets. That is, they seek to measure traffic flows by considering the point where travellers commence their journey ('origin') and the point where they will finish their journey ('destination'). ABS categorises the destination as the country where travellers will spend the most time abroad. MiDT determines the destination based on stopover period. As noted above, based on the stopover conditions imposed by British Airways in common with the industry standards, the stopover cut-off is 6 hours for short haul to short haul, 14 hours for short haul to long haul, and 20 hours for long haul to long haul.

To see how the different approaches might categorise traffic differently, consider a traveller that flies from Australia to London for a 20-day visit under the following scenarios:

- Scenario 1: The traveller flies one-stop via Singapore, with a stopover duration of 15 hours. Both ABS and MiDT would consider the traveller's destination to be London.
- Scenario 2: The traveller flies one-stop via Singapore, with a stopover duration of 25 hours. The ABS would consider the traveller to make a single journey from Sydney to London. However, MiDT would consider the traveller to make two O/D journeys, one from Sydney to Singapore and one from Singapore to London.
- Scenario 3: The traveller flies to Singapore and stays for 10 days. The traveller then flies on to London. The ABS would treat the traveller as making a single journey from Sydney to London. MiDT would treat the traveller as making two O/D journeys, one from Sydney to Singapore and one from Singapore to London.
- Scenario 4: The traveller flies one-stop via Singapore, with a stopover duration of 15 hours. The traveller spends 20 days in London and then 10 days in Frankfurt. The ABS would consider London to be the destination. MiDT would consider the traveller to make two O/D journeys, one from Sydney to London and one from London to Frankfurt.

- Scenario 5: The traveller flies one-stop via Singapore, with a stopover duration of 15 hours. The traveller spends 20 days in London and then 30 days in Frankfurt. The ABS would consider Frankfurt to be the traveller's destination. MiDT would consider the traveller to make two O/D journeys, one from Sydney to London and one from London to Frankfurt.

As is evident in sections 5.1.1 and 5.1.2, we analyse the JSA routes both at the market level as well as at more disaggregated levels, including at the country-pair level. For the purpose of analysing traffic between Australia and the UK, we would see it as being preferable that traffic ABS would record as being Sydney-Frankfurt (i.e. Australia-Germany) traffic under Scenario 5 should be recorded as Sydney-London (i.e. Australia-UK traffic).

As the scenarios presented above would suggest, it would be difficult to measure the precise extent to which differences will arise from market shares constructed using ABS and MiDT data. The important point, however, is that because of their different approaches to recording passenger destinations, market shares for journeys involving stopovers will differ depending on whether ABS or MiDT data is used.

- (2) *ABS allocates passenger traffic to the carrier that leaves or enters Australia, while for MiDT data, British Airways has allocated a passenger to the carrier serving the longest sector of the passenger's journey.*

The ABS allocates passenger traffic based on the question on arrival and departure cards that ask what airline passengers are using to arrive in or depart from Australia. Suppose a passenger travels from Australia to Europe on a single connect one-stop service. If a JSA airline were to carry the passenger from Australia to the connect point, and a non-JSA airline were to carry the passenger from the connect point to Europe, then allocating the passenger's entire journey to the JSA parties would overstate their passenger traffic share for the Australia-Europe market. Equally, however, if a non-JSA airline were to carry the passenger from Australia to the connect point, and a JSA airline were to carry the passenger from the connect point to Europe, then allocating the passenger's entire journey to the non-JSA airline would understate the passenger traffic share of the JSA parties.

MiDT data has similar problems arising from its allocation of passenger traffic to the carrier operating the longest sector of the passenger's journey. Overall, because of their different approaches to recording passenger traffic against airlines, there is the potential for divergence between Australia-Europe market shares using MiDT and ABS data. It is, however, interesting to note Table 68, which presents market shares for the JSA parties, Singapore Airlines and Malaysia Airlines for Australia-UK using ABS data, the MiDT data

presented in section 5.1.2 that assigns the passenger to the primary carrier, and a third set of data, which is MiDT data with ABS carrier allocations imposed.

Table 68: Comparison of market shares using different methodologies

	ABS	MiDT ABS Carrier Assumptions	MiDT Primary Carrier
Qantas	35%	27%	23%
British Airways	11%	10%	12%
JSA	45%	36%	35%
Singapore Airlines	17%	21%	21%
Malaysia Airlines	9%	10%	10%

Source: ABS and MiDT.

These differences between recording methodologies are much less of an issue with respect to point-to-point travel between Australia and South East Asia. Since travel between Australia and South East Asia is typically direct, the carrier serving the longest sector of the passenger's journey will more often than not be the sole carrier serving the passenger, as well as the carrier leaving or departing Australia.

(3) *ABS data is based on passenger immigration cards while MiDT data is collected through travel agent GDS.*

As noted above, ABS data relies on passengers filling in their immigration cards correctly. As such, the accuracy of the ABS data could be affected by passenger error in filling out cards.

(4) *MiDT data excludes direct sales by airlines to customers.*

As a result of being sourced from travel agent sales, MiDT data does not capture direct sales made by airlines. That said, typically, the fraction of direct sales is relatively low for more complex, long haul, international itineraries as compared with simple, short haul (especially domestic) flights. To the extent to which direct sales are significant, generally the proportion of direct sales will vary across geographies but not airlines. For example, in countries with a high penetration of Internet access, direct sales via the Internet may be a material proportion

of sales. However, to meet consumer demand all airlines would offer direct sale channels and the proportion of direct sales by each airline will likely be similar. Given this, MiDT data will underestimate total market output, however, airline market shares will not be greatly affected.

Appendix B: Definition of South East Asia and Europe

This appendix shows the countries that are captured in our analysis of Australia-South East Asia and Australia-Europe market shares when using ABS and MiDT data. As is evident in Table 69, when presenting Australia-South East Asia market shares, ABS and MiDT data both capture the same countries. However, as shown in Table 70, when presenting Australia-Europe market shares, there are slight differences in the countries captured between the ABS and MiDT data. This may have a very slight impact on absolute market shares, though we do not believe that this materially impacts observed market share trends.

Table 69: Definition of South East Asia

Country	ABS	MiDT
Indonesia	➡➡	➡➡
Malaysia	➡➡	➡➡
Vietnam	➡➡	➡➡
Philippines	➡➡	➡➡
Singapore	➡➡	➡➡
Thailand	➡➡	➡➡

Table 70: Definition of Europe

Country	ABS Europe	MiDT Europe	Country	ABS Europe	MiDT Europe
Albania	➤➤	➤➤	Latvia	➤➤	➤➤
Andorra	➤➤		Liechtenstein	➤➤	
Armenia	➤➤	➤➤	Lithuania	➤➤	➤➤
Ascension Island		➤➤	Luxembourg	➤➤	➤➤
Austria	➤➤	➤➤	Macedonia	➤➤	➤➤
Azerbaijan	➤➤	➤➤	Malta	➤➤	➤➤
Belarus	➤➤	➤➤	Monaco	➤➤	➤➤
Belgium	➤➤	➤➤	Netherlands	➤➤	➤➤
Bosnia & Herz	➤➤	➤➤	Norway	➤➤	➤➤
Bulgaria	➤➤	➤➤	Poland	➤➤	➤➤
Croatia	➤➤	➤➤	Portugal	➤➤	➤➤
Cyprus	➤➤		Moldova	➤➤	➤➤
Czech Republic	➤➤	➤➤	Romania	➤➤	➤➤
Denmark	➤➤	➤➤	Russia	➤➤	➤➤
Estonia	➤➤	➤➤	Serbia & Montenegro	➤➤	
Faeroe Islands		➤➤	Slovakia	➤➤	
Finland	➤➤	➤➤	Slovenia	➤➤	➤➤
France	➤➤	➤➤	Spain	➤➤	➤➤
Georgia	➤➤	➤➤	Sweden	➤➤	➤➤
Germany	➤➤	➤➤	Switzerland	➤➤	➤➤
Gibraltar	➤➤	➤➤	Tajikistan	➤➤	
Greece	➤➤	➤➤	Turkmenistan	➤➤	
Greenland	➤➤		Ukraine	➤➤	➤➤
Hungary	➤➤	➤➤	United Kingdom	➤➤	➤➤
Iceland	➤➤	➤➤	Uzbekistan	➤➤	
Ireland, Rep of	➤➤	➤➤	Yugoslavia	➤➤	➤➤
Italy & San Marino	➤➤	➤➤			
Kazakhstan	➤➤				
Kyrgyzstan	➤➤				

Appendix C: Bilateral restrictions in air passenger service markets

As summarised in section 5.2.2, we do not view bilateral restrictions as a strong constraint on the intensity of competition to the JSA parties, at least in the current situation and in the likely medium term. This appendix provides a more detailed analysis of the extent to which restrictions arising from bilateral agreements give rise to entry and expansion barriers in the relevant air passenger markets.

Third and fourth freedom rights under Australia-Europe bilateral agreements

Average weekly seat capacity allowances for designated Australian and European airlines between Australia and Europe as of December 2002 are presented in Table 71. The permitted services between Australia and the foreign country concerned may be operated over any routing provided for in the air agreements concerned. To illustrate the point, Australian airlines are allowed 28 flights to the UK per week each way. A flight by a designated Australian airline would use this entitlement regardless of whether the flight was a one-stop flight via (say) Singapore or a two-stop flight via (say) Singapore and Frankfurt.

It is also important to note that airlines designated in a European Union country are able to fly on an unrestricted basis within the European Union. While bilateral agreements between Australia and any given European country typically stipulate that an airline designated by the European country must originate the flight at its home port, the absence of bilateral restrictions among European Union countries is likely to facilitate the provision of indirect services for European based airlines, consistent with the discussion contained in section 4.2. For example, all European carriers with rights to operate to Australia can freely use their intra European service networks to feed traffic, at their home ports, between their European flights and their services, and those of their alliance partners, operated to and from Australia. European carriers serving Australia have traditionally used their Australian service rights in this manner. Similarly, these carriers undertake the same hubbing practices to carry traffic between Europe and Asia, between Europe and North America, and between Europe and other destinations.

Bearing this in mind, we note that, with the exception of France, designated airlines of Australia have available capacity to enter or expand services between Australia European O/Ds directly impacted by the JSA. For France, available capacity is entirely used by Qantas.¹³⁰ We note that Alitalia codeshares on Qantas flights to Italy. (As noted below, this codeshare is reported as capacity used by Qantas.) Table 71 shows that designated French, German and Italian airlines have not used any of their available capacity entitlements. This suggests that bilateral restrictions are not the reason why they do not operate services in the Australia-Europe market.

¹³⁰ We understand that talks between Australia and France will be taking place early this year to seek expansion of capacity entitlements.

Table 71: Capacity entitlements between Australia and selected countries, as of December 2002

Air Services Agreement Between Australia and:	Capacity Entitled Seats pw Each Way		Utilised Capacity Seats pw Each Way		Unused Capacity Seats pw Each Way - Dec 02	
	Australian Carriers	Foreign Carriers	Australian Carriers	Foreign Carriers	Australian Carriers	Foreign Carriers
United Kingdom (Note 3)	11200 28 freq	11200 28 freq	8274 21 freq	6250 19freq	2926 7 freq	4,950 9 freq
France (Paris)	1200 3 units	1200 3 units	1182 3 units	Nil	Nil	1,200 3 units
Germany (Note 3)	8400 21 freq	8400 21 freq	2758 7 freq	Nil	5642 14 freq	8,400 21 freq
Oct 2004	10000 25 freq	10000 25 freq				
Italy (Note 3)(Note 4)	2800 7 freq	2800 7 freq	1576 4 freq	Nil	1224 3 freq	2,800 7 freq
Austria	2800	2800	Nil	2408	2800	392
Netherlands	2800	2400	Nil	Nil	2800	2,400
Greece	2100	2100	Nil	Nil	2100	2,100
Norway/ Denmark/Sweden	2800	2800	Nil	Nil	2800	2,800
Finland	2800	2800	Nil	Nil	2800	2,800
Switzerland (Note 3)	2800 7 freq	2800 7 freq	Nil	Nil	2800 7 freq	2,800 7 freq
Russia (Note 3)	1200 3 freq	800 2 freq	Nil	Nil	1200 3 freq	800 2 freq
Malta (Note 3)	700 3 freq	700 2 freq	Nil	Nil	700 3 freq	700 2 freq

Source: Qantas. Notes: (1) On certain routes, codesharing is undertaken between Qantas and foreign carriers and between foreign carriers. The above table places all capacity against the operating carrier where codesharing occurs. (2) On some routes, capacity is described in terms of weekly frequencies or frequencies/aircraft type or in aircraft type equivalents. In these cases, capacity has been converted into seats using an appropriate conversion factor. Where capacity is expressed in terms of weekly frequencies/any aircraft (eg. UK, Germany, Italy) seats have been calculated at 1 frequency pw = 400 seats pw. (3) Weekly frequencies, as shown, are limited under these Agreements. Any aircraft types can be used. (4) Qantas has since reduced Rome services from 4 to 3 weekly.

In Determination A30202, the Commission noted the possibility of an open skies agreement between Australia and the UK and suggested that this could impact on the ability of sixth

freedom operators to compete. As shown below, sixth freedom carriers are no more constrained in expanding services to European destinations than the JSA parties. However, with respect to the possibility of an Australia UK open skies agreement, we have been informed that there are no talks underway or planned in the near future. However, Qantas and British Airways are of the view that if there were a need to increase current capacity entitlements, for instance, to facilitate entry by an airline such as Virgin, the UK and Australian Governments would be likely to accommodate the required increase.

Third and fourth freedom rights under Australia-Asia/Middle East bilateral agreements

Information on seat capacity allowances between Australia and Asia, as well as the Middle East, is presented in Table 72. The information is relevant to considering the extent to which bilateral agreements hinder entry or expansion in both the Australia-South East Asia and Australia-Europe markets. Note that it is relevant to consider bilateral agreements between Australia and North Asia/Middle East in addition to those between Australia and South East Asia, since services between Australia and North Asia/Middle East form legs for services between Australia and Europe.

Table 72 suggests that the existing Australia-Hong Kong bilateral agreement constrains any further expansion by Hong Kong airlines. However, as noted below, negotiations are underway to significantly increase capacity entitlements. Moreover, although Cathay Pacific has used all its entitlements, it added 7 weekly services in the last few months of 2002. This is a substantial increase in a short period of time, and is in addition to 9 weekly services added to the route by Qantas from late 2001 and during 2002. It is clear that under other existing bilateral agreements, Singapore Airlines, Thai Airways, Malaysia Airlines, Emirates and Gulf Air have available capacity to expand services between Australia and their respective home countries. Moreover, except for Thai Airways, these carriers have also sought additional capacity entitlements through their Governments' requests to Australia. Air services discussions with each of these will take place over the next two to three months. Specifically:

- The UAE has recently received an increase on Dubai-Sydney services from 4 to 7 weekly flights, which allows for any type of aircraft.¹³¹ Despite its capacity entitlements, Emirates does not yet fly to Brisbane (though intends to commence daily B777-300 Brisbane via Singapore services from the end of 2003), and it only commenced 4 services per week to Perth in August 2002.
- Turning to Thailand, Qantas and British Airways do not expect there to be any further negotiations aimed at revising entitlements in the near future. However, there is more capacity in this bilateral than is likely to be used in the foreseeable future, and in the next 5 to 7 years at least. As noted above, Australia is entitled to operate 35 B747 equivalents per week to Thailand, but only uses 7. Equally, more than one-third of the capacity available for designated Thai airlines to expand services to Australia is currently unused. As a result, we do not believe bilateral agreements pose any constraint on competitive expansion on this route.
- With respect to Singapore, the Australian and Singapore Governments have entered into discussions on an open skies agreement, which would remove restrictions on capacity and routes. In any event, because of the manner in which codesharing is captured in the Australia-Singapore bilateral (as noted below), Singapore Airlines has significant capacity to expand further should it wish to do so. Qantas and British Airways are of the view that both the Australian and Singapore Governments would also take a relaxed stance toward a request for an increase in capacity entitlements should such a request be made. This would be consistent with the substantial increases in capacity implemented in 2000 and 2001. As a result, we believe that even if such an open skies agreement were not to eventuate, the Australia-Singapore bilateral agreement is not likely to create any entry or expansion barriers relevant to the JSA.
- In terms of the Malaysia-Australia bilateral, the Malaysian Government is seeking rights for additional capacity to Australia for Malaysia Airlines. Talks with Malaysia are expected to be held around April 2003.

¹³¹ The bilateral agreement signed between Australia and the UAE differs from typical bilateral agreements in that capacity is allocated with respect to specific ports.

- There are also ongoing negotiations surrounding significant changes to the Australia-Hong Kong bilateral. When concluded, Qantas expects there to be large increases in capacity permitted for the carriers of each side.
- In the near future, the Bahrain Government is expected to seek amendments to the Australia-Bahrain bilateral to provide for Gulf Air to operate additional services. As noted in section 5.2.6, it is anticipated that Gulf Air will resume its own flights to Australia later this year.
- The Australian Government has agreed to air services discussions with Qatar in April for the conclusion of an air services agreement. This will provide for Qatar Airlines, a rapidly expanding Doha based Middle Eastern carrier with extensive growth plans, to commence services to Australia (as discussed in section 5.2.6).

Table 72: Capacity entitlements between Australia and Asia/Middle East, as of October 2002

Air Services Agreement Between Australia and:	Capacity Entitled Seats pw Each Way		Utilised Capacity Seats pw Each Way		Unused Capacity Seats pw Each Way - Dec 02	
	Australian Carriers	Foreign Carriers	Australian Carriers	Foreign Carriers	Australian Carriers	Foreign Carriers
Singapore (Note 1)	28200	22600	21051 (note 1)	19,443 (note 1)	7,149	3,157
Thailand	14000	14000	2758	8,619	11,242	5,381
Malaysia	17800	14600	Nil	11,892	17,800	2,708
Hong Kong	12600 37 freq (note 3)	12600 37 freq (note 3)	8832 33 freq (note 4)	10,507 35 freq (note 4)	3,768 4 freq (note 4)	1,293 Nil freq (note 4)
Indonesia						
MEL/SYD/PER/BNE	10800	10800	2110	3,471	8,690	7,329
Other Cities	Unlimited	Unlimited	Nil	248	Unlimited	Unlimited
Brunei						
MEL/SYD/BNE/PER	4140	2070*	Nil	1,386	4,140	684
Other Cities	Unlimited	Unlimited	Nil	348	Unlimited	Unlimited
		*BNE and PER				
Philippines	2500	2500	916	906	1,584	1,594
Vietnam	2000	2000	Nil	1,360	2,000	640
(Note 5) (Note 6)	5 freq	5 freq		5 freq	5 freq	Nil freq
China	4020	4020	Nil	4,378	4,020	Nil
Taiwan	3600	3600	813	2,309	2,787	1,291
Japan	15800 79 units	15800 79 units	12990	8,729	2,810	7,071
Korea (Note 1)	5120	5120	392	5,618	4,728	Nil
Macau (Note 6)	1200 3 freq	1200 3 freq	Nil	Nil	1,200 3 freq	1,200 3 freq
United Arab Emirates (Note 6)		7 freq Mel 7 freq Syd 7 freq Per 7 freq Bne (Dubai)		7 freq Mel 4 freq Syd 4 freq Per (Dubai)		3 freq Syd 3 freq Per 7 freq Bne (Dubai)
1. Dubai - SYD/MEL/BNE/PER	12000/ 30 freq to Dubai and Abu Dhabi	11200 / 28 freq	Nil	5,315 / 15 freq	12,000 / 30 freq to Dubai and Abu Dhabi	5,885 / 13 freq SYD/BNE/PER
2. Abu Dhabi - SYD/MEL/BNE/PER		800 / 2 freq	Nil	Nil		800 / 2 freq
					Unlimited	Unlimited

Air Services Agreement Between Australia and:	Capacity Entitled Seats pw Each Way		Utilised Capacity Seats pw Each Way		Unused Capacity Seats pw Each Way - Dec 02	
	Australian Carriers	Foreign Carriers	Australian Carriers	Foreign Carriers	Australian Carriers	Foreign Carriers
3. To/from other Australian cities.	Unlimited	Unlimited	Nil	Nil		
Bahrain (Note 6)	4000 10 freq	1750 5 freq	Nil	Nil	4,000 10 freq	1,750 5 freq

Source: Qantas. Notes: (1) On certain routes, codesharing is undertaken between Qantas and foreign carriers and between foreign carriers. Except for Singapore and Korea, the above table places all capacity against the operating carrier where codesharing occurs. In the case of Singapore and Korea, use of capacity must take all codesharing into account and capacity usage has been adjusted for this. (2) On some routes, capacity is described in terms of weekly frequencies or frequencies/aircraft type or in aircraft type equivalents. In these cases, capacity has been converted into seats using an appropriate conversion factor. Where capacity is expressed in terms of weekly frequencies/any aircraft (eg. UAE) seats have been calculated at 1 frequency pw = 400 seats pw. (Refer notes 3 and 6). (3) Hong Kong entitlements are subject to both frequency and capacity limitations. The maximum permitted frequency, including all aircraft types, is 37 services weekly. Maximum Australia - HKG seat capacity is shown and assumes all capacity entitlements are operated with passenger aircraft. The Australia Hong Kong air services arrangements allow freighter services to be operated from within total entitlements at the conversion rate of one service per 400 seats. Cathay Pacific operates two B747F services weekly HKG-Australia. Qantas temporarily suspended freighter services to Hong Kong in late September 2002. (4) Passenger services only. Unused capacity takes into account the freighter services operated by Cathay Pacific. Qantas currently operates no freighter services to Hong Kong. (5) Vietnam's capacity is for SYD/MEL/BNE/PER only. Capacity to/from other cities in Australia is unlimited. Australian capacity entitlement includes all Australian cities. (6) Weekly frequencies, as shown, are limited under these Agreements. Any aircraft types can be used.

In short, and as indicated in Table 72, key Asian and Middle Eastern airlines have significant room for expansion of flights between Australia and their home hubs. However, they might still be constrained in expanding services between Australia and the European destinations directly affected by the JSA if they were unable to increase the services they provide between their home hubs and these destinations, namely the United Kingdom, France, Italy, and Germany.

Third and fourth freedom rights under Asia-Europe bilateral agreements

While information on bilateral agreements as they relate to Australia vis-à-vis other foreign countries is readily obtainable, it is much more difficult to obtain information regarding bilateral agreements between foreign countries. Information on bilateral agreements between countries is not typically published. Therefore, with the exception of bilateral agreements between the UK and foreign countries, the information we present on bilateral agreements between foreign countries has been based on the best estimates of Qantas and British Airways.

Table 73 shows that, with the exception of Malaysia Airlines, none of the key Asian/Middle Eastern competitors to the JSA parties is constrained by bilateral agreements between their home countries and the UK.¹³² The UK-Malaysia bilateral agreement only restricts services for designated airlines between Malaysia and London. In particular, this agreement allows for 18 weekly flights for carriers of each side using any aircraft type between Malaysia and London. British Airways and Qantas understand that Malaysia may have used all of these London entitlements. However, unlimited capacity entitlements exist for all other services between Malaysia and the UK. Turning to the bilateral agreements that exist between the UK and other Asian countries, the UK-Singapore bilateral agreement allows for open frequency and capacity between the 2 countries. The UK-Thailand agreement allows for 21 passenger flights per week for each country's airlines, using any type of aircraft. An open skies agreement exists between the UK and the UAE, which allows for unlimited frequency and capacity between the two countries. The UK-Hong Kong bilateral agreement allows for 18 and 35 weekly flights for carriers of each side using any aircraft type, respectively.

¹³² Note that this table does not include information on Japan-UK entitlements. Japanese airline rights are fully exercised under the Japan UK bilateral agreement (though UK airlines have an unused daily B747 at Osaka).

Table 73: Capacity entitlements between UK and selected countries (seats/frequency)

	Capacity Entitled UK Carriers	Capacity Entitled Foreign Carriers	Capacity Utilised UK Carriers	Capacity Utilised Foreign Carriers	Unused capacity UK Carriers	Unused capacity Foreign Carriers
Singapore	Unlimited	Unlimited	4800 12 pw	11200 28 pw	Unlimited	Unlimited
Thailand	8400 21 pw	8400 21 pw	2800 7 pw	4400 11 pw	5600 14 pw	4000 10 pw
Malaysia (London)	7200 18 pw	7200 18 pw				
Malaysia (Other)	Unlimited	Unlimited	Nil	1200 3 pw	Unlimited	Unlimited
Hong Kong	14000 35 pw	14000 35 pw	8400 21 pw	7200 18 pw	5600 14 pw	1200 3 pw
UAE	Unlimited	Unlimited	8400 21 pw	19600 49 pw	Unlimited	Unlimited

Source: British Airways.

As noted above, information concerning the bilaterals between foreign countries other than the UK is more difficult to obtain. The following information in respect of bilateral agreements between Asian and European countries is based on the best estimates of Qantas and British Airways.

With respect to Singapore's bilateral agreements, Qantas and British Airways understand that the agreement with France allows at least a daily B747 to be operated by the carriers of each country. Singapore Airlines is expanding capacity with a 7th weekly B747-400 service to Paris from the end of March 2003. We understand that the Singapore-Italy agreement allows for 3 B747 equivalents for the carriers of each side. While we have no information regarding the agreement between Singapore and Germany, we consider that it is likely to be significantly more liberal. As a result, we would expect Singapore Airlines to be in a position to increase its services to European destinations by means of Germany, either using its own aircraft or by transferring passengers on to Lufthansa.

In terms of Hong Kong's bilateral agreements for air passenger services, Qantas understands that the Hong Kong-Germany bilateral allows for 15 services per week for the carriers of

each side using any aircraft. Qantas understands that Hong Kong's agreements with France and the Netherlands allow for 7 services per week using any aircraft, while for Italy, flights are limited to 5 per week using any aircraft type. For the UK, in addition to the 35 weekly passenger services allowed, the UK-Hong Kong bilateral also allows for 6 freighter services per week.

With respect to Japanese arrangements, Qantas understands that the rights of Japanese airlines to France have been fully exercised for Tokyo, though there is some capacity available for services between Osaka and Paris. Qantas believes that this is also the case with respect to the capacity entitlements of Japanese airlines to Germany. However, for Italy, we understand that Japanese airlines have scope to increase services from both Tokyo and Osaka.

There is little available information on UAE bilateral agreements. However, the UAE has not historically had difficulties in negotiating increases in capacity. As noted above, it has recently negotiated significant increases in capacity for Australian ports, despite not using all these entitlements thus far.

Despite attempts to do so, Qantas and British Airways have been unable to obtain information regarding bilateral agreements between foreign countries relevant to the JSA other than those discussed above. Any overall assessment of the impact of bilaterals must therefore be qualified. Nonetheless, what information there is does not suggest that entitlements under bilaterals are a significant or material constraint on expansion by the JSA parties' competitors on the markets affected by the JSA. This inference is consistent with the market share trends highlighted in section 5.1. We therefore query whether material entry or expansion barriers arise from this source.

Impact of fifth freedom restrictions on Australian airlines

It is also relevant to consider the extent to which (lack of) fifth freedom rights constrain airlines expanding in the Australia-Europe market. It is as a result of fifth freedom or beyond rights that Qantas flights originating in Australia can pick up passengers and fly beyond Singapore to (say) the UK. Using this example, Australia requires permission from both the Singapore and UK Governments in order to operate beyond services between Singapore and the UK. Fifth freedom restrictions could potentially constrain expansion in the Australia-Europe market in two ways:

- First, they might prevent Australian airlines flying beyond Asian ports to European destinations.

- Second, they might prevent European airlines flying beyond Asian ports to Australian destinations. However, we proceed on the basis that European airlines are not constrained by fifth freedom rights. As noted above, few European airlines currently provide services between Europe and Australia. However, as noted in section 5.2.5, a number of European airlines have previously provided these services. If fifth freedom rights did in fact restrict European airlines from flying beyond Asia, then it would not have been possible to deliver these services in the past.

Fifth freedom restrictions would not be expected to constrain Asian hub operators, since these airlines only require third and fourth freedom rights to serve the Australia-Europe market.

The information we have indicates that, generally, fifth freedom restrictions do not constrain expansion by Australian airlines. This is shown in Table 74, in which 'Yes' means Australia has rights from both countries to operate and to freely carry traffic between the two countries up to the limit of Australia's capacity/frequency entitlements. As can be seen, Australia is not constrained by fifth freedom rights beyond Singapore, Thailand or Malaysia.

Australian designated airlines are constrained by bilateral agreements with Hong Kong and Japan. The Australia-Hong Kong bilateral only enables Qantas to operate and exercise fifth freedom rights between Hong Kong and one point of choice in Continental Europe. Even then, the Hong Kong bilateral limits services to 3 weekly each way. (Although Hong Kong allows Australia to choose a point in France, the Australia-France bilateral does not permit the uplift of traffic for the Hong Kong-France sector.) In the case of the Japan bilateral, Australia has no beyond rights to any destinations. Even if Australia were granted these rights, services beyond Japan are not allowed under some European bilateral agreements.

Table 74: Fifth freedom rights for Australian airlines, selected countries

	UK	France	Germany	Italy
Singapore	Yes	Yes	Yes	Yes
Thailand	Yes	Yes	Yes	Yes
Malaysia	Yes	Yes	Yes	Yes
Hong Kong	No	No	Yes	Yes
Japan	No	No	No	No

Source: Qantas.

There are good reasons to suggest that the JSA assists in lowering expansion barriers that might arise from Hong Kong freedom restrictions especially. In particular, while Qantas and British Airways do not include their respective services to Hong Kong in the JSA for the benefit sharing, the joint pricing and interline cooperation between Qantas and British Airways for the carriage of traffic between Australia and Europe over Hong Kong enables Qantas to provide an alternative one-stop routing to and from the UK and an alternative stopover point in Asia.¹³³ The JSA also helps British Airways to provide for traffic wishing to travel over Hong Kong. British Airways does not have the rights at present to extend flights beyond Hong Kong to Australia.

It could be argued that Qantas and British Airways could achieve these same objectives through the oneworld marketing alliance. However, with carrier cooperation, Qantas and British Airways can manage Australia-Hong Kong and UK-Hong Kong service inventory to accommodate UK-Australia passengers. Indeed, the ability to coordinate Hong Kong inventories is important for managing Australia-Europe traffic during peak load periods. During these periods, were it not for this coordination, the volume of passengers using Singapore and Bangkok sectors to connect through to Australia and Europe would constrain the number of seats available for O/D traffic to these ports.

¹³³ At present, British Airways operates 14 London-Hong-Kong services per week and Qantas operates 30 Australia-Hong Kong services per week (to and from Sydney, Melbourne, Brisbane and Perth). Australian Airlines provides 3 Cairns-Hong Kong services per week.

Labour market

The model closure assumes that workers are concerned with the real after-tax wage rate, that is, the wage rate less income taxes, deflated by the CPI. If the labour market strengthens, the real after-tax wage rates are assumed to rise in response to increased worker negotiating strength. More technically, it is assumed that the deviation in the after-tax real wage rate from its base case forecast level increases in proportion to the deviation in employment from its base case forecast level. The coefficient of proportionality is chosen so that the employment effects of a shock to the economy are largely eliminated after 5 years. In other words, after about 5 years the benefits or costs of a shock, such as increased tourism demand, are realised mainly as an increase or decrease in real after-tax wage rates. The labour market assumption can be summarised as short-run real-wage stickiness and long-run real-wage flexibility. It is consistent with conventional macro-economic modelling in which the NAIRU is exogenous.

Appendix D: Monash model of the Australian economy

MONASH is a dynamic computable general equilibrium model of the Australian economy developed at the Centre of Policy Studies, Monash University. The model is designed for forecasting and policy analysis. It describes in mathematical terms the behaviour: of industries, households and the government; of domestic and foreign markets for commodities; and of the domestic markets for labour and capital. The model generates results for 112 industries and 115 commodities.

The model contains more variables than equations. Consequently, it is necessary to treat a number of variables as exogenous. In addition, this closure of the model provides flexibility in the specification of how the economy will respond to the factors simulated. In the current analysis, the key assumptions involved with the closure of the model are set out below.

Public expenditure and taxes

In the simulations, all tax rates are fixed on their base-case paths but public consumption adjusts. With shocks that stimulate economic activity and thereby increase tax collections and reduce unemployment benefits, the Government is assumed to increase its consumption.

Rates of return on capital

MONASH allows for short-run divergences in after-tax rates of return on industry capital stocks from their levels in the base case forecasts. Short-run increases/decreases in rates of return cause increases/decreases in investment and capital stocks, thereby gradually eroding the initial divergences in after-tax rates of return.

Production technologies

MONASH contains variables describing: primary-factor and intermediate-input-saving technical change in current production; input-saving technical change in capital creation; and input-saving technical change in the provision of margin services. In the simulations described in this paper, all of these variables are exogenous and follow their base case forecast paths.