

**Analysis of Canada's Bilateral Air Services Agreements:
Policy Focus on Asia-Pacific Region**

for

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By

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Executive Summary

Objectives

This study provides a thorough assessment of Canada's bilateral air services agreements (ASAs) by focusing on the following four issues:

1. Assessing and summarizing Canada's existing bilateral ASAs, especially those with British Columbia's key trading partners,
2. Assessing the effects of liberalizing Canada's restrictive bilateral ASAs including the costs and benefits of liberalizing air transport markets to/from British Columbia's key trading partners,
3. Identifying and describing the key issues in Canada's bilateral ASA negotiation process in comparison with that in the United States; and
4. Presenting options for and recommendations on potential strategies for British Columbia to influence Ottawa's bilateral ASA process.

Global Developments on International Air Transport Policy

Canada's approach to its bilateral ASAs has not kept up with the global developments in international air policy, despite successive attempts by Canadian governments of different political parties to liberalize Canada's bilateral ASA approach (the International Air Policy of 1994 and the Blue Skies policy of 2006). Canada has Open Skies agreements with only six countries, while retaining restrictive clauses in most of the other 76 bilateral ASAs.

- The United States signed its first open skies agreement in 1992 and, as of June, 2008, has Open Skies agreements with 92 countries, becoming the Open Skies hub nation.
- The European Union created the EU single aviation market by undertaking a series of policy measures between 1987 and 1997. Since then, the European Commission has been seeking to expand the single aviation market and negotiate Open Skies agreements on behalf of its member states.
- A EU-US Open Aviation Agreement (OAA) was signed in April, 2007 and became effective on March 30, 2008.

- 11 Asian countries, including South Korea, Taiwan, Thailand, Indonesia, Brunei, Singapore, India, and Pakistan, have Open Skies with the United States.
- A 'single aviation market' between Australia and New Zealand has been in full operation since 2000.
- China and the United States have agreed to meet by 2010 to discuss full Open Skies.

In particular, Canada's bilateral ASAs have not kept up with the shifting trade, investment and economic interest of Canada with respect to Asia. Canada does not have an Open Skies agreement with any Asian country. Virtually all of the Canada's bilateral agreements with Asian countries are restrictive, limiting which airlines should be allowed to serve particular airport pairs, how many flights should be allowed and how airfares should be regulated. Our study concludes that Canada's current bilateral ASAs do not serve the economic interest of Canada by imposing constraints on the growth of Canada's trade, investment, tourism, logistics, education and other related industries as well as constraining growth opportunities for the air transport sector itself. This economic costs imposed by the restrictive bilateral ASAs are especially high in British Columbia, where the economy depends heavily on trade, investment, tourism and the export of education services to Asian countries.

Positive Economic Effects of Open Skies

It has been shown time and again that air transport liberalization initiatives and Open Skies agreements have significant positive economic effects on the economies of the nations involved and on the airline industry itself. Our literature survey found that traffic growth following Open Skies and air liberalization have generally averaged between 12% and 35%, reaching almost 100% in some cases. Open Skies have generated significant benefits for consumers (passengers), shippers, and other stakeholders. Our analysis of key markets show the following predicted long-run benefits of Open Skies:

- Korea-Canada: average airfares decreasing by 30%; total passenger volumes increasing by 62.5%; \$150 million impact on BC's tourism industry per year.
- China-Canada: average airfares decreasing by 19.7% (Vancouver-Beijing); 39% increase in passenger volume (Vancouver-Beijing); \$71 million impact on BC's

tourism industry per year (assuming the absence of Approved Destination Status and maintaining the current visa restriction).

- Hong Kong-Canada: 9% reduction in airfares; 15.2% increase in passenger volumes as new carriers enter the market.
- Philippines-Canada: decrease in average airfares of 24%; increase in passenger volumes of 39% within one year.

Fuel costs accounted for 26.5% of the operating costs in 2007, but soaring fuel prices have pushed the share to over 40% for many airlines. Our results show that fuel cost doubling would increase the effect of Open Skies on traffic volume reported above slightly, as proportionally more passengers are induced to travel on direct (Open Skies) routes when fuel price increases.

How the US Approach Differs From Canada

- The United States bilateral ASA negotiators have a legislated mandate to pursue Open Skies (*International Air Transportation Competition Promotion Act, 1979*).
- The United States bilateral ASA negotiators have abandoned the principle of 'bilateral reciprocity' in favour of providing 'equal opportunities' to carriers of both countries.
- A semi-independent Office of Aviation Economics conducts cost-benefit analyses on the United States economy of liberalizing or forming Open Skies with each bilateral partner. This moves the focus away from carrier impacts.
- When an airline opposes a proposed Open Skies agreement, the airline must submit the reasons why keeping the restrictive bilateral ASA would benefit the United States economy as a whole.
- The United States does not allow confidential addendum to their bilateral ASAs while Canada signs ASAs frequently with confidential addendum

Strategies for Dealing with the Restrictive Bilateral ASA Regime

Transport Canada officials in charge of bilateral ASAs are not ready to accept Open Skies if there is a "risk" for the Canadian "flag" carrier to lose traffic to foreign carriers, even where Open Skies are shown to benefit the Canadian economy as a whole. Since the argument for Open Skies is strong, negotiations for new or expanded services may

be manipulated by Canadian carriers arguing for a “level playing field”. Below, we propose a number of complementary strategies to deal with the Bilateral ASA issues.

(1) Measures to increase transparency of the ASA process

- **Eliminate confidential addenda:** Confidential addenda are included in 35 of the 80+ bilateral ASAs Canada has with other countries. Most address commercial issues (flight schedules, seat capacity, routes and air fares). This practice reduces public scrutiny and independent analysis and is fundamentally undemocratic. Media exposure on this issue may effectively remove this practice. The United States does not allow confidential addenda.
- **Publish all inputs to the process:** Although anyone can send comments and opinions to the bilateral ASA process, the submitted inputs are not available to the public. All inputs received by the bilateral ASA team from all stakeholders should be available for public review.
- **Expand Number of observers at bilateral negotiations:** For the interest of balancing stakeholders’ interests and eliminating the perception of ‘backroom deals’, it would be useful to invite more observers from stakeholder communities: airports, tourism, trade, investment and consumer sectors.

(2) Dealing with Transport Canada’s ‘visible hand’ approach

- **Create economic analysis capability:** create an arms length unit with the Canadian Transportation Agency with a mandate similar to the United States’ Office of Aviation Economics – a semi-independent organization from the bilateral ASA negotiating team. Such a unit would make the bilateral process more transparent and could illustrate the limitations of the current ‘visible hand’ approach being employed in negotiations.
- **Addressing short term negotiating concerns:** in order to positively influence on currently scheduled negotiations, such as the case on South Korea, doing further in-depth economic analysis to provide more specific inputs would be helpful.

(3) Tilting the balance of power on negotiations

The federal Department of Foreign Affairs and International Trade (DFAIT) houses the Office of Chief Air Negotiator and ultimately signs off on the negotiating mandate for each bilateral ASA negotiation. However, they are heavily dependent on Transport Canada input and analysis. Since DFAIT appears to believe that liberalization of bilateral ASAs will benefit the Canadian economy as a whole, it is important to tilt the balance of power on negotiations to DFAIT by supporting their efforts.

(4) Political and legislative approach

- **Legislative action:** replace the policy focus for developing bilateral ASA negotiating mandates with a legislated mandate focused on Open Skies. Although this may take some time, it is a measure that government may want to explore since such a measure would obligate Transport Canada officials to seek opportunities to liberalize bilateral ASAs – consistent with past policies on air liberalization introduced by both Conservatives and Liberal Transport Ministers.
- **Vancouver 2010 Olympics as an opportunity:** the Vancouver Olympic Games provides a unique opportunity for British Columbia to convince Ottawa of the need for liberalization of bilateral ASAs, especially on the markets to/from Vancouver.
- **Pacific Gateway and logistics hub strategy:** Ottawa has declared building the Pacific Gateway and Logistics Hub in Greater Vancouver as an important economic strategy. Bilateral ASA liberalization can be viewed as an essential element supporting this Federal economic policy.
- **Making British Columbia an Open Skies province:** China was reluctant to liberalize their bilateral ASA with South Korea fearing that Chinese airlines may lose out in competition with Korean carriers. Shandong Provincial government persuaded Beijing to do a limited Open Skies between Shandong and South Korea. A similar argument could be constructed for British Columbia to push for regional Open Skies with selected Asian countries especially in the period leading up to the 2010 Vancouver Olympic. Such a move is also consistent with the Federal policy of gateway and logistics hub building.

(5) Travel and tourism facilitation issues

- **Press for Approved Destination Status (ADS) with China:** The majority of current visitors from China are business travellers, students, or people visiting friends and relatives. The growth potential with ADS is substantial. For example, within 3 years of receiving ADS, the number of Chinese visitors to Australia almost doubled from 98,000 in 1999 to 190,000 by 2002.
- **Press Canada to approve transit without visa for Chinese nationals:** a visa is required for all Chinese travellers to Canada, including those just transiting through Canadian airports. Enabling transit without visa would improve the economics of a connection between China and Vancouver, allowing many of the seats to be sold to connecting passengers.

(6) Additional issues and approaches

- Explore possibility of introducing Canada's second international carriers (e.g., West Jet) on Asian routes.
- More frequent meetings and communications between British Columbia government officials and Federal bilateral ASA negotiating team members.
- Mobilizing lobbying power of the bilateral partner countries and their flag carriers on Ottawa via diplomatic channels and their own influences on Transport Canada.
- More effective use of national media for expressing Canada's economic needs for ASA liberalization and open skies.

Acronyms

AC:	Air Canada
ADS:	Approved Destination Status
ASA:	air services agreement
ATA:	Air Transport Association of America
CRS:	Computer Reservation System
CTA:	Canadian Transportation Agency
CX:	Cathay Pacific
DFAIT:	Foreign Affairs and International Trade Canada
DL:	Delta Airlines
DOT:	US Department of Transportation
ECAA:	European Common Aviation Area
ECJ:	European Court of Justice
ECU:	European Currency Unit
EEC:	European Economic Community
ETS:	Emissions Trading Scheme
EU:	European Union
FFP:	frequent flyer program
GATS:	General Agreement on Trade in Services
GATT:	General Agreement on Tariffs and Trade
GDP:	Gross domestic product
HKG:	Hong Kong Airport
IATCPA:	International Air Transportation Competition Promotion Act
ICAO:	International Civil Aviation Organization
ICN:	Incheon (Seoul) Airport
IATA:	International Air Transport Association
JL:	Japan Airlines
KE:	Korean Air
LAX:	Los Angeles Airport
MNL:	Manila Airport
MOU:	Memorandum of Understanding
MU:	China Eastern
NRT:	Tokyo Narita Airport
NW:	Northwest Airlines
OAA :	Open Aviation Area Agreement between EU and US
OD:	Origin and Destination
PAL:	Philippines Airlines
PAX:	Passengers
PEK:	Beijing Airport
PVG:	Shanghai Pudong Airport
SFO:	San Francisco Airport
SQ:	Singapore Airlines
TC:	Transport Canada
TILMA:	Trade, Investment and Labour Mobility Agreement
TWOV:	Transit Without Visa
UA:	United Airlines
UAE:	United Arab Emirates
WTO:	World Trade Organization

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¹ The discussions in this sub-section are based on Tae Oum’s interviews with the following individuals in Washington DC. John P. Heimlich, VP and Chief Economist, Air Transport Association (ATA); Cecilia Bethke, Managing Director, International Affairs, ATA; Paul Gretch, Director, International Air Transport, US Department of Transportation (DOT); and Keith Glatz, US DOT, Manager, International Air Transport.

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1 INTRODUCTION AND OBJECTIVES OF THE STUDY

1.1 Background Information

International air transport operates within the framework of the 1944 Chicago Convention on international air transportation, under which airlines' commercial rights on international routes are governed by a complex web of about 7,700 bilateral air services agreements (ASAs).

These bilateral ASAs can be classified into two broad categories: producer-interest agreements or consumer-interest agreements.

Producer-interest agreements typically include:

- pre-determination of capacity, in which governments must approve schedules in advance; designation of points that can be served rather than general grants of traffic freedoms².
- provisions for price and capacity coordination among national flag carriers, which may be limited to one of each party (single designation), and complex controls on airline pricing (such procedures are rarely enforced today).

Producer interest agreements, that in some cases expressly sanction anti-competitive practices such as price-fixing and mandatory pooling of revenues, view competition as inefficient and wasteful if not harmful. The consumer is to benefit through stability of supply and quality of service of established carriers.

Consumer interest agreements, as originally pioneered by the United States but also as championed in recent years by many other countries – seek to establish discipline by the market by removing entry controls³. The theory holds that this will lead to efficient producers as well as greater consumer choice.

Traditional ASAs generally fall within the producer interest category, as they contain detailed clauses on carrier and route designation, capacity allocation, pricing, etc. However, the worldwide trend over the last three decades is to move away from the

² Appendix I lists the nine freedoms of air.

³ Airlines must continue to meet qualitative standards, e.g. in the safety, security and health areas.

producer-interest agreements toward consumer-interest agreements through Open Skies and/or liberalized agreements.

Open Skies agreements remove all restrictions on international route rights, number of designated airlines, capacity, frequencies and type of aircraft. Under a bilateral Open Skies agreement, pricing is determined by market forces, and a fare can be disallowed only if both governments concur or at least one government has specific anti-competitive reasons. Carriers may enter into code-sharing or leasing arrangements with airlines of either country, or with those of third countries. All carriers — designated and non-designated — of both countries may establish sales offices in the other country, and convert earnings and remit them in hard currency promptly and without restrictions. Designated carriers are free to provide their own ground-handling services — "self handling" — or choose among competing providers. Airlines and cargo consolidators may arrange ground transport of air cargo and are guaranteed access to customs services.

As of February 2008, 142 bilateral Open Skies agreements have been reportedly concluded worldwide. The United States has become the Open Skies hub nation of the world as a partner in 92 Open Skies agreements. Recognizing the competitive disadvantage created by the US Open Skies, the European Union (EU), on behalf of its 27 member countries, has launched negotiations to liberalize its bilateral ASAs with a large number of countries including Canada. The most recent and very significant development was the Open Aviation Area Agreement (OAA) between EU and the US that came into effect on March 30, 2008.

From the late 1990s both International Civil Aviation Organization (ICAO) and World Trade Organization (WTO) have attempted to devise a multilateral framework for trade in air services similar to General Agreement on Tariffs and Trade (GATT) and General Agreement on Trade in Services (GATS). Unfortunately, these efforts will not likely succeed in the foreseeable future. On the brighter side, however, there is an increasing trend of liberalizing air services on a bilateral and regional basis. Therefore, in the foreseeable future, the world will continue to rely mostly on bilateral ASAs between each pair of countries for airline market and route development. It is estimated that, in 2007, about 30 per cent of country-pairs with non-stop scheduled passenger air services and

over half of the frequencies offered, were covered by either bilateral Open Skies agreements or regional/plurilateral liberalized agreements and arrangements (compared with about 6 per cent and 33 per cent, respectively, a decade ago).

Over 70 per cent of the agreements and amendments concluded during the last decade contained some form of liberalized arrangements, such as expanded traffic rights (covering Third, Fourth and in some cases Fifth Freedom traffic rights), multiple designation with or without route limitations, free determination of capacity, a double disapproval tariff or free pricing regime, and broadened criteria of airline ownership and control.

The EU-US Open Aviation Area agreement has put Canada in a rather precarious competitive situation. Canada has a lot to lose economically because many Canadians route their overseas travel via US hub airports, and an increasing proportion of foreigners route their travel to Canada via US hubs because they can find cheaper, more frequent and convenient flights (Dresner and Oum, 1998). This trend of traffic diversion to US hubs will become increasingly significant as the tightened border security implemented after the 9/11 incident becomes eased over time.

Canada has bilateral air agreements with 82 foreign countries and territories. In November 2006, the Canadian government released their "Blue Skies" policy (Appendix II) to encourage the development of new markets, new services and greater competition. The government has since signed Open Skies agreements with Ireland, Iceland, New Zealand, and Barbados. On November 27, 2007 Canada announced the launch of negotiations for an Open Skies agreement between Canada and the European Union. Canada currently has bilateral ASAs with 19 of EU's 27 member states.

However, Canada has not been proactively pursuing Open Skies agreements with Asian countries, with which the Province of British Columbia and Canada as a whole are increasing our trade and investment relationships very rapidly.

1.2 Project Goals and Objectives

The goals of this study are:

- To examine the current status of bilateral ASAs including Open Skies agreements.
- To investigate the benefits and costs of liberalizing bilateral ASAs to key stakeholders including passengers, airlines, airports, tourism industry and economy.
- To investigate and compare the Canadian process for establishing bilateral ASA negotiation priorities and mandates with those in the United States.
- To develop options for, and make recommendations on potential strategies for effectively communicating BC's position to Federal authorities.

2 Review of Selective Open Skies Agreements – Experiences of Foreign Countries

In this section, we document the effects of the following Open Skies agreements on air fares, passenger volumes, flight frequency, seat capacity, and the number of new airlines entered, etc.

- US Open Skies (with 92 countries; especially with 11 Asian countries)
- US - South Korea Open Skies Agreement
- European countries and EU Open Skies;
- Australia - New Zealand Single Aviation Market
- South Korea – China Limited Open Skies (Shandong and Hainan provinces) which started in September 2006.

2.1 The US Open Skies Experiences

The United States has led the drive towards fully liberalized markets with its Open Skies initiatives, beginning with the US-Netherlands Agreement in 1992. The agreement gave both countries unrestricted landing rights on each others' soil. The United States also granted anti-trust immunity to the alliance between Northwest Airlines and KLM Royal Dutch Airlines that started in 1989 (when Northwest and KLM agreed to code sharing on a large scale).

As of June 2008, the United States has Open Skies agreements with 92 countries and territories. The most recent developments are the Open Aviation Area Agreement with the European Union that came into effect on March 30, 2008, and the comprehensive Open Skies agreement with Kenya that was initialled on May 30 and officially signed on June 18, 2008.

With the exception of the US-EU agreement, the US Open Skies agreements still follow the bilateral ASA framework agreed in Chicago Convention (1944). They have continued to contain language that expressly removes ***cabotage***⁴ rights from the coverage of air services agreements. And importantly, they establish strong regulatory

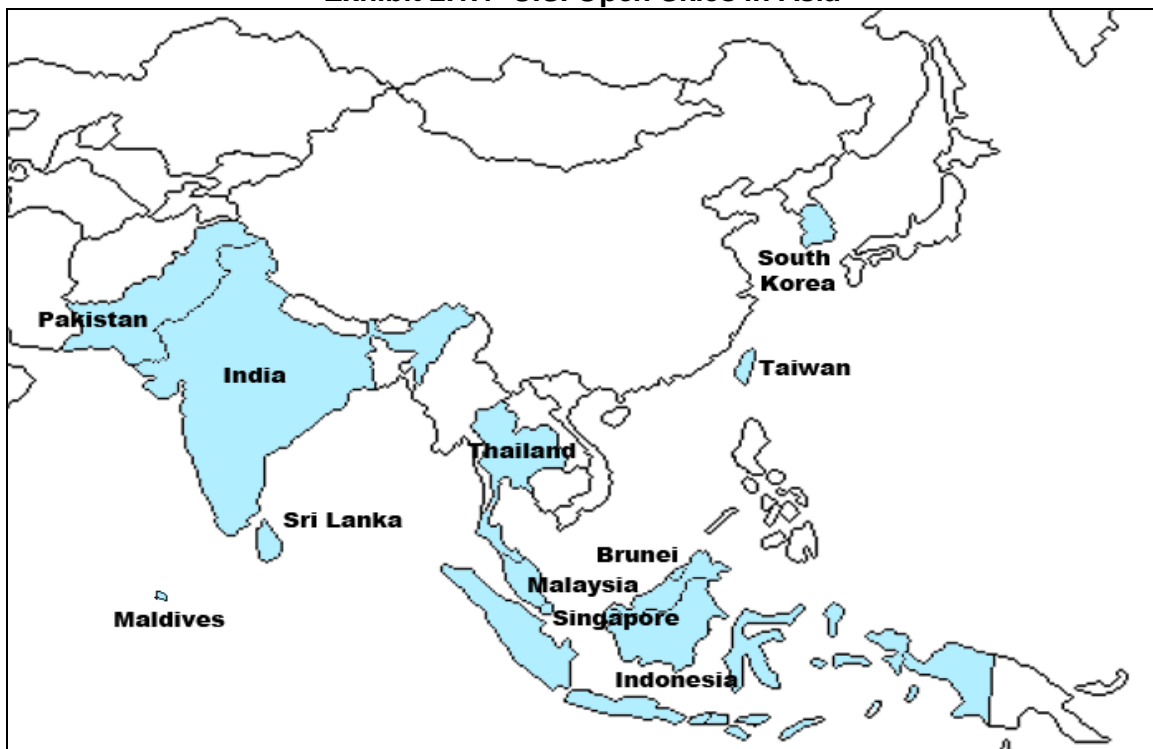
⁴ ***Cabotage*** is the permission allowing one or more foreign carriers to transport goods and/or passengers between any two points in the same country.

powers and obligations in the areas of safety and security just as it preserves the full ability to apply national laws.

2.1.1 The US Open Skies and Liberal ASAs in Asia

As shown in Exhibit 2.1.1, the United States has signed Open Skies agreements with 11 Asian countries, mostly in South Asia. South Korea became the United States' largest Open Skies partner in Asia in 1998. Japan signed a liberal ASA with the United States in 1998, whereas China and the United States signed an agreement in July 2004 that allows the number of weekly return flights between the two countries to increase from 54 to 249 by 2010. In May 2007, China and the United States reached a new and more liberalized bilateral ASA in which the two countries agreed to introduce unlimited entry, unlimited route and unlimited capacity (frequency and seats) gradually by year 2011.

Exhibit 2.1.1 U.S. Open Skies in Asia



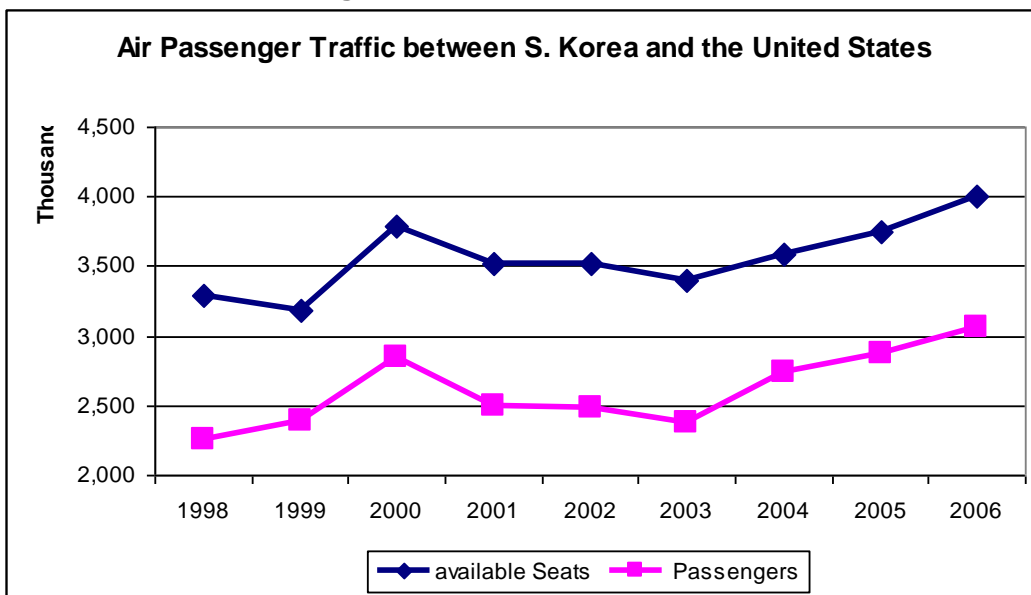
2.1.1.1 The United States – South Korea Open Skies

United States and South Korea reached an Open Skies agreement on April 23, 1998. The agreement allows the airlines of both countries to operate air services between the two countries without any restriction. South Korea was the United States' second-largest market in Asia, and with the Open Skies agreement became the US' largest Open Skies partner in the region.

In 1995, South Korea ranked 8th in terms of countries of origin for overnight arrivals in the United States with 592,000 visitors, which increased significantly following the Open Skies agreement and reached 662,000 visitors in 2000. It ranked 14th as the foreign countries visited by American residents with 591,000 visitors in 1995, which increased to 779,000 visitors in 2000. The Los Angeles – Seoul route served 714,000 passengers in 1996, which increased to 864,000 passengers in 2000. However, the visitor volume and consequently the air passenger volume declined following the event of September 11.

Exhibit 2.1.2 shows that air passenger volume between S. Korea and the United States experienced significant increase between 1998 and 2000, then declined in 2001 (and 2003), and has since grown considerably and exceeded 3 million passengers in 2006.

Exhibit 2.1.2 Air Passenger Traffic between S. Korea and the United States



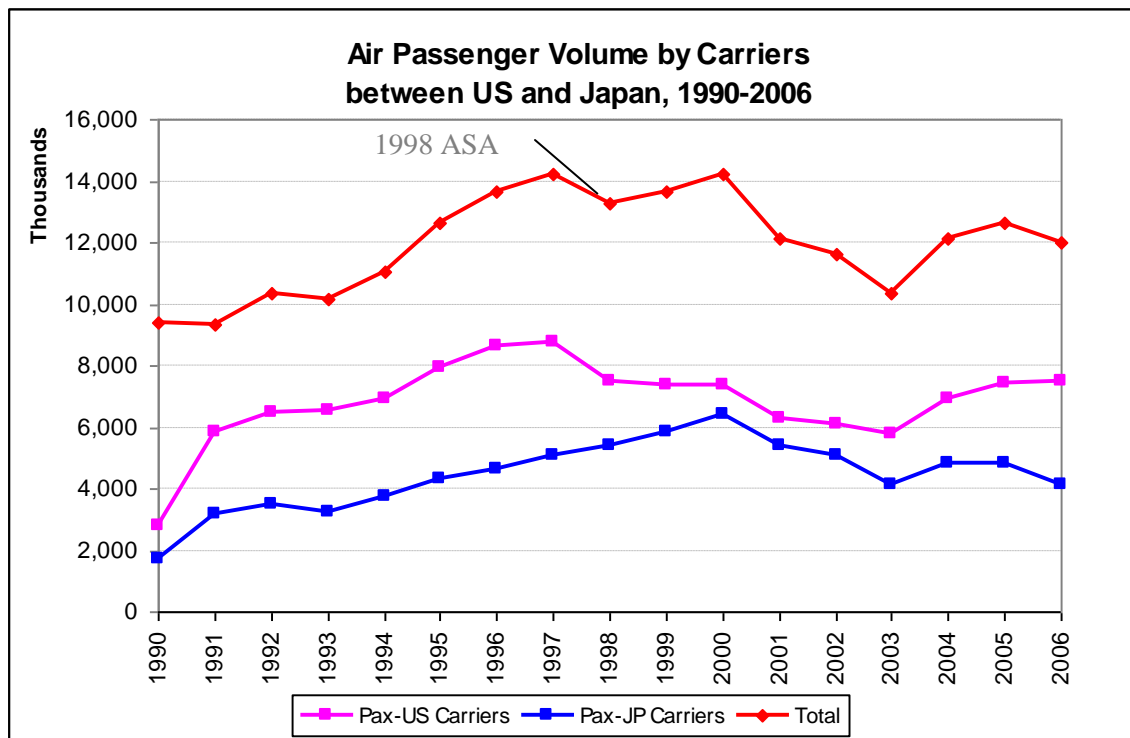
Source: US Bureau of Transportation Statistics, T-100 International Market.

2.1.1.2 The United States – Japan

The United States and Japan signed a Memorandum of Understanding on aviation in April 1998 to expand air services between the two countries. The agreement removes all restrictions on the US - Japan services of the so-called "incumbent" carriers (United Airlines, Northwest Airlines and Federal Express), and allows them to operate from any US gateway point to any point in Japan. These carriers are also able to fly beyond Japan to third countries without limitation on the number of flights. However, the "non-incumbent" carriers are still subject to capacity and other restrictions.

Exhibit 2.1.3 indicates that there was a 7% increase in air passenger volume in the US-Japan market from 1998 to 2000, which was followed by a 23% drop between 2000 and 2003 due in part to the event of September 11. However, air passenger traffic has since increased by 16% between 2004 and 2006.

Exhibit 2.1.3 Air Passenger Volume by Carriers between the US and Japan



Source: US Bureau of Transportation Statistics, T-100 International Market.

2.1.1.3 The United States – China

Prior to 1994, only two carriers from each country were able to serve in the US - China market under very restrictive conditions of route designation and capacity determination. However, the new ASAs in 1994, 1999 and 2004 have removed many of the restrictions in order to keep pace with the growing economic and social ties between China and the United States.

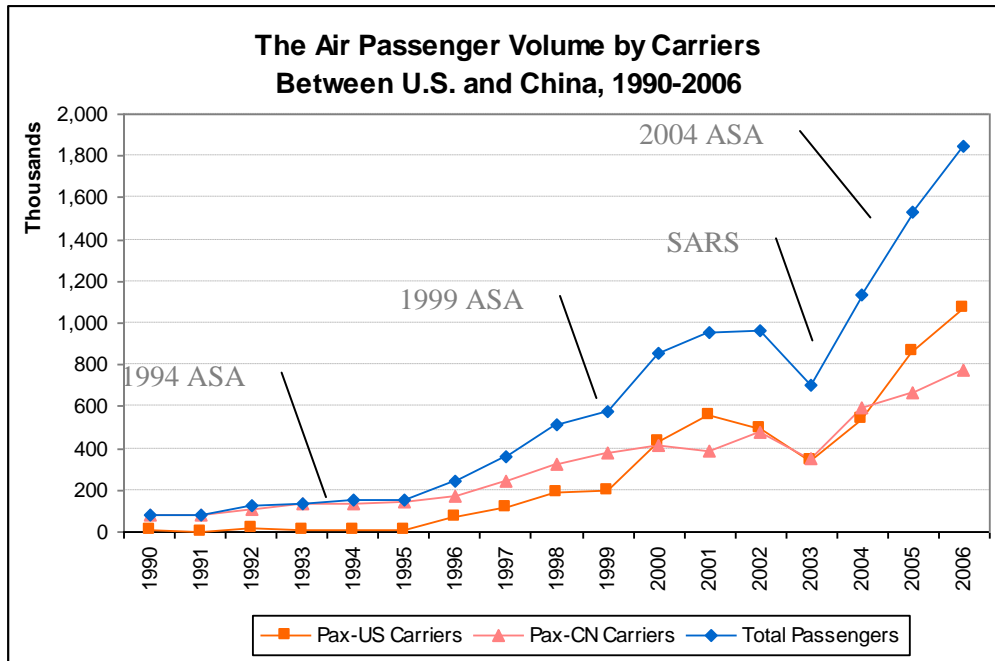
As of April, 2008, there are 84 non-stop passenger flights per week by American carriers departing from the US to China. The current agreement between China and the US will add 28 more weekly flights in 2009. The selected carriers for 2009 are US Airways⁵, Northwest Airlines, American Airlines and Continental Airlines. Three new daily flights from the US will be added in 2010, two in 2011 and two in 2012. The two countries have agreed to meet by 2010 to discuss full open skies.

Flights by Chinese carriers are much less frequent, with only 3 daily flights, 2 by Air China and 1 by China Eastern. Air China also provides a 3-flights per week service, China Eastern operates another 4-flights per week service, and China Southern operates a 5-flights per week services. In total, there are only 33 flights per week coming from China to the US.

Exhibit 2.1.4 shows the growth of air passenger volume between China and the US since 1990. It is noted that the total number of air passengers increased by 35% in 2005 following the signing of the 2004 landmark air services agreement between the two countries.

⁵ US Airways has been granted permission to postpone launching its China flights for one year, to March 2010, without losing rights to fly there later; In the meantime, US Airways and Air China announced their codesharing agreement on June 23, 2008.

Exhibit 2.1.4, Air Passenger Volume between the U.S. and China, 1990 - 2006



Source: US Bureau of Transportation Statistic, T-100 International Market.

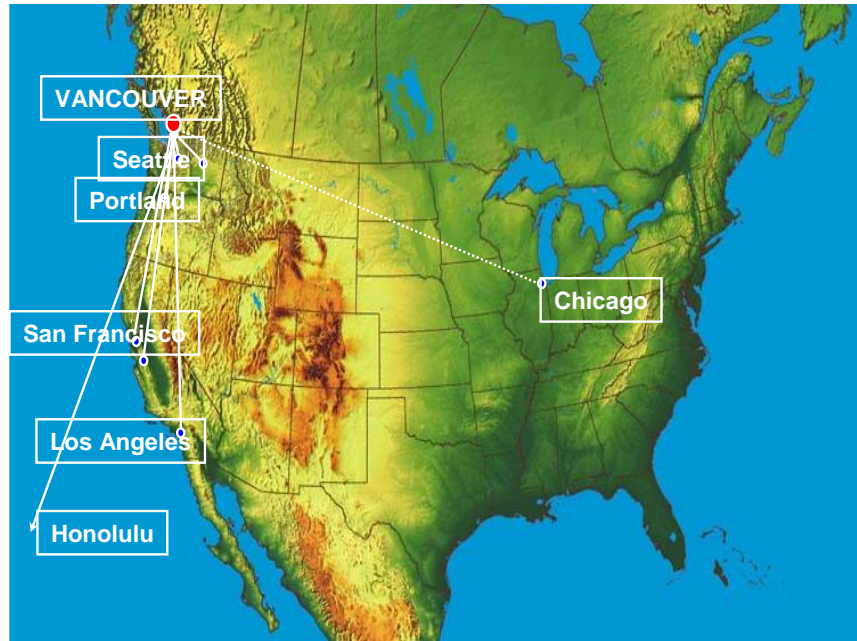
2.1.2 The Canada-US 1995 Transborder Open Skies Agreement

On February 24, 1995, the governments of Canada and the United States signed an “Open Skies” Agreement allowing both Canadian and American airlines to establish direct links between any pair of cities located on either side of the border. The agreement authorized any Canadian or US airline to offer transborder services without restriction in terms of fares, flight frequencies or aircraft types. It greatly facilitated business and leisure travel, providing greater choice through a growing number of transborder routes. For example, there were only 9 non-stop US destinations from Vancouver in 1995 (Exhibit 2.1.5), but 28 in 2008 (Exhibit 2.1.6). Overall, the number of Canadian cities with transborder air services has increased from 21 in 1994 to 27 in 2005, with smaller communities being the beneficiaries. The number of transborder routes has nearly doubled from 90 in 1994 to 171 in 2005.

The capacity of scheduled airline services between the two countries experienced strong growth starting in 1995 – with a sharp increase of 25% in the first year alone. During the 1995-2005 period, the number of air carriers providing transborder air services nearly

doubled, increasing from 11 carriers in 1994 to 20 in 2005; and the average transborder seat capacity per day increased by about 49%, from 28,217 in 1994 to 41,968 in 2005.

Exhibit 2.1.5 Vancouver – U.S. Routes Before 1995



Source: YVR Airport Authority (2006)

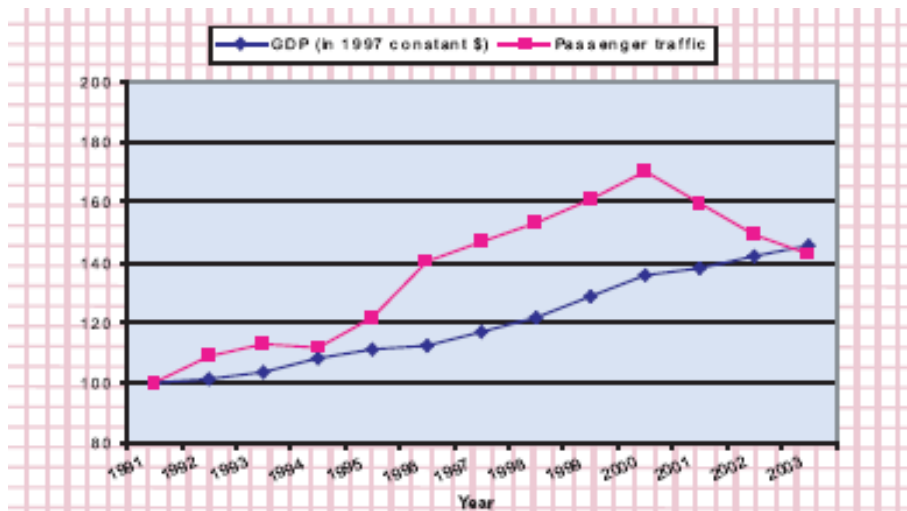
Exhibit 2.1.6 Vancouver – US Routes 2008



YVR's linkages with N. American airports as of August, 2008, supplied by YVR Airport Authority

The number of trips by air taken by Canadian and US residents between the two countries rose 41% in the first five years following the signing of that agreement. Exhibit 2.1.7 shows that the growth in transborder passenger traffic was far greater than the growth in economic activity during the period 1991- 2000, following which the negative effects of recession and the bursting of the dot.com tech bubble in the US were amplified by the terrorist attacks in New York and the SARS crisis.

Exhibit 2.1.7 Transborder Air Traffic and Canadian GDP



Source: Montreal Economic Institute (2005)

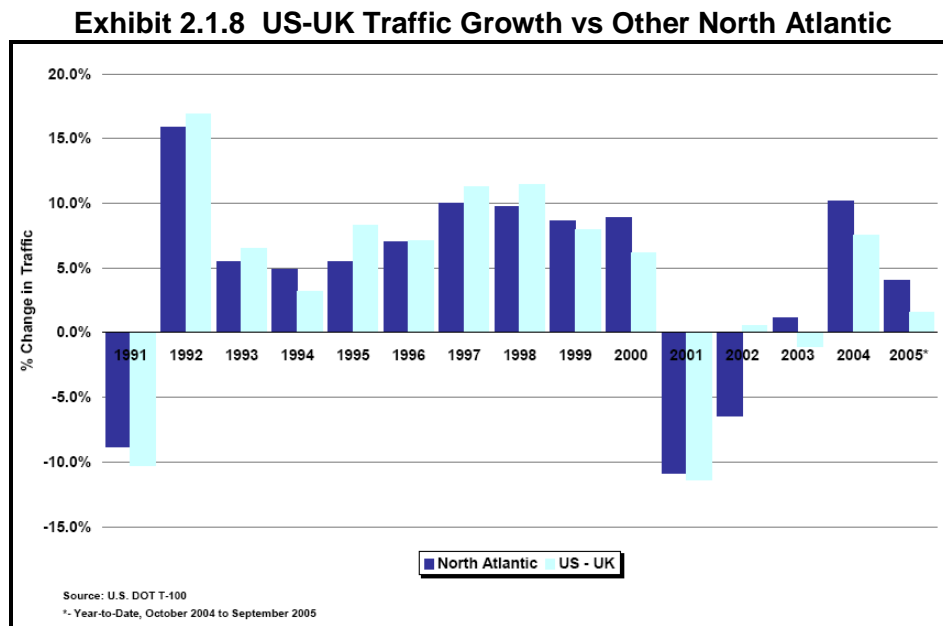
By allowing greater flexibility in fares, flight frequencies and aircraft size, the agreement greatly helped airlines to improve their efficiency. The load factors of the main carriers rose by 10% between 1994 and 2000, and labour productivity during this period, as measured in passenger-kilometers per employee, grew by 18%.

The growth in transborder air service has made significant contributions to Canada's economy. It is estimated that the "open skies" induced increase in transborder air traffic, generated about 4,500 additional direct jobs per year, contributing almost \$300 million in GDP. Furthermore, new air services also stimulated other economic sectors, such as tourism and export industries. It is estimated that a 5th freedom passenger service by a US carrier could generate as many as 105 direct aviation jobs, and about 1,300 direct jobs in the tourism industry.

2.1.3 United States - United Kingdom

In the years leading up to 1990, the US-UK traffic represented roughly one-third of total US to Europe traffic. Moreover, growth in the US-UK market was generally consistent with that of the US - Europe market.

In 1995, the US and UK agreed to a partial easing of their restrictive Bermuda II agreement. Airlines of both the US and the UK obtained unlimited access between any airport pair, with the exceptions of London Heathrow and Gatwick. As a result, capacity and traffic grew considerably during the 1990's. Interestingly, the liberalization resulted in a capacity (seat) share shift over the ten year period from 48% US flag carriers in 1990, to 58 % US flag carriers in 2000, and to 56% at the end of 2005. Intervistas (2006) reports that traffic in the US-UK market subsequent to the liberalization grew generally at a rate in excess of the general North Atlantic growth (Exhibit 2.1.8). While the trend began to reverse itself in the late 1990's, i.e. the North Atlantic grew at a faster rate beginning in 1999, the reversal may have been more a function of capacity limitations at Heathrow and Gatwick, combined with the maturity of the US-UK market subsequent to liberalization.



Source: Intervistas (2006)

2.2 Australia – New Zealand Single Aviation Market

The 'single aviation market' between Australia and New Zealand was first negotiated in 1992, completed four years later in 1996 and put into full operation in 2000 (Vowles and Tierney, 2007). This agreement not only liberalized air traffic between the two countries but also opened up the Australia-New Zealand market, known as the Trans-Tasman, to airlines from other countries.

The 'single aviation market' agreement allows Australian and New Zealand airlines to operate across the Tasman and beyond to third countries without restriction. Previously, beyond services were limited to 12 Boeing 747s per week to a maximum of 11 countries. Trans-Tasman market is one of the most diverse and competitive markets with 11 passenger airlines and four cargo airlines offering services between Australia and New Zealand. In 2004, there were over 4.6 million passengers in the market, up from the nearly 3.3 million passengers in 2000, the year the 'single aviation market' between Australia and New Zealand was first fully implemented.

The market itself can be broken into two distinct markets: Auckland–Australia and Christchurch–Australia; and New Zealand Secondary Airports–Australia. In the larger markets, liberalisation has brought third-country airlines into the market, with the national 'flag carriers', Qantas and Air New Zealand, continuing to dominate the market in terms of passengers carried. The largest market, Christchurch–Sydney, shown in Exhibit 2.2a, has two growth periods: the first was between 1999 and 2001, which can be attributed to the finalisation of the Single Aviation Market Agreement, and the second was between 2003 and 2004. This second growth spurt is attributable to the announcement and eventual entrance of the successful Australian-based carrier Virgin Blue. The number of passengers in the market increased by over 25% over the 15 months from their announced entry. In the New Zealand Secondary Airports–Australia market, the main issue is not one of competition but one of access. Before the mid-1990s, the only access cities such as Hamilton and Dunedin had on the Trans-Tasman were flights connecting through larger airports in Auckland and Christchurch. The Single Aviation Market Agreement allows low-cost carriers the opportunity to provide service to some of the smaller centres, creating a new network of direct international connections in the market that did not previously exist. This creates a number of niche markets focusing on serving

two types of traffic, leisure and visiting friends and family, which are both price-sensitive. Exhibit 2.2b shows a significant growth of passengers in these niche markets after 2000.

Exhibit 2.2a Christchurch Trans-Tasman markets
Christchurch-Sydney/Melbourne/Brisbane

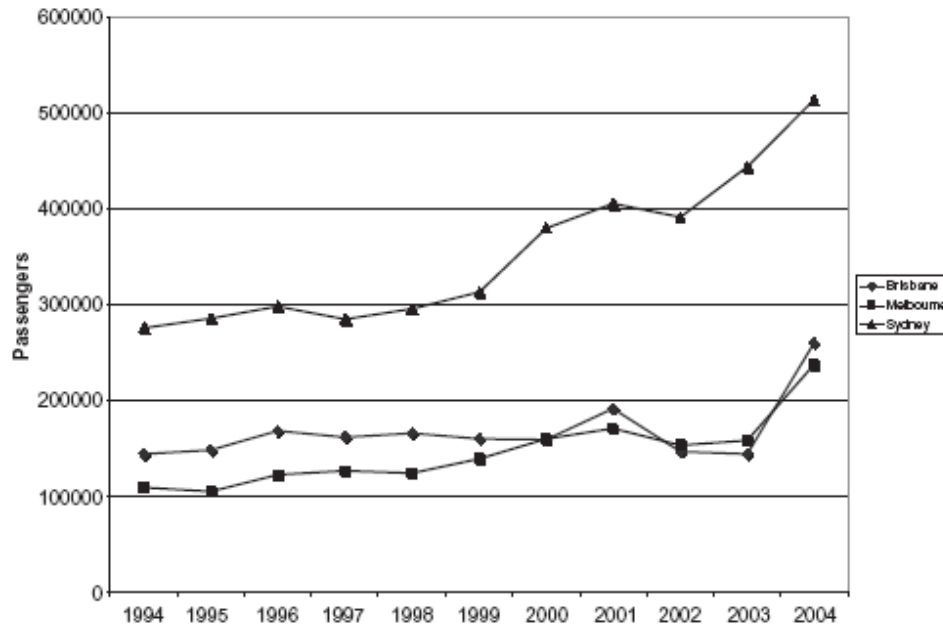
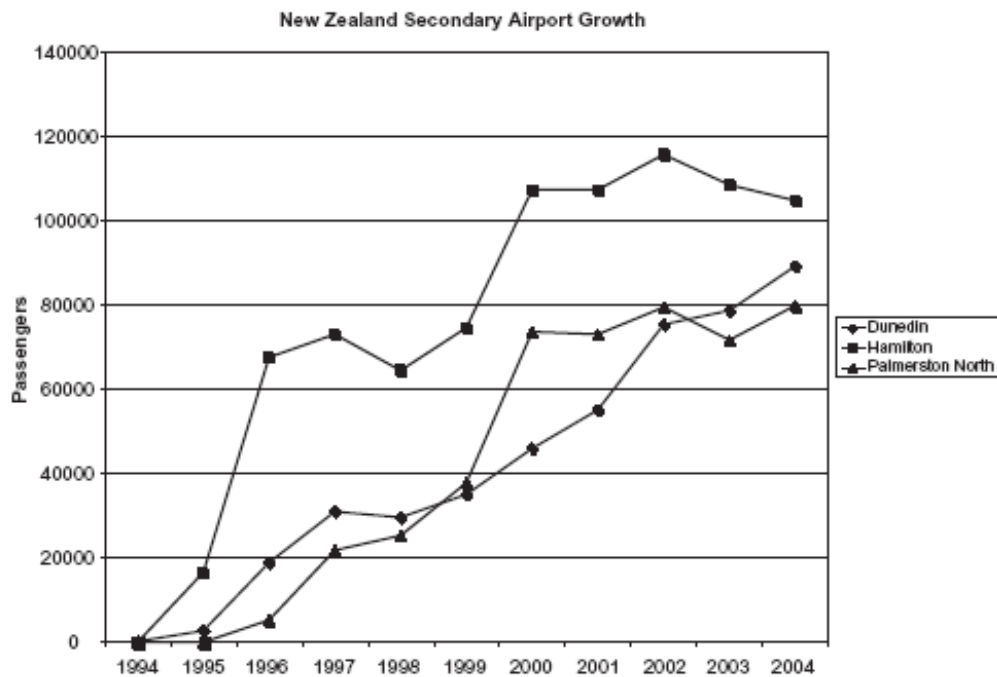


Exhibit 2.2b New Zealand secondary airport growth



Source: Vowles and Tierney, 2007

2.3 South Korea – Shandong Province (China) Open Skies

In June 2006, South Korea and China signed an air services agreement that opens the “skies” between South Korea and cities in China’s Shandong Province. Shandong Province has a population of 95 million and an area of 150,000 square kilometers, and some 10,000 Korean companies including subsidiaries of Samsung and LG have established business in the province.

The agreement came into effect in September 2006. There were only 4 weekly flights from Qingdao to Incheon before June 2006. By March, 2007, however, the number of weekly flights on Incheon-Qingdao route had increased to an incredible 134 flights per week. Total number of passengers between Korea and Shandong Province increased 50% from 1.58 million in the June 2005 – May 2006 period to 2.38 million in the July 2006-June 2007 period. (Previously, many passengers were using connecting services via Shanghai, Beijing, Hong Kong and Guangzhou).

- Overall, flights to the four major cities in Shandong province increased to 260 per week.
- Airfares dropped from the \$420-530 range in August, 2006 to \$210 soon after the open skies agreement went into effect. According to Dong-A Ilbo, the Korean newspaper, airfares on those routes were expected to decrease further to the \$100-\$110 range.

**Exhibit 2.3 Cities served, Frequencies and Airfares
Before and After the 2006 Open Skies ASA between Korea and Shandong**

	Cities Served	Weekly Flights*	Airfare
Before Open Skies	Korea: Incheon/Seoul, Taegu and Pusan China: Jinan, Qingdao and Yantai	Qingdao to Incheon only: 4 (Data not available for other routes)	\$420 - \$530
After Open Skies	Korea: Incheon/Seoul, Taegu and Pusan China: Jinan, Qingdao, Weihai and Yantai	Incheon – Qingdao: 134 Incheon – Jinan: 10 Incheon – Weihai: 56 Incheon – Yantai: 60	\$210

**: weekly frequencies are as of 2007.3.25; airfare is as of August, 2007*

2.4 The EU Single Aviation Market

The EU Single Aviation Market was created in 1992 within the then twelve Member States of European Economic Community (EEC)⁶. Following the creation of European Union (EU) in 1993, the number of member States in the EU Single Aviation Market increased to 15 in 1995 with Austria, Finland and Sweden joined the EU, and subsequently increased to 25 in 2004, and to 27 in 2007⁷. Full **cabotage** rights became effective on April 1, 1997. The liberalization package has been applied also to three member States⁸ of the European Free Trade Association (EFTA) belonging to the European Economic Area (EEA) since 1994 as well as Switzerland through a bilateral agreement on air transport since 2002. The Single Aviation Market has evolved into an wider European Common Aviation Area (ECAA) involving 35 States⁹ in 2006.

A significant impact of the Single Aviation Market is the development of the low cost airline services, and dramatic increase in competition and more choices. Intra-EU routes with more than 2 carriers have increased by 385% between 1992 and 2007. Number of cross-border Intra-EU routes has increased by 220% during the same period. Air travel in Europe tripled over the 1980 and 2000 period. In 2006, the EU air transport industry carried over 730 million passengers of which 480 million were within the EU, and the traffic volume is expected to be doubled by 2020.

In 2002, European Court of Justice (ECJ) ruled on a case brought in 1998 by the European Commission against eight member States which have concluded or amended bilateral air services agreements (seven of them Open Skies agreements) with the United States. The judgement affirmed the ability of the member States to enter into bilateral air services agreements with third countries to the extent that these do not affect Community rules on air transport, but found that some of the provisions in these

⁶ ECC includes 12 member states: Belgium, France, Germany, Italy, Luxemburg, Netherlands, Denmark, Ireland, United Kingdom, Greece, Spain, and Portugal. When the European Union (EU) was created in 1993, the EEC was transformed into the European Community, one of the EU's three pillars, with EEC institutions continuing as those of the EU.

⁷ EU members include Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom

⁸ Iceland, Liechtenstein, Norway

⁹ ECAA includes the 27 EU member states and eight South-East European partners (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the former Yugoslav Republic of Macedonia, Romania, Serbia and Montenegro and the U.N. Mission in Kosovo).

agreements infringed the Community's exclusive external competence, as regards air fares and computer reservation systems (CRS). ECJ also found that the clause regarding ownership and control of airlines infringed Community law on freedom of establishment.

Following the ECJ's judgement in 2003, the Council of EU conferred on the European Commission a mandate to negotiate a comprehensive air services agreement on behalf of all member States with the United States for creation of an Open Aviation Area (OAA) between the two territories, as well as a so-called "horizontal" mandate to negotiate with third countries to bring certain specific provisions in the existing bilateral ASAs in line with Community law. The Council subsequently granted additional negotiating mandates to the Commission for creation of a "common aviation area" (the integration of EU's neighbouring States into the single aviation market) with Morocco and the countries of the Western Balkans in 2004, Ukraine in 2006 and Jordan in 2007 as well as the creation of an OAA with Canada in 2007¹⁰. In addition, the Commission has been asking the Council to grant negotiating mandates for a common aviation area with Israel and Russian Federation and for OAAs with important global partners, i.e. Australia, Chile, China, India and New Zealand. The agreements, which have so far been concluded by the Commission under these mandates, are as follows:

- the Multilateral Agreement on the Establishment of a European Common Aviation Area (ECAA) involving 35 States, i.e. all the EU member States, Iceland, Norway and the countries of Western Balkans (initialled in 2005, signed in 2006 and applied provisionally for some States);
- the Euro-Mediterranean Aviation Agreement with Morocco (initialized in 2005, signed and applied provisionally in 2006);
- the Air Transport Agreement with the United States (a draft text of a first-stage comprehensive agreement was agreed to in 2005; an amended text was initialled in 2007 following the United States Department of Transportation (DOT)'s withdrawal of a proposal that would have changed rules governing international investment in U.S. airlines; applied provisionally in March 2008);

¹⁰ On November 27, 2007 Canada launched negotiations for an Open Skies-type air transport agreement between Canada and the European Union (EU) and its Member States. Canada currently has concluded bilateral air transport agreements with 19 of the 27 Member States of the (EU).

- “horizontal” agreements (initialled with 36 States since 2004; covering more than 550 ASAs); and
- 87 non-EU states have accepted Community designation, and nearly 700 Bilateral ASAs have been brought into conformity with Community law

2.5 The EU – US Open Aviation Area (OAA) Agreement

The European Union and the United States are the two largest air transport markets in the world. Together they account for more than half of all global scheduled passenger traffic and 71.7 percent of the world’s freighter fleet.

On March 2, 2007, the United States and the European Union concluded a comprehensive air transport agreement including all 27 EU countries. The agreement, coming into effect on March 30, 2008, extends Open Skies principles to 11 EU countries where the United States has had restrictive agreements or none at all, including Greece, Ireland, Spain, and the United Kingdom.

The agreement contains the following major provisions:

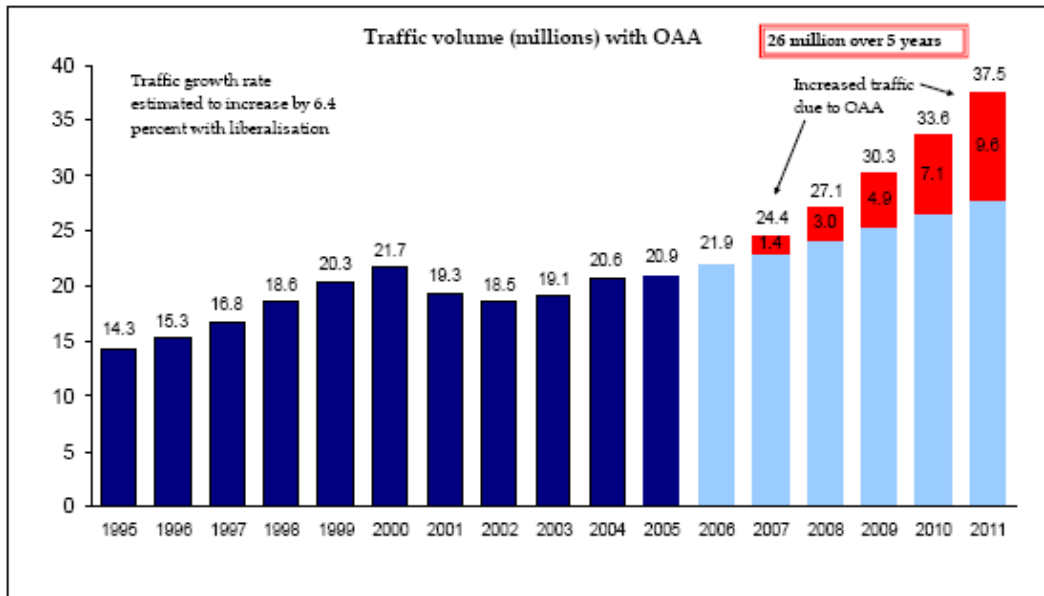
- Open Skies between the United States and all 27 member states of the EU;
- Broader entry into cooperative marketing arrangements for code sharing, franchising, and leasing;
- Creation of a cooperative joint committee to further deregulate airlines;
- Guarantees for US investors to participate as minority shareholders in any majority-EU-owned airline (effectively including minority shares of state-owned firms);
- Investment in US airlines: Restatement of US policy (25 percent legislated cap on voting equity, 25 percent-minus-one-share regulatory cap on non-voting equity). The United States will consider foreign requests to hold larger shares of non-voting equity, including combinations in which the total of voting and non-voting equity exceeds 50 percent;
- For EU carriers, the ability to route flights between any EU member state and the United States without touching the home country’s “community carriers” (for example, a German Lufthansa flight can go from Paris to the United States, without having to pass through Germany);

- US agreement that purchase by an EU carrier or investor of a controlling share in a carrier (passenger or cargo) from third countries that have Open Skies agreements with the United States—such as Switzerland, Liechtenstein, members of the European Common Aviation Area (ECAA), Kenya, or African countries—would not jeopardize the acquired airlines’ rights to operate in the United States;
- Authorization for EU carriers (scheduled and charter, passenger and cargo) to carry certain Fly America traffic, except for the Department of Defence; and
- For EU cargo carriers, the ability to route flights between third-party states and the United States without touching the home country, and between the United States and members of the ECAA.

It is estimated (Booz Allen Hamilton, 2007) that the US-EU Open Skies will result in new routes and new market entrants, generating 9.6 million additional annual passengers during the first five years (Exhibit 2.5.1), contributing €6.4 to €12 billion in consumer surplus over the five year period. In other words, OAA is expected to generate 43.8% passenger traffic growth during the first five years (9.6 million / 21.9 million base traffic in 2006 = 43.8%). Consequently, 80,000 jobs across the EU and US will be generated during the period. Airlines operating on EU-US services will face additional competition and pressure on costs. Moreover, the ability to restructure across national borders, and to organise deeper cooperative alliances, gives the potential for significant gains in productivity and resulting cost savings. These factors are also expected to lead to lower fares, increased traffic, additional jobs and further economic benefits. For example, improved airline cooperation is estimated to result in €160 to €340 million per year in consumer benefits, and the pressure on airline costs is estimated to generate as much as €3.8 billion per year in consumer surplus.

As stated by James Devall (April, 2008), “--- the US-EU Air Transport Agreement should be considered one of the most significant developments in the international aviation regulatory scheme since the 1944 Chicago Convention”; and the US and EU should build on the great achievement of the US-EU Agreement in a way that leads to a more global liberalization of the international aviation industry.

Exhibit 2.5.1 Predicted Increase in Passenger Traffic due to US-EU Open Skies



Source: Booz Allen Hamilton, 2007

EU and US negotiators opened the second round of Open Skies negotiations on May 15, 2008. EU's main objectives are to lower investment hurdles and access restrictions for EU carriers in the US, which are strongly opposed by the US Congress. The US congress still imposes a 25% cap on voting rights of EU carriers investing in US airlines. On the other hand, US airlines are able to hold voting rights of up to 49% in European carriers. The United States has announced that they want to negotiate a multilateral agreement that would remove access restrictions on airlines from more than 60 nations.

The scope of the negotiations, though, will go beyond the ownership question. U.S. negotiators have voiced concerns that the proliferation of night flight curfews related to noise restrictions at EU airports could affect express delivery carriers such as DHL, FedEx and UPS, which operate most of their flights at night. The U.S. side has seen no evidence that airports in Brussels, Belgium, Frankfurt, and Porto (Portugal), which introduced such curfews, had considered alternative noise-reduction measures.

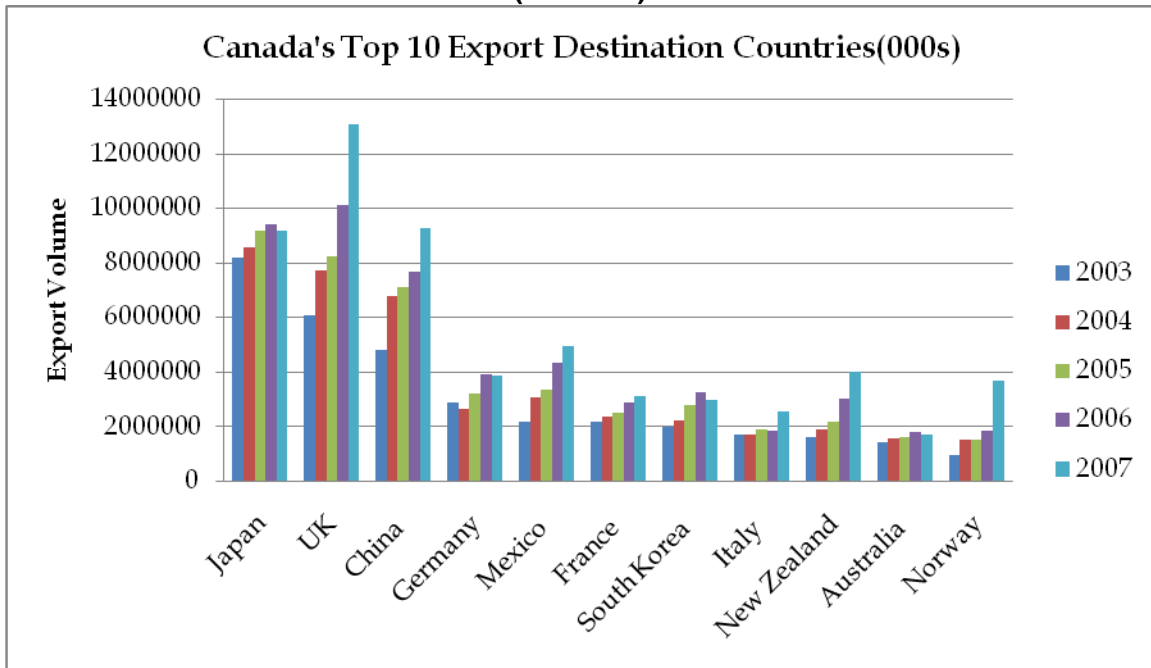
3 Review of Canada's current bilateral Air Services Agreements (ASAs)

In this section, we first identify the bilateral partner countries that have significant economic and social ties to British Columbia, and then conduct a review of the current bilateral ASAs between Canada and these countries in order to identify the constraints on air transport services.

3.1 BC's Major Economic Partner Countries

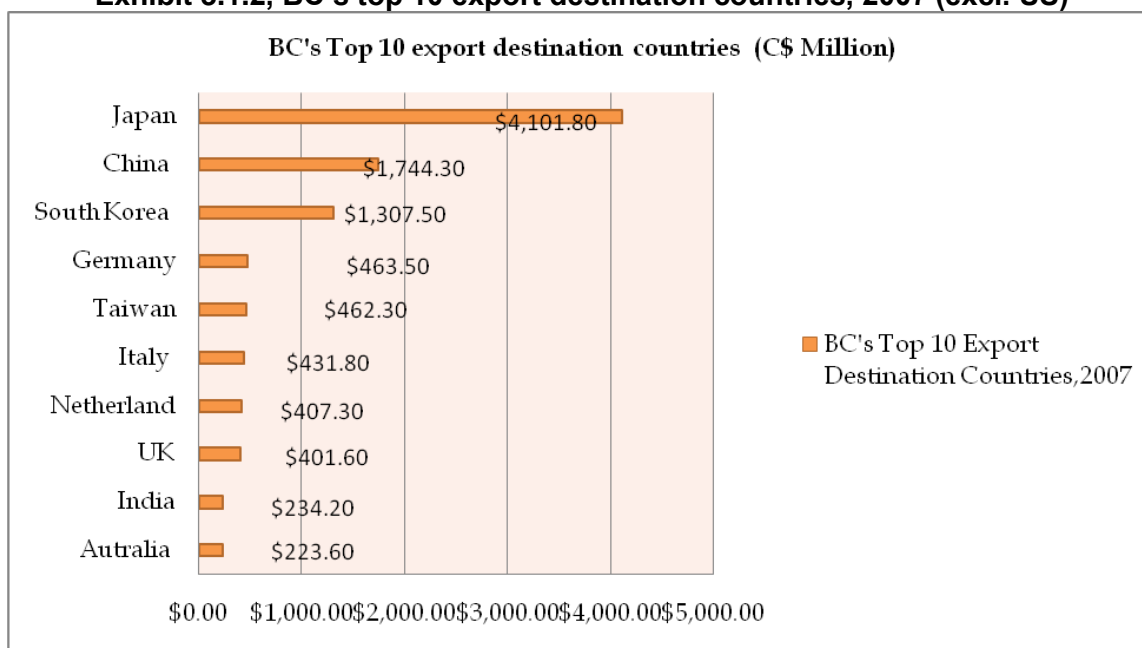
Exhibits 3.1.1 and 3.1.2 show the top 10 export destinations for Canada's products for the 2003-2007 period and BC's top 10 export destinations in 2007, respectively. It should be noted that the United States is excluded in both Exhibits. Exhibit 3.1.1 indicates that in terms of merchandise trade, Japan, China and South Korea, Australia and New Zealand are important economic partners for Canada in the Asia Pacific region. Exhibit 3.1.2 shows that Japan, China, South Korea, and Taiwan are among the top five countries, to which BC exports its merchandise.

Exhibit 3.1.1, Canada's top 10 export destination countries, 2003-2007 (excl. US)



Source: Statistics Canada, 2003-2007

Exhibit 3.1.2, BC's top 10 export destination countries, 2007 (excl. US)



Source: BC Stats, 2007

In terms of the 2007 international travelers coming to Canada (other than from the US), UK, France, Japan, Germany, Mexico, Australia, South Korea, China, Netherlands and Hong Kong are the top 10 countries (see, Exhibit 3.1.3). Exhibit 3.1.4 lists the top ten origins of overnight customs entries to BC. It shows that UK, Japan, Australia, South Korea, mainland China, Taiwan, Germany, Hong Kong, Mexico and Netherlands are the top 10 countries for overnight visitors to BC.

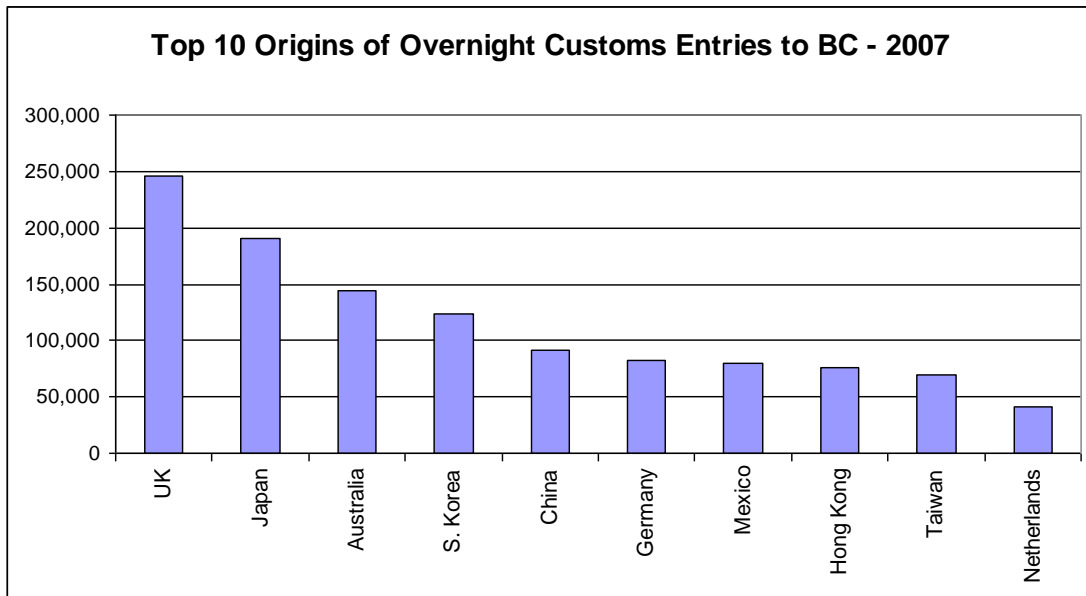
India is an exception. Although in terms of current trade and tourism statistics India is not one of the top 10 countries with which Canada or British Columbia trade, it has shown rapid economic growth in recent years. BC has a large indo-Canadian community. Although the number of tourists coming from India is limited, there are significant and growing number of Indo-Canadian travel to/from India for business and family visits. For these and related reasons, BC has included India as one of the four major countries on which to focus its Asia Pacific initiatives campaign.

**Exhibit 3.1.3, Top 10 Origins of the International Travelers to Canada, 2007
(excluding USA)**



Source: Tourism British Columbia, 2008

**Exhibit 3.1.4, Top 10 Origins of Overnight Customs Entries to BC, 2007
(excluding USA)**



Source: Tourism British Columbia, 2008

3.2 Current level of air services between Canada and Key Partner Countries, and the Constraints Imposed by the Bilateral ASAs

This sub-section examines the current level of air services being provided by Canadian and foreign carriers on the direct BC - Asia partner countries markets. This analysis will help us to identify the constraints on the current supply of seat capacity and flight frequency in these markets.

3.2.1 South Korea

South Korea is a key export market in Asia for British Columbia. It is BC's fourth most important trade partner, accounting for 3% of British Columbia's exports of goods. On his recent trip to Korea, Premier Campbell stated that "B.C. exports to Korea are estimated to grow by \$15.4 billion by 2020".

Under the current bilateral ASA, Air Canada (codeshare with Asiana Airlines) operates seven flights per week and Korean Airlines operates six flights per week (Exhibit 3.2.1).¹¹ The services must be provided with the designated type of aircraft. Singapore Airlines is allowed to serve three times per week with its grand-fathered right to serve Vancouver via Seoul (Song, 2007).

It is clear that the Canada - South Korea air travel market is dominated by a duopoly that is able to charge much higher prices than those in markets between Canada and most other Asian or European countries.

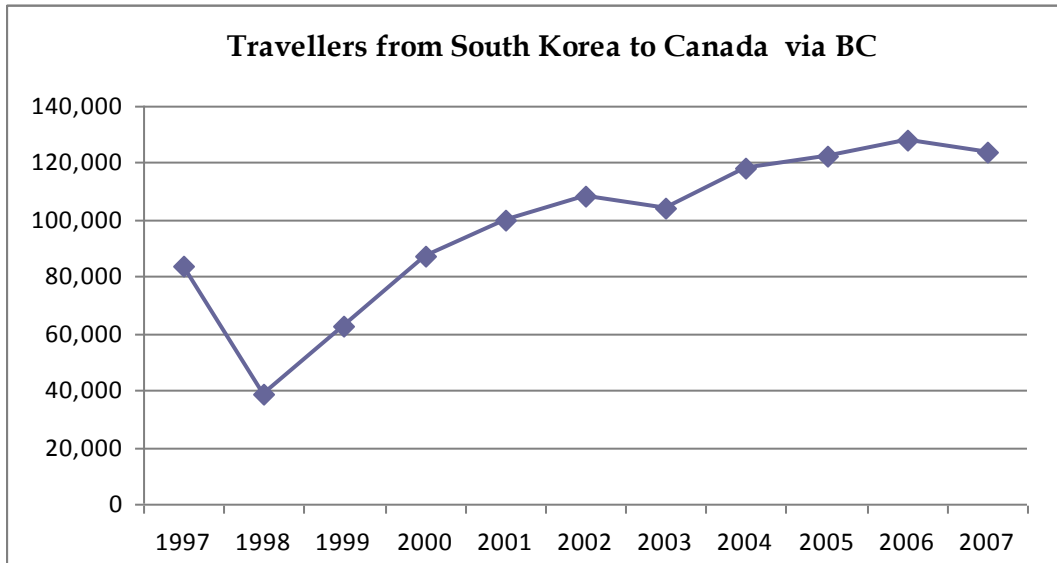
There is no visa requirement for South Korean citizens to visit Canada. The number of South Korean tourists to BC had been growing continuously until 2006 (Exhibit 3.2.2). However, the number of South Korean visitors to BC decreased by 1.9% in 2007 while the total number of South Korean visitors to Canada grew by 3.5% in 2007.

¹¹ Korean Air also operates two all-cargo flights per week via Anchorage.

Exhibit 3.2.1 Current Air Services between Canada and Korea¹²

Airlines	Routes	Aircraft Type	Weekly Frequency
Air Canada ¹³	Vancouver – Incheon	Boeing 767 Airbus 340	7
Korean Air	Incheon – Vancouver	Boeing 747 or	3
	Incheon – Toronto	Boeing 777	3
Singapore Air	(Singapore)- Incheon -Vancouver	Boeing 777	3
Total			16 flights/wk

Exhibit 3.2.2 Travellers from South Korea to Canada via BC



Source: *Tourism British Columbia, 2008*

A significant proportion of the Korean travelers choose to route their trips to Canada via U.S. airports because of lower airfares and greater seat availability made possible by the 1998 Korea – U.S. open skies agreement¹⁴. Direct air travel between Korea and Canada has been constrained by the limited number of airline seats available and consequently the high airfares. Discount fare seats on Canada-Korea routes tend to get

¹² Air Canada and Korean Air agree to increase their flight frequencies during summer peak periods with the blessing of Transport Canada. They usually add two additional weekly flights each during summer peak period.

¹³ 9 weekly flights in the peak season.

¹⁴ It is noted that Korean citizens need US transit visa to route their travel via US airports. This helps reduce Koreans routing their travel to Canada via US airports.

sold out two or three months ahead of the departure date. Air Canada's internet fares on Vancouver-Seoul direct service route for mid-week travel are much higher than those of Vancouver-Hong Kong route.¹⁵ The restrictive air services agreement between Canada and Korea is a major constraining factor for travel between the two countries. Open Skies between Canada and South Korea would surely lead to more flights and lower prices, as existing airlines increase flight frequencies, and in the long run, new airlines may enter the market to compete with the existing duopoly.

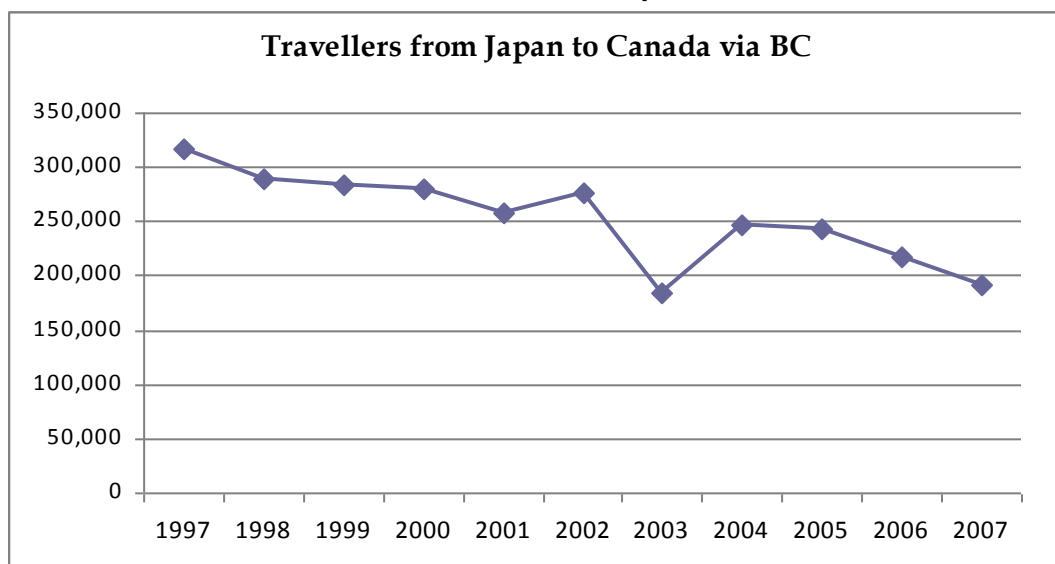
3.2.2 Japan

Japan is Canada's second most important overseas travel market. 330,931 Japanese tourists visited Canada in 2007. British Columbia has long been the top Canadian destination for Japanese tourists. The number of Japanese tourists to BC grew steadily in the 1980s and early 1990s reaching a peak of over 340,000 tourists in 1996. However, a succession of events including the Asian financial crisis, Japanese recession and the regional SARS outbreak, and recently appreciation of the Canadian dollar has seen this number drop significantly. The number of Japanese tourists to BC hit a low of 184,844 in 2003, and recovered somewhat in 2004, but has since declined again in 2005, 2006, and 2007 (Exhibit 3.2.3). In 2007, overnight customs entries to BC from Japan were substantially down (-11.5%) compared to that in 2006, and total entries to Canada were down by 14.4%.

It appears that more Japanese are travelling to Asian countries, notably China, with distant destinations such as Canada slipping off tourists' radar. Between 2000 and 2006, China alone has seen 70 per cent growth in Japanese visitors, bringing in more than 1.5 million tourists from Japan. By comparison, Canada lost 152,100 visitors during that same time span, a 31% drop.

¹⁵ It is possible that AC internet fares may have been more expensive on the days we sampled AC's airfares for Korea and Hong Kong. Route-specific average fares were not available for our research.

Exhibit 3.2.3 Travelers from Japan to Canada via BC



Source: Tourism British Columbia, 2008

The initial ASA between Canada and Japan was reached in July 1955, and has since had a number of amendments. Air Canada, Japan Airlines, and All Nippon Airways are the designated carriers under the agreement. The carriers are allowed to serve Tokyo, Osaka and another point in Japan and Vancouver, Toronto and one more point in Canada. Limited fifth freedom rights are included in the agreement. Airfares are subject to single disapproval ¹⁶(a restrictive fare regulation), and capacity is pre-determined.

The current bilateral agreement was concluded on January 25, 2007, and it provides more flexibility to airlines of both countries to adjust the capacity of their services and aircraft types. The airlines also have greater route flexibility to market partner airline flights as their own (code-sharing services), offering additional means of serving markets. Exhibit 3.2.4 lists the current direct flights between Canada and Japan. It should be noted that All Nippon Airways code shares with Air Canada, but does not operate its own aircraft in the market.

¹⁶ Single disapproval means that if one of the governments does not approve, a fare level will be rejected.

Exhibit 3.2.4 Current Air Services between Canada and Japan (May, 2008)

Airlines	Routes	Aircraft Type	Weekly Frequency
Air Canada	Vancouver – Narita	Airbus 330	7
	Vancouver- Osaka**	Boeing 767	7
	Toronto-Narita*	Boeing 777	7
Japan Airlines	Vancouver-Narita	Boeing 747	7
Total			28 flights/wk

* AC reduces YYZ-NRT flight frequencies in the winter off-peak period.

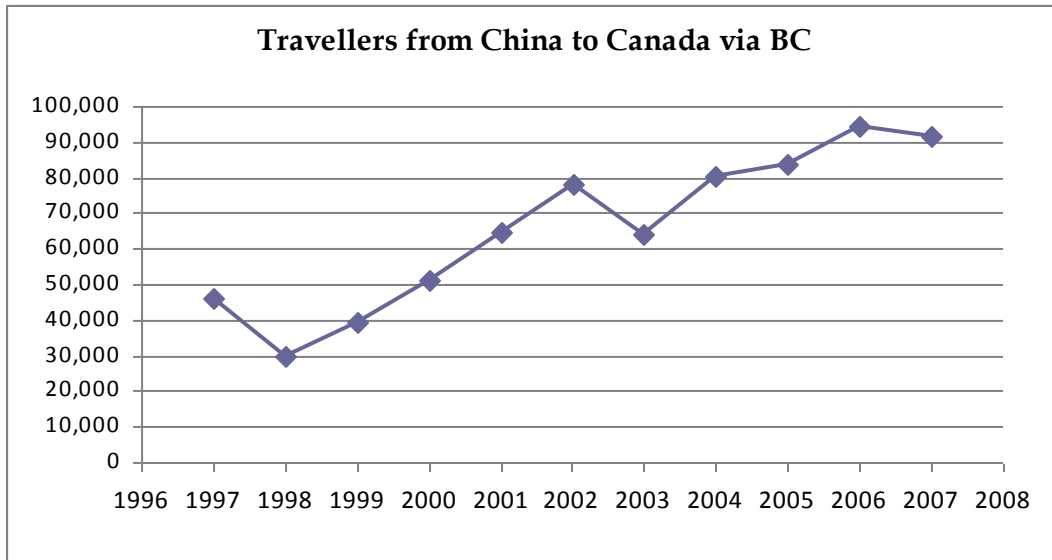
** AC recently announced that it will cancel YVR-KIX flight as of Oct 24, 2008.

Japan has generally been seen as a reluctant partner in liberalizing its air bilaterals with other countries. However, under the proposals of the Asian Gateway Initiative (endorsed by the Japanese cabinet in May 2007), the Japanese government will open up its airports to much greater domestic and international competition, and to position Japan as a much more accessible Asian hub. Japan is pushing for the equivalent of an EU-US “open skies” agreement in Asia. The initiative has already brought results. On August 2 2007, Korea and Japan reached a limited version of transborder open skies agreement under which their flag carriers can freely increase flights between the two countries with the exception of the flights to/from Tokyo area airports. On September 4, 2007, Japan opened Tokyo’s Haneda airport to (scheduled charter) flights to/from Shanghai Hongqiao. In February 2008, Japan reached a new agreement with Hong Kong to lift all capacity restrictions on services between Hong Kong and all Japanese cities with the exception of Tokyo.

3.2.3 China

China is BC’s second-largest trading partner, with bilateral trade of more than \$10 billion in 2006. China is also the top source of immigrants to BC, with close to 11,000 immigrants settling in BC in 2006. The number of visitors to Canada via BC has grown at an impressive rate over the last decade (Exhibit 3.2.5). In 2007, however, overnight customs entries to BC from China were down (-2.2%) compared to 2006, while the total number of visitors to Canada grew by 5.3%. Greater China (China, Hong Kong and Taiwan) is now the second largest overseas travel market after the UK for visitors to Canada.

Exhibit 3.2.5 Travellers from China to Canada via BC



Source: Tourism British Columbia, 2008

The initial framework for air services between China and Canada was set in the Civil Air Transport Agreement signed on June 11, 1973 between the two countries. This first bilateral ASA between Canada and China specified that each country would designate one national carrier to provide the services. CP Air (later Canadian Airline International) was designated as the Canadian flag carrier. Under this agreement, the Chinese carrier would be able to operate flights between China, Vancouver and Ottawa, whereas the CP Air would operate services between Canada, Shanghai and Beijing. Following the restructuring of the airline industry in both China and Canada, Air China was designated as China's flag carrier in 1988, whereas Air Canada was designated as Canada's flag carrier in 2000. Winport Logistics Ltd was designated in 2000 to operate all-cargo services to China. It was replaced by Cargojet Airways Ltd in 2003. In January 2004, China Eastern was given the designation to operate passenger services between China and Canada.

The current "Agreement between the Government of Canada and the Government of the People's Republic of China on Air Transport" came into effect in 2005. This agreement increased the air transport capacity by three-fold, and the gateway cities from 3 to 9. Furthermore, Harmony Airways and Shanghai Airlines¹⁷ were given the designation in

¹⁷ Shanghai Airlines was designated on September 17, 2007, while Harmony Airways ended its scheduled service on April 9, 2007.

this new ASA. Nevertheless, the tariffs are still subject to single disapproval. Exhibit 3.2.6 compares the routes operated between the new and previous ASAs.

Exhibit 3.2.6 Flight Frequencies Operated under 2005 Canada-China ASA as compared to the Previous ASA

Carriers/Route	Previous ASA		2005 ASA	
	Flights per week	Aircraft Type	Flights per week	Aircraft Type
Air Canada:				
Toronto – Beijing	-	-	7	777
Toronto – Shanghai	-	-	7 (1)	777
Vancouver – Beijing	7	763	7 (2)	763
Vancouver – Shanghai	7	763	7 (2)	763
Air China:				
Vancouver – Beijing	6	767	7	767
China Eastern Airlines:				
Vancouver – Shanghai	3	A340	4	A340

Note: (1) Air Canada operates three flights per week during winter schedule on the Toronto – Shanghai route, and daily flights during summer.

(2) AC recently announced that it will reduce its YVR-PEK flights from daily to three times weekly, and YVR-PVG flights from daily to four times weekly, in its fall and winter (2008-2009) schedules

Although there appears to be excess capacity within the current bilateral in the Canada-China market, entry restriction becomes a significant deterrent factor to real competition in the market after Air China and Shanghai Airlines (designated, but yet to launch services) joined Air Canada in December 2007 as members of Star Alliance. In fact, Air China and Air Canada started to code-share on all of their flights between China and Canada in April 2008.

In addition to the ASA issues, other factors impede the growth of air travel between Canada and China.

- First, China has not granted the Approved Destination Status (ADS) to Canada. The majority of current visitors from China are business travellers, students, or people visiting friends and relatives. The tourist travellers represent only 16% of the total revenue to Canada. ADS agreement is a bilateral tourism agreement

whereby Chinese government allows Chinese tour operators to organize tours to the counterpart country while the counterpart government allows Chinese tourists to travel into its territory with a special group ADS visa. Only countries with ADS can be listed as group travel destinations for Chinese tourists and promote their destinations in China.

The growth potential with ADS is substantial. For example, Australia and the UK were among the first western countries that were granted ADS in 1999. Within 3 years of receiving the ADS, the number of Chinese visitors to Australia almost doubled from 98,000 in 1999 to 190,000 by 2002. While the UK saw a 40% increase in the number of inbound visits from China over the same period (from 46,000 to 64,000).

On December 11, 2007, China and the United States signed a memorandum of understanding (MOU), which allows Chinese citizens to travel to the US in tourist groups. The United States, therefore, has the “first mover” advantage over Canada in terms of North America bound Chinese tourists. The US Department of Commerce has estimated that the number of Chinese tourists could reach 579,000 by 2011. The first groups of tourists flew out of Beijing, Shanghai, and Hong Kong on June 18, 2008.

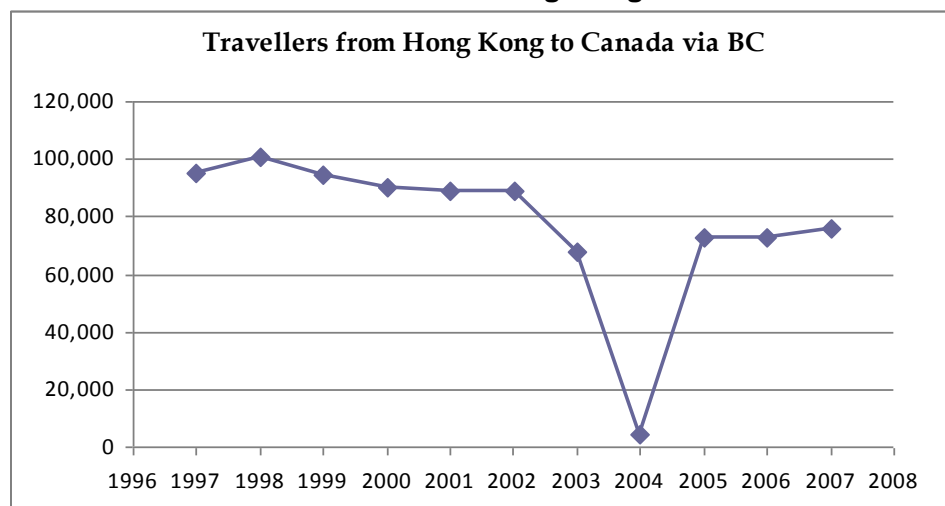
- Second, a transit visa is required for Chinese travellers making connections at Canadian airports. This requirement prevents Chinese travellers from routing their travel to other countries via a Canadian airport, such as YVR. If Transit Without Visa (TWOV) is granted to Chinese citizens, Vancouver Airport might be able to capture some of the US bound Chinese tourists that currently connecting at US west-coast airports such as Seattle, San Francisco, and Los Angeles.

3.2.4 Hong Kong

The trade balance between Canada and Hong Kong reached \$996 million in 2007, a slight drop from the \$1,082 million in 2006. This reflects a 12.3% increase in export volume and an 8.3% decrease in import.

There is no visa restriction for travelling between Hong Kong and Canada. In 2007, 75,989 travellers from Hong Kong entered BC, a 6.7% increase from that in 2006. The number of travellers from Hong Kong to BC peaked 100,463 in 1998 (Exhibit 3.2.7), and the dramatic drop in 2004 was attributable to SARS.

Exhibit 3.2.7 Travellers from Hong Kong to Canada via BC



Source: Tourism British Columbia, 2008

Air services between Hong Kong and Canada are still subject to restrictive conditions, including single disapproval for tariff, carrier and route designation, and pre-determined capacity. Air Canada and Cathay Pacific are the respective designated airlines.¹⁸ Exhibit 3.2.8 lists the current direct flights between Canada and Hong Kong.

Exhibit 3.2.8 Current Air Services between Canada and Hong Kong (May, 2008)

Airlines	Routes	Aircraft Type	Weekly Frequency
Air Canada	Vancouver – Hong Kong	A340/B777	7 (1)
	Toronto – Hong Kong	Boeing 777	7
Cathay Pacific	Toronto - Hong Kong	Boeing 777	7
	Vancouver – Hong Kong	Airbus 340	14 (2)
	Vancouver- Hong Kong (JFK-HKG)	Boeing 747	7
Total			42 flights/wk

Note: (1) AC will reduce its YVR-HKG flights from daily to 5 times weekly in its winter 2008-2009 schedule (as a seasonal adjustment).

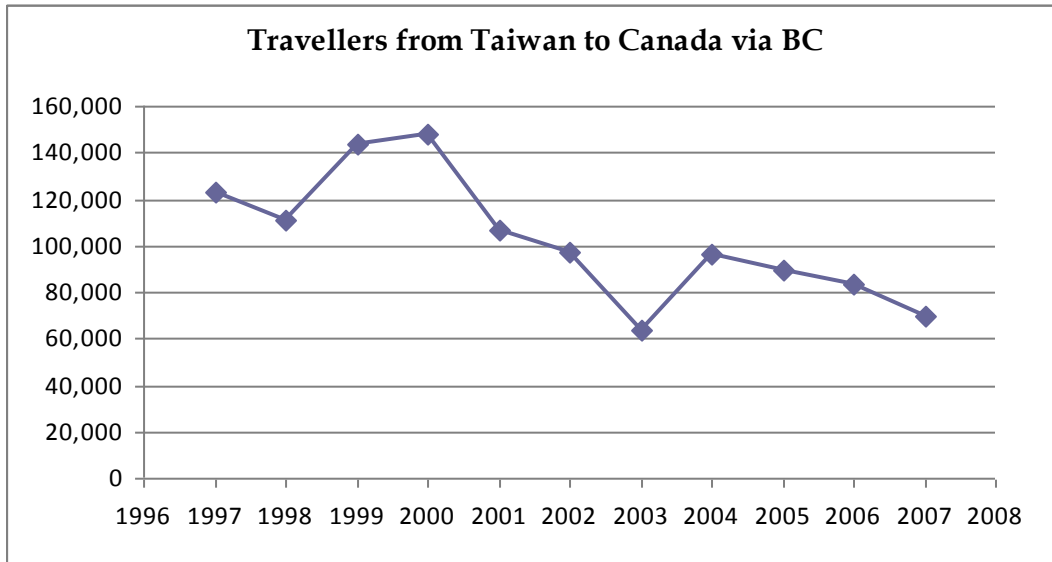
(2) CX will also reduce its YVR-HKG flights from 21 flights a week to 17 flights per week by mid-September 2008.

¹⁸ Oasis Hong Kong Airlines operated a non-stop service between Hong Kong and Vancouver during the period of July 2007 to April 2008.

3.2.5 Taiwan

Total trade between Taiwan and BC ranked 5th in 2007 at \$462.3 million. Taiwan also ranked 9th as BC's top overseas tourist markets with 69,387 visitors in 2007. The number of visitors from Taiwan peaked in 2000 with 147,671 travellers, and has since declined mainly due to the slowdown in economic growth of the Taiwanese economy (Exhibit 3.2.9).

Figure 3.2.9 Travellers from Taiwan to Canada via BC



Source: *Tourism British Columbia, 2008*

There is no official air service agreement between Taiwan and Canada. Instead, air services between Taiwan and Canada are subject to a Ministerial Direction which was first signed in December 1990. Under the Ministerial Direction, carrier designation is restricted to “single-by-route”, tariff is subject to single disapproval, and there are strict restrictions on capacity and type of aircraft. Air Canada is the designated airline for Canada, China Airlines and Eva Airways for Taiwan.

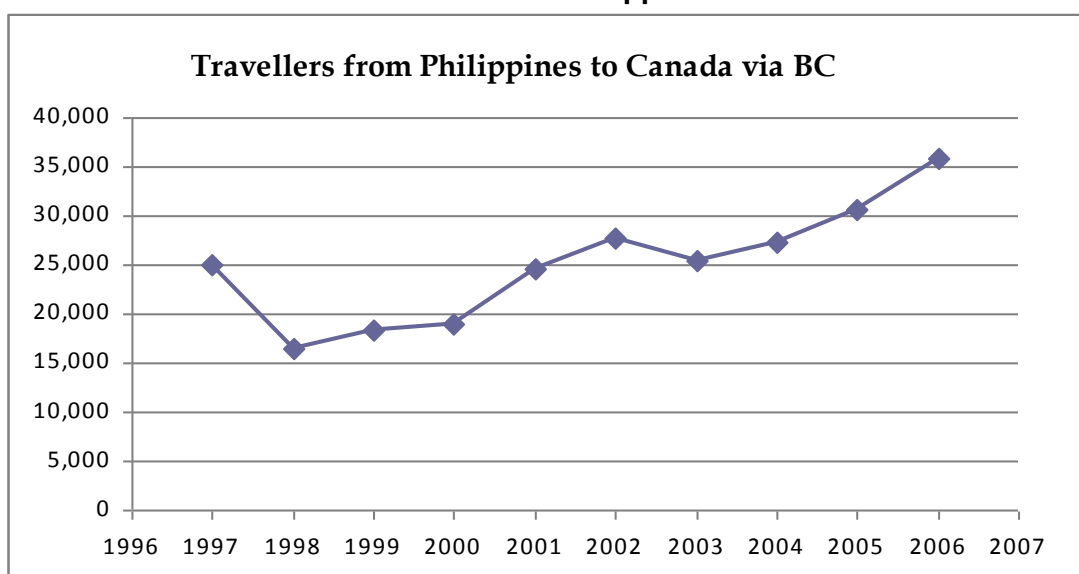
In June 1999, Air Canada and Eva Airways teamed up to launch a 6-flights per week non-stop service between Vancouver and Taipei with Eva Air operating three Boeing 747 non-stop flights a week and Air Canada operating three non-stop Airbus A340 flights per week. However, dwindling profits on the routes forced Air Canada to suspend its services from Oct. 27, 2002. Air Canada now code-shares on Eva Air's flights, but does not operate its own aircraft. Eva Air operates three flights per week between Vancouver and Taipei during winter with Boeing 747 and five flights per week during summer with

Boeing 777. China Airlines operates a daily flight between Vancouver and Taipei with Boeing 747.

3.2.6 Philippines

The total trade between Canada and Philippines reached \$1.2 billion in 2007 (\$458 million export and \$765.7 million import). 30% of Canada's export to Philippines goes through BC. There has been steady increase in the number of travellers from Philippines to BC over the last decade (Exhibit 3.2.10), reaching 35,883 in 2006.

Exhibit 3.2.10 Travellers from Philippines to Canada via BC



Source: Tourism British Columbia, 2008

The current ASA between Canada and Philippines was signed in January 1997. Under this ASA, Philippines Airlines (PAL) and Air Canada are entitled to field up to four flights per week in each direction. While Air Canada has yet to launch its maiden flight into the Philippines, PAL has used up all of its flight entitlements. PAL has been seeking to increase its number of flights to Canada from four per week to 14. It received a temporary permit to add an extra flight per week (borrowed from Air Canada), which was scheduled for review in May 2008. PAL was hoping to fly to Canada twice daily.

PAL deploys its Airbus A-340 for flights to Vancouver that continue to Las Vegas. The airplane can transport about 264 passengers and almost all flights are full. The bulk of PAL's flights from the Philippines to Canada are booked by overseas Filipino workers.

There are 80,000 Filipinos living in Vancouver. The load factor for the flights has been over 90 percent. Air Canada does not have any immediate plan to use its flight entitlements to open direct flights to Manila due to the shortage of long-haul aircraft.

A new and expanded ASA between Canada and the Philippines was reached on May 30, 2008. According to Transport Canada's news release, the new provisions provide greater market access options for airlines from both countries for passenger-cargo combination services, as well as a new, flexible regime for the operation of air-cargo services. The actual terms of the new agreement remain confidential, and are subject to final ratification.

3.2.7 Thailand

Canada's export to Thailand was \$593 million in 2007, and 22% of the export is from BC. The number of inbound tourists from Thailand is relatively low. There were 7,600 travelers from Thailand to Canada via BC in 2006. During the past decade, the number of inbound travelers to BC has been fluctuating around 8,000 (Exhibit 3.2.11)

Exhibit 3.2.11 Tourists Entry from Thailand to Canada via BC



Source: *Tourism British Columbia, 2008*

The current ASA between Thailand and Canada was signed in May 1989, and has since been amended a number of times. The agreement is rather restrictive. It allows single

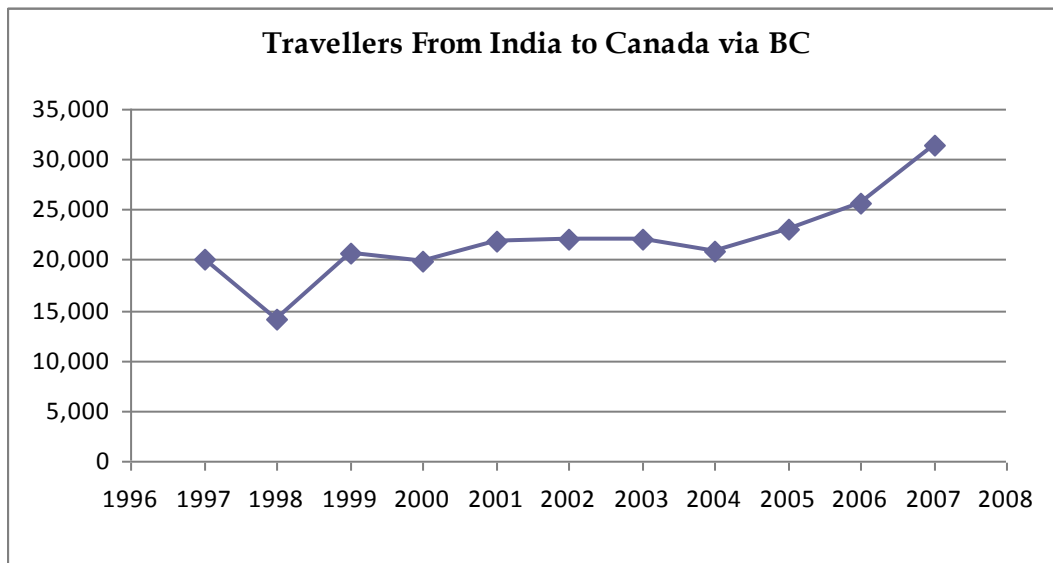
carrier designation by route, and dual for codeshare. The services are subject to single disapproval pricing clause and pre-determined capacity. The designated carriers are entitled to operate up to three flights per week using B747 or equivalent aircraft or four flights/week using DC10 or equivalent aircraft. There is no capacity limitation for codeshare operations. It should be noted that Vancouver is not a designated gateway point for carriers of Thailand under the current ASA (only Toronto and Montreal are).

Currently, there is no direct flight between Canada and Thailand. However, Thai Airways and Air Canada, both Star Alliance members, offer codeshare connecting services via Hong Kong, Tokyo, London, Zurich, and Frankfurt.

3.2.8 India

The total trade volume between India and Canada is increasing from \$3,026 million in 2004 to \$3,402 million in 2006. Canada's export to India grew by almost 50% in 2006. The number of travelers from India to Canada via BC increased from 20,130 in 1997 to 31,516 in 2007 (Exhibit 3.2.12).

Exhibit 3.2.12 Travellers from India to Canada via BC



Source: *Tourism British Columbia, 2008*

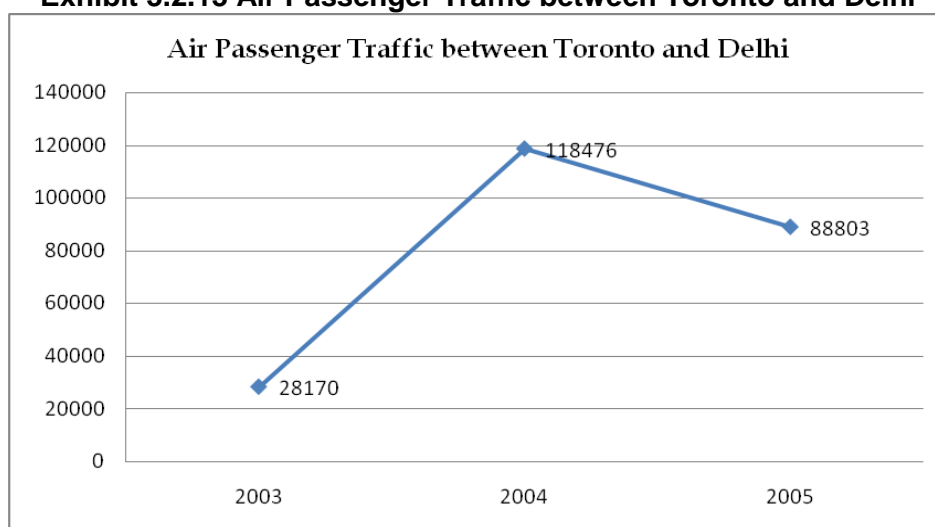
The ASA between Canada and India was initially reached on August 31, 1982, and amended in June 2005. The agreement remains rather restrictive and includes single disapproval for pricing, single by route carrier designation, and pre-determined capacity.

Air Canada, Air India and Jet Airways are the designated airlines. Vancouver has a route designation under the current ASA.

Designated airlines of each country can operate a total 35 flights per week, with own aircraft or code-sharing, in each direction, subject to a maximum of 14 flights per week to/from a single point in the other country. The aircraft used shall not exceed the capacity of a B747 aircraft. There is no restriction on frequency for all cargo flights.

Air Canada offered daily non-stop service between Toronto and Delhi from 2003 to 2005 while there was no service operated by Indian carriers. The load factor for each direction reached above 70% in 2005. However, Air Canada discontinued its daily flight to India in May, 2007, citing insufficient demand for the route in the summer months. Currently, Air Canada provides services to India through its Star Alliance partners, Lufthansa and Swiss International Air Lines (SWISS) via Frankfurt and Zurich. Air India resumed its services to Canada with a three-time weekly service from Toronto to Delhi via Birmingham and Amritsar on 15 May, 2005.¹⁹ Jet Airways introduced its Delhi-Toronto service via Brussels on 5 September, 2007. Jet Airways reached a codeshare and frequent flyer program (FFP) agreement with Air Canada in February, 2008, for services between 5 Canadian cities and 2 Indian cities via Brussels and London. Exhibit 3.2.13 shows the total number of passengers between Toronto and Delhi from 2003 to 2005.

Exhibit 3.2.13 Air Passenger Traffic between Toronto and Delhi



Source: ICAO Traffic by Flight Stage Database

¹⁹ The flights were suspended after the bombing of **Air India** Flight 182 in June 1985.

4.0 Measuring the Effects of Liberalizing Canada's Restrictive Bilateral ASAs

Air transport and related industries, such as tourism and logistics industries, are an important part of Canada's service import and export. Service quality and output enhancements following bilateral ASA liberalization bring direct economic gains to the nations involved. In addition, the transport sector provides important inputs to numerous industries such as manufacturing, retailing, energy production and trade, and such "induced effects" are substantial.

This study develops a framework of analysis for estimating the benefits and costs of a bilateral ASA liberalization on pricing, capacity/flight frequency, and entry into markets (routes). The model will allow us to predict the overall economic benefits and costs to each of the partner countries when air fares, seat capacity and frequency, route designation/entry, and carrier designation are wholly or partially liberalized

4.1 Key Policy Variables in Bilateral Air Service Agreements

The key commercial rights to be negotiated in a bilateral ASA are pricing, capacity (frequency and aircraft size), and carrier and route designation. Carrier and route designation form a barrier to competition in several ways. First, bilateral air treaties normally limit the number of carriers that can serve the bilateral markets. For example, most bilateral agreements allow one carrier from each country to serve markets between the two countries: e.g., Korean Air and Air Canada in the Canada – South Korea bilateral markets. Second, the cities a (designated) foreign carrier is allowed to serve are normally specified. Third, most bilateral ASAs do not allow fifth freedom rights (beyond right) to foreign carriers. The removal or relaxation of the carrier/route designation clause is likely to induce competitive entry by new carriers as well as encourage entry into new routes by the existing carriers.

Pricing regulations in bilateral agreements usually take one of the following forms. First, all carriers may be required to use the fares set by the International Air Transport Association (IATA). Second, when only one carrier from each country serves the market, the bilateral agreement may require the two carriers agree on a uniform price. The third option is the so-called "single-disapproval" pricing regime that allows for one of the two governments to disapprove a carrier's fare proposal. In this case, the foreign

government can disapprove a competing carrier's proposed discount fares. The fourth option is the "double disapproval" system. Under this regime, the agreement of both governments is required in order to disapprove a carrier's proposed fares. Under the double disapproval regime, airlines will have nearly complete pricing freedom.

The aggregate seat capacity that the carriers of a country can offer is usually restricted in bilateral agreements. Although many agreements allow tradeoff between frequency of service and aircraft size, in many bilateral routes the cost characteristics and the need to offer near daily flights limit the choice to one or two aircraft types. Therefore, for convenience of analysis our model will incorporate frequency competition only.

Although other factors including access to airport slots and facilities could influence competitive outcomes significantly in bilateral air transport markets, in this study we will examine only the effects of removing or relaxing the pricing, capacity and entry regulations on the consumers and carriers of each country.

4.2 Formulation of Model

4.2.1 Anticipated Impacts of Bilateral ASA Liberalization

Air transport bilateral liberalization would involve the removal of regulatory restrictions on pricing, seat capacity (or frequency), entry onto new routes, and new carrier designation. The removal of these constraints is expected to lead to increased competitive behavior as:

- new entrants can commence operations in markets from which they are currently excluded, thus offering the potential for increased price competition, leading to lower fares and stimulating additional demand; additional passengers lead to greater spending on goods and services at origin and destination of travel.
- additional competition in the market encouraged by the removal of barriers to entry (traffic rights and designations) may also mitigate against fears of market dominance by larger network alliances, so that anti-trust immunity may be more readily granted and deeper complimentary alliances enabled (Oum, Park and Zhang, 2001).²⁰ Research has shown that such complementary alliances can

²⁰ Complementary alliance refers to the case where two firms link up their existing networks so as to feed traffic to each other, while the parallel alliance refers to collaboration between two firms who, prior to their

deliver greater benefits over and above those based on simple code share and operational relationships when they permit price coordination and/or revenue sharing activity

- new entrants may lead to more efficient firms replacing less efficient firms as existing firms respond to competition by reducing their costs and adopting more efficient behaviour or risk being taken over by the new, more efficient firms. Cost reductions achieved can lead to benefits retained by firms, or passed on to consumers in the form of lower fares, again stimulating demand.

Further effects on the wider economy of increased demand are likely to be significant as the multiplier effects of additional air travel and cargo transportation generate benefits in a number of areas such as:

- benefits relating to the increase in jobs on or near the airports or directly related to the provision of aviation services
- benefits relating to direct expenditure by aviation visitors, including spending on travel agents, hotels and other industries not directly in the aviation field
- benefits related to support services to airports or the wider aviation industry
- benefits derived from activities/expenditure in support of the non-aviation related industries under the primary indirect category
- benefits to air transport consumers through enhanced air services and expanded travel
- benefits to air cargo shippers and consignees through enhanced air services and expanded trade.

Benefits from the reduction in fares, which accrues to both new passengers and existing passengers, can be measured in the form of consumer surplus. As prices fall the existing consumers generate an additional surplus from the difference in the original prices they paid and the new lower fares which can then be spent on additional goods and services. New consumers benefit from the lower fares as the prices they pay are lower than the value of the travel they decide to consume.

alliance, are competitors on some routes of their networks. A complementary alliance is generally considered to improve air services, whereas a parallel alliance is likely to reduce competition on the previously competitive routes.

4.2.2 Literature Review on Modeling Bilateral ASA Liberalization

A number of previous studies have examined the impacts of air transport deregulation/liberalization on air services. For example, Dresner and Tretheway (1992), based on data for 51 unidirectional long-distance international air routes in the north Atlantic markets during the period 1976 to 1981, found that air liberalization led to a 35% reduction in discount air fares, but had little impact on business air fares. In the study that examined the effects of air liberalization in the North Atlantic markets (U.S. – France, Germany, Italy and Netherlands), Maillebiau and Hansen (1995) suggested that liberalization increased air passenger volume by 56%; reduced airfares by 35%; and increased the air services accessibility by 44%; Schipper et al (2002) estimated the effects of air liberalization in European market and found that full liberalization led to 34% reduction in standard economy airfares, 69% increase in departure frequencies, and €666 million consumer surplus.

Gillen, Harris and Oum (2002) developed a bilateral ASA model, and applied it to measure the economic effects of liberalizing the Canada – Japan bilateral ASA. Their simulations of removing bilateral restrictions on price, frequency and airline entry in the Canada–Japan market show an approximately \$32.7 million aggregate economic gain and a 50% increase in traffic volume.

The Productivity Commission in Australia (1998) models a network of routes between Australia and Asian countries. Their study predicts a 4.4% reduction in air fares, and 2.6% increase in traffic volume for the Australia–China ASA liberalization.

Booz Allen Hamilton (2007) conducted an analysis of the potential economic benefits from establishing an Open Aviation Area (OAA) between European Union and U.S. They built a simple Cobb-Douglas demand model to calculate the change of traffic volume and consumer surplus after liberalization, and estimated that the traffic volume between EU and US would increase by over 1 million (4.6% increase) for the first year, and 9.6 million in cumulative total increase (43.8% increase over the base traffic of 21.9 million in 2006) in year 5 after the OAA agreement.

4.2.3 Model Development and Key Features of the Model

Since the models need to capture the effects of key variables (policy levers) on the market outcome, there is a need to simplify the reality and abstract from the complexity of how the world works. In this study, we developed a new and simplified model to compute the equilibrium changes in traffic volume, prices, and flight frequencies (equivalently seat capacity) of airlines as liberalization of a bilateral ASA is introduced.²¹ Our model also allows us to measure gains and losses to each airline.

The technical details on the model are described in Appendix IX. In this sub-section we describe the key features of the Model and related issues.

Key Features of the Model:

Our model allows the representative consumer to make decision on whether or not they take a trip in a particular origin-destination (OD) market, and if yes, which alternative carrier-route combination they will choose in order to maximize his/her own utility.

The model assumes that airlines know the consumer utility function, and the prices, flight frequencies, number of connections required for a consumer to travel from the origin to the destination being offered by all other carrier-route combinations. With this knowledge and data, each carrier-route combination offers the price and flight frequency decisions to maximize its profit from the carrier-route combination.

Aggregate Demand Adjustments:

When one or more regulatory changes are introduced in the OD market, all carrier-route combinations linking the OD market will change prices and flight frequencies. This would also change the overall market price and flight frequencies offered in this market, which will in turn change the demand for travel in the OD market. In order to reflect the effects of price and frequency changes on travel volume, therefore, we assume the

²¹ Because of the time and budget limitation for this project, our simplified model does not fully capture the network effects of liberalizing a bilateral ASA. Our model captures, for example, only the effects of open skies on a specific Origin-Destination (Vancouver-Seoul) market, not including how other Origin-Destination traffic (say, Winnipeg-Seoul) will find it easier to route their travel via Vancouver instead of routing their travel to Seoul via Chicago, San Francisco or Los Angeles. Please see Exhibit 4.3.2 later in this section.

following market price elasticity, ε_p , and flight frequency elasticity, ε_f , of air passenger demand:

$$\varepsilon_p = -1.2$$

$$\varepsilon_f = 0.15$$

The aggregate demand adjustments help endogenize the airlines' pricing and flight frequency decisions within the passenger demand model. That is, airlines' price and flight frequency decisions are dependent on each other as price affects travel volume, which in turn affects airline's flight frequency. As flight frequency changes it affects the travel volume and thus prices.

4.2.4 Model Application to A Specific Bilateral Case

Our model is designed to apply to a specific OD market. The following is a "step by step" description of how the model is applied:

Step 1: Understanding the bilateral market and current status of bilateral ASA agreement.

- Identify all the effective regulatory constraints in the short and long term. For example, if a particular bilateral ASA limits a foreign flag carrier's seat capacity, it is important to distinguish the short term vs. long term effects of such constraint. It is possible, that if only 80% of the seat capacity granted is being used by the foreign carrier at the moment, this may not constitute a short term barrier since they can always increase seat capacity by 20% if necessary. However, once we take into account of the 3-4 year planning horizon for airline fleet acquisition, the fact that Canada has a restrictive bilateral with a particular country itself may constitute a barrier. An airline may not want to take a risk of ordering aircraft suitable to serve Canadian markets under a restrictive ASA when they can take advantage of an Open Skies agreement with countries such as the United States.
- In brief, it is important to understand the current status of bilateral ASA on a specific market under consideration with respect to the short term constraints

effectively limiting capacity increase, and the long term consequences on having a restrictive bilateral ASA.

Step 2: Identification of Alternatives:

- Identify all of the alternative routing possibilities for passengers to travel from a specific origin city to a destination city: For practicality we are limited to identifying only the non-stop and major one-stop routes for serving the specific OD pair under consideration.
- Identify the airlines that serve a particular non-stop and/or one-stop route. Since there is generally more than one airline serving a route, it is useful to designate each of them as a route-carrier combination. For example, since Air Canada (AC) and Korean Air (KE) serve on the Vancouver -Incheon (Seoul) route, we have two route-carrier combinations on the direct route: YVR-ICN-AC and YVR-ICN-KE. Both United Airlines (UA) and Northwest (NW) can serve Vancouver-Seoul passengers on one-stop routing via San Francisco (SFO), we list YVR-SFO-ICN-NW and YVR-SFO-ICN-UA as two alternative route-carrier combinations. In addition, since Japan Airlines (JL) can serve Vancouver-Seoul passengers via Tokyo (NRT) or Osaka (KIX), we also list YVR-NRT/KIX-ICN-JL as another route-carrier combination competing for the direct Vancouver-Seoul passenger market.

Stage 3: Data collection and preliminary computation work

- Compile airline specific costs of carrying passengers for each of the route-carrier combinations identified above. Since airlines do not provide route specific cost data, the route specific per-passenger unit costs are estimated using statistical analysis.

Stage 4: Application of the model, and interpretation of the results

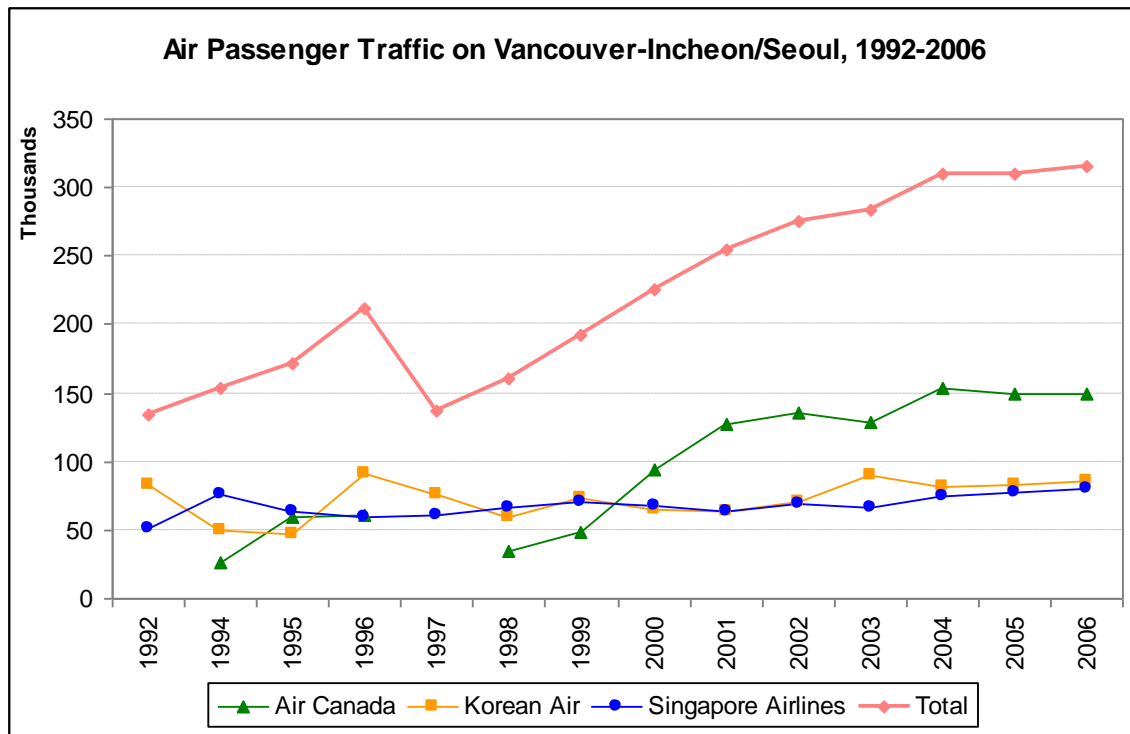
Further technical details of the model are provided in Appendix IX, and the model is applied in the next section to measure the effects of liberalizing Canada's restrictive bilateral ASAs with BC's major trading partner countries in Asia.

4.3 Measuring the effects of liberalizing Canada's restrictive bilateral ASAs with BC's major partner countries

4.3.1 Canada-Korea Open Skies Case

Exhibit 4.3.1 shows that total air traffic on the Vancouver-Seoul route increased from about 130,000 in 1997 to over 315,819 in 2006. According to the air traffic statistics from ICAO, the year-around average passenger load factors of Air Canada, Korean Air, and Singapore Airlines on this route were 86%, 87% and 90% in 2006, respectively. This indicates that flights are full not only in the peak seasons but also in shoulder and even off-peak seasons, which suggests a severe capacity shortage in this market. The capacity shortage results from the tight capacity control under the current Canada-Korea Bilateral ASA, which limits Korean Air to 3 flights per week on the Seoul-Vancouver route and 3 flights per week on the Seoul-Toronto route, and limits Air Canada to 7 flights per week, with designated aircraft. Singapore Airlines (SQ) provides another 3 flights per week under its grand-fathered right to serve Vancouver via Seoul.

Exhibit 4.3.1 Air Passenger Traffic between Vancouver and Incheon/Seoul, 1992-2006

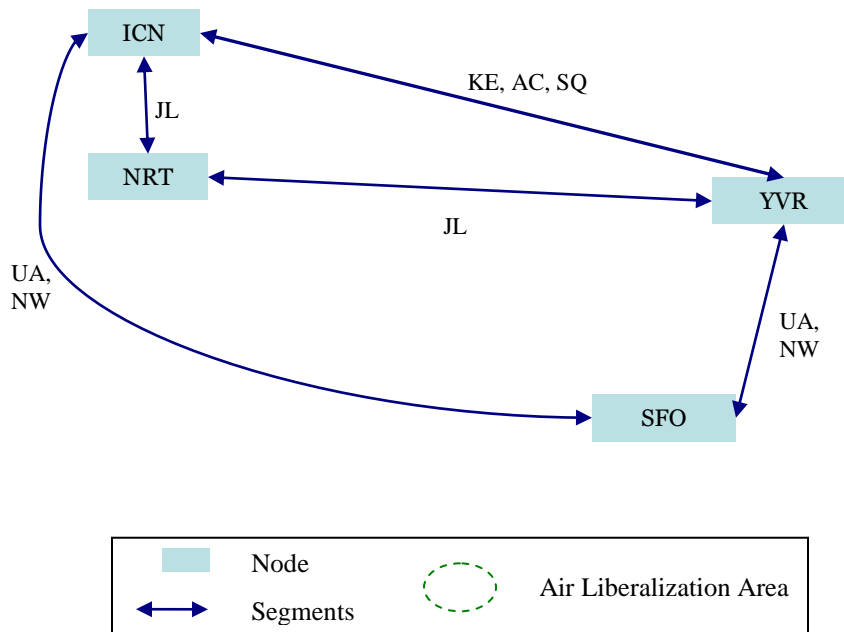


Source: ICAO Traffic by Flight Stage Database (1993 data is unavailable)

In addition to the direct services, there are a number of alternative routing options for passengers traveling between Vancouver and Seoul. Exhibit 4.3.2 shows the following five potential route-carrier combinations for passengers in this market:

- YVR-ICN, Korean Air (KE) non-stop services
- YVR-ICN, Air Canada (AC) non-stop services
- YVR-NRT-ICN one-stop services by Japan Airlines (JL)
- YVR-SFO-ICN one-stop services by United Airlines (UA)
- YVR-SFO-ICN one-stop services by Northwest Airlines (NW)

Exhibit 4.3.2 Alternative Routing Choices for YVR-ICN OD Traffic



Under Canada-Korea Open Skies, new carriers may enter the market without any restriction. Suppose two new carriers²² enter the YVR-ICN market following the Open Skies, the number of competing route-carrier combinations in the market will increase from the current five to seven. The increased competition will force prices down and consequently increase the traffic and flight frequencies.

²² For example, one new Korean carrier (say, Asiana) and one new Canadian carrier (say, WestJet).

Anticipated Effects of Canada-Korea Open Skies

We applied our model to investigate both the short term and long term effects of removing regulatory restrictions in the Canada-Korea air transport market.

It should be noted that an identical base fare was set for the three incumbent airlines on the YVR-ICN route. This is because (i) Expedia and other online reservation systems do not appear to be used as major distribution channels for the Korea-Canada markets. Ticket prices offered by travel agents specialized in Korean travel are significantly lower than those available from online bookings. Therefore, the ticket price information collected from online sources do not always reflect the actual prices most travelers pay; (2) the current Korea – Canada market is rather competitive, thus we believe that the average prices (including premium class tickets) for the three competing airlines are roughly the same. The average base air fares (economy and premium classes together) on the YVR-ICN route is set at \$1,620 based on information compiled from carriers' websites, common travel portals such as Expedia, Travelocity, etc, and from travel agencies specialized in the Korea-Canada markets.

Short Term Outcome – within about a year

Once frequency and capacity restrictions are removed in the Korea-Canada market (without allowing new entry), Korean Air is expected to introduce daily flights on the YVR-ICN route. The increased seat supplies will lead to lower airfares. Consequently, total passenger traffic volume on the direct Korea-Canada routes will increase. This traffic increase is attributed two components: new traffic stimulated by lower airfares, and passengers switching from one-stop routes (via US or Japan points) to the direct Canada-Korea routes induced by the lower airfares and improved frequencies. We assumed that currently 20% of the total Canada-Korea passenger traffic travel via one-stop routes through the US and/or Japan.

Exhibit 4.3.3 presents the expected short term (within a year) market outcomes in the Korea – Canada markets when restrictions on frequency, capacity and pricing are removed, but no new entry is allowed. The results can be summarized as follows:

- Within a year or so (short term), the total passenger traffic volume on the YVR-ICN route is expected to increase by 37.7%, from 315,819 (2006) to 434,924

- passengers; and the total passenger traffic on the YYZ-ICN route is expected to increase by 45%, from 112,856 to 163,668 passengers
- 90% of the Korea-Canada passenger traffic will be carried over the direct route, that is, about half of the Canada-Korea passengers currently traveling via one-stop routes would switch to the direct routes.
 - On the YVR-ICN route, Korean Air's passenger volume is expected to increase from 86,296 (2006) to 200,265 passengers, a 132% gain, whereas passenger volume for Air Canada is expected to increase from 149,412 (2006) to 159,076 passengers, a 6.5% gain, and Singapore Airline's (SQ) passenger volume would decrease by 5.7%, from 80,111 to 75,582 as the direct flights by other airlines would offer better values to passengers (assuming that SQ will not be allowed to increase any capacity and frequency). The overall average airfare in the market is expected to decrease by 15% within a year from \$1,620 to \$1,338.
 - On the YYZ-ICN route, Korean Air is expected to remain as the only carrier serving the route in the short run, and the average airfare is expected to be reduced from \$2,233 to \$1,861, a 16.7% decrease.

Exhibit 4.3.3, Expected Market Outcome After Removing Restrictions on Price and Capacity

YVR – ICN	Air Canada		Korean Air		Singapore		Total/Average	
	Base Case	Expected Outcome (Δ)	Base Case	Expected Outcome (Δ)	Base Case	Expected Outcome (Δ)	Base Case	Expected Outcome (Δ)
Airfare (US\$)	1,620	1,308 (-19.3%)	1,620	1,448 (-10.6%)	1,620	1,338 (-15.0%)	1,620	1,338 (-15.0%)
Passenger	149,412	159,076 (6.5%)	86,296	200,265 (132.1%)	80,111	75,582 (-5.7%)	315,819	434,924 (37.7%)
Frequency	827	950 (14.8%)	330	831 (151.8%)	312	312 (0.0%)	1,469	2,093 (42.5%)
YYZ – ICN			Korean Air				Total/Average	
			Base Case	Expected Outcome (Δ)			Base Case	Expected Outcome (Δ)
Airfare (US\$)			2,233	1,861 (-16.7%)			2,233	1,861 (-16.7%)
Passenger			112,856	163,668 (45.0%)			112,856	163,668 (45.0%)
Frequency			294	568 (93.4%)			294	568 (93.4%)

Assumptions: (1) price elasticity at -1.2, frequency elasticity at 0.15;
(2) average load factor at 85% for the YVR-ICN route, and 80% for the YYZ-ICN route

Full Market Outcome – Long-Term Effects

Exhibit 4.3.4 presents the expected market outcomes in the Korea-Canada markets under Canada-Korea Open Skies where all restrictions are removed including entry restrictions.

The results indicate that the overall average airfare is expected to fall by 30% on the YVR-ICN route, and 24% on the YYZ-ICN route; The annual passenger traffic is expected to increase by 62.5% on the YVR-ICN route from 315,819 to 513,314, and by 63.3% on the YYZ-ICN route from 112,856 to 184,304 passengers. The flight frequency is expected to increase by 71.5% on the YVR-ICN route and 117.7% on the YYZ-ICN route. The large expected increase in flight frequency is due to the entry of new carriers in the long run. Again, the traffic increase is attributable not only to new demand stimulated by lower airfares but also to passengers switching from one-stop routes through the US hubs and/or Japanese airports to the direct routes.

Impacts on tourism

We estimate the direct effects of Open Skies on tourism by the spending of international travellers in Canada. The effects of Open Skies on tourism are estimated by multiplying the average spending per Korean tourist, CDN\$1,900 (Tourism BC), by the additional passengers generated by the Canada-Korea Open Skies Agreement. As discussed earlier, the Open Skies is expected to increase air travel volumes in Canada-Korea market by approximately 268,943 passengers. Assuming 80% of the air travelers are visitors from Korea to Canada, the Open Skies agreement would contribute an additional \$ 204²³ million per year to the Canada tourism industry. The increased tourism benefits to BC calculated in a similar way would give \$150 million per year.

Since our Canada-Korea bilateral ASA simulation model does not capture the effect of the proposed US government's entry visa waive program for Korean citizens, the actual traffic volume forecasted in this section may need to be adjusted down if many Koreans switch their tourism and educational training destinations away from Canada to the United States when the US government execute their 90-day entry visa waive program for Korean citizens in the near future.

²³ = 268,943 one-way passengers/2 x \$1,900.

Exhibit 4.3.4 Long-run Expected Market Outcome Under Canada-Korea Open Skies

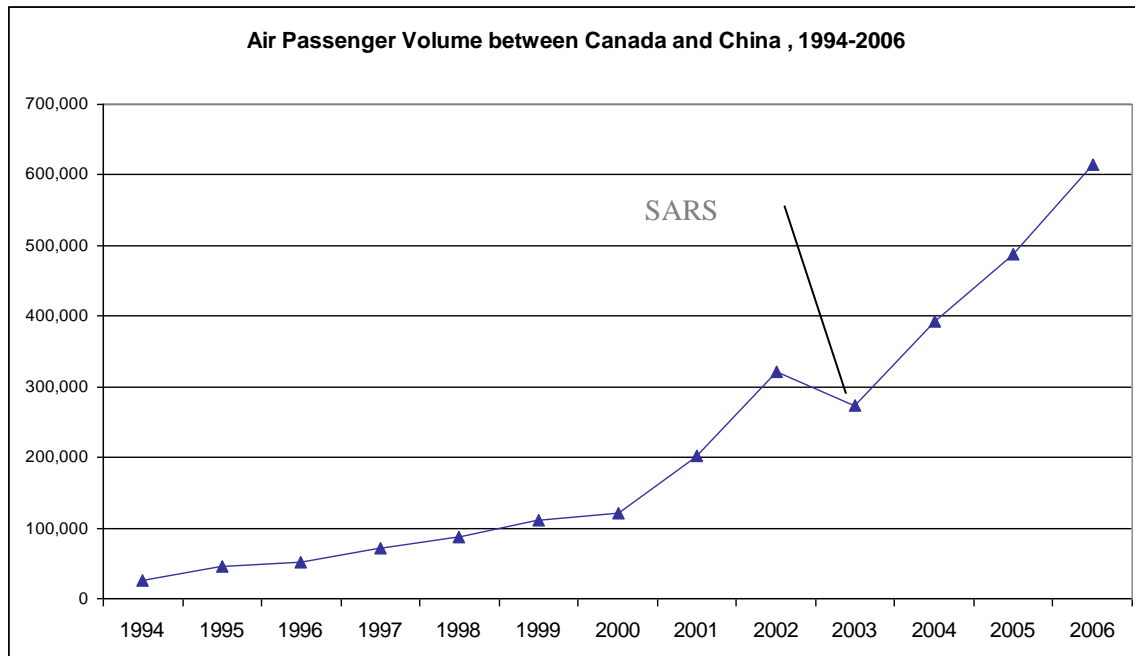
YVR - ICN	Air Canada		Korean Air		Singapore		New entrant	Total/Average	
	Base Case	Expected Outcome (Δ)	Base Case	Expected Outcome (Δ)	Base Case	Expected Outcome (Δ)		Base Case	Expected Outcome (Δ)
Airfare	1,620	1,076 (-33.6%)	1,620	1,191 (-26.5%)	1,620	1,133 (-30.0%)	1,133	1,620	1,133 (-30.0%)
Passenger	149,412	163,704 (9.6%)	86,296	151,176 (75.2%)	80,111	62,109 (-22.5%)	136,325	315,819	513,314 (62.5%)
Frequency	827	977 (18.2%)	330	627 (90.1%)	312	272 (-12.7%)	643	1,469	2,520 (71.5 %)
YYZ - ICN			Korean Air				New Entrant	Total/Average	
Airfare (US\$)			Base Case	Expected Outcome (Δ)				Base Case	Expected Outcome (Δ)
			2,233	1,781 (-20.2%)			1,608	2,233	1,675 (-24.1%)
Passenger			112,856	100,709 (-10.8%)			83,595	112,856	184,304 (63.3%)
Frequency			294	350 (19.0%)			290	294	640 (117.7%)

4.3.2 Canada-China Bilateral ASA

There are currently four non-stop service routes between China and Canada: Beijing-Vancouver, Shanghai-Vancouver, Beijing-Toronto, and Shanghai-Toronto. The total number of air passengers between Canada and China increased from about 26,000 in 1994 to over 614,000 in 2006 (Exhibit 4.3.5). Although there was a 14.5% drop in 2003 due to the impact of SARS, air traffic rebounded quickly and experienced a 56% increase between 2004 and 2006.

The overall load factor for the Canada-China routes was 81% in 2006. Exhibit 4.3.6 shows that with the exception of China Eastern's Vancouver-Shanghai flights, all the other flights were mostly likely to be full not only in the peak seasons but also in the shoulder and even off-peak seasons. Consequently, passengers might not be able to get seats on direct flights.

Exhibit 4.3.5 Air Passenger Volume between Canada and China, 1994 – 2006



Source: ICAO Traffic by Flight Stage Database

Exhibit 4.3.6 Average Load Factor by Route and Carrier (2006)

From	To	Carriers	Passenger Load Factor (%)
Toronto	Beijing	Air Canada	89%
Vancouver	Beijing	Air Canada	78%
		Air China	84%
Vancouver	Shanghai	Air Canada	78%
		China Eastern Airlines	70%
Beijing	Toronto	Air Canada	83%
Beijing	Vancouver	Air Canada	79%
		Air China	87%
Shanghai	Vancouver	Air Canada	85%
		China Eastern Airlines	75%

Source: ICAO On-Flight Origin and Destination Database

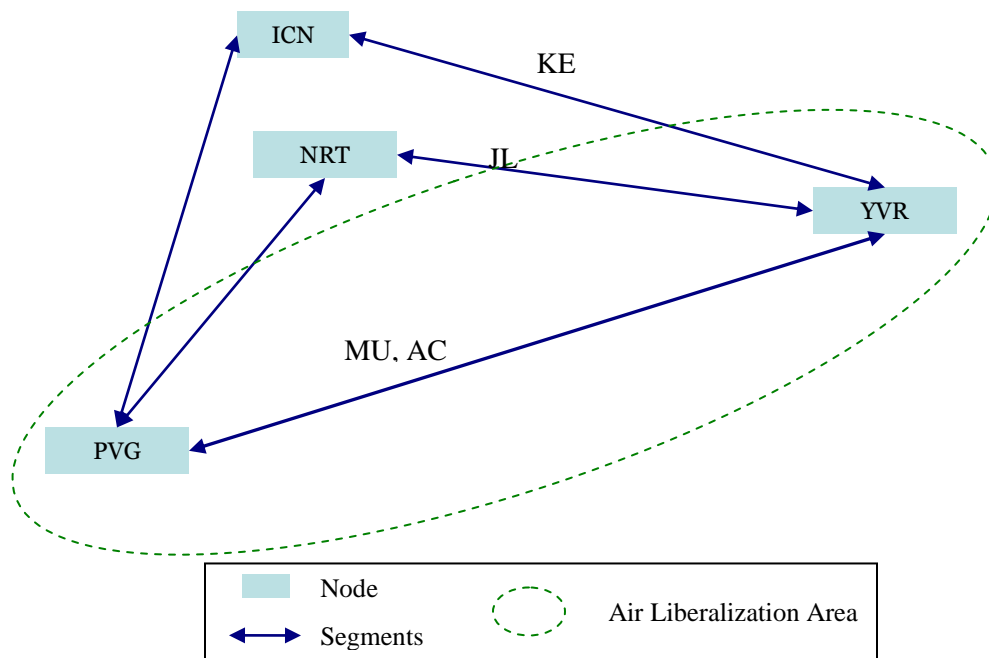
As discussed in Section 3.2.3, there is a lack of real competition in the Canada-China market under the current ASA, as two of the three carriers providing direct services in the market (three of the four designated carriers) are members of Star Alliance²⁴, and are active code-sharing partners on all Canada-China routes. Alternative routing options are available for passengers traveling between China and Canada. However, accessibility of routing through the US hubs is limited especially to Chinese citizens as Chinese citizens need transit visas to connect via a US hub.

Exhibit 4.3.7 shows the simplified network of Vancouver (YVR), Shanghai (PVG), Tokyo (NRT), and Seoul (ICN). Each OD market can be served by a number of alternative routes. In particular, we have the following four competing route-carrier combinations for serving Vancouver-Shanghai market:

- YVR-PVG (Shanghai-Pudong), China Eastern non-stop services
- YVR-PVG, Air Canada (AC) non-stop services
- YVR-ICN-PVG one-stop services by Korean Air (KE)
- YVR-NRT-PVG one-stop services by Japan Airlines (JL)

²⁴ Air Canada and Air China were direct competitors prior to Air China joined Star Alliance, thus the alliance is categorized as a “parallel” alliance, which is likely to have anti-competitive effects.

Exhibit 4.3.7 Alternative Routing Choices for YVR-PVG OD Traffic



Source: Wei Song's MSc Thesis in progress at University of British Columbia (2008)

If the entry restriction is relaxed in the China-Canada market, new carriers may enter the market, and increase competition in the market. Suppose two new carriers²⁵ enter the YVR-PVG market following the removal of entry restriction, the number of competing route-carrier combinations for serving Vancouver-Shanghai market will increase from four to six, which will intensify the competition in the market.

For each OD city-pair/airport-pair markets, one can obtain a similar set of competing route-carrier combinations. As described above, the number of route-carrier combinations for serving an OD or city pair will increase as the various restrictions in the bilateral ASAs are removed or Open Skies is adopted.

Our model is applied to simulate the anticipated market outcomes under two scenarios of ASA liberalization in the Canada-China market, focusing on the Vancouver-Beijing and Vancouver-Shanghai routes. The following provides a summary of the overall simulation results under two alternative scenarios:

²⁵ For example, one new Chinese carrier (say Hainan Airlines), and one new Canadian carrier (say, WestJet).

Scenario 1: relax price and frequency but no entry of new airlines

On the YVR-PEK (Vancouver-Beijing) route, Air Canada and Air China are currently codesharing partners rather than competitors. If they continue to be partners after the restrictions on price and frequency are removed, we do not expect to see any significant change in the market. However, if they become true competitors, airfares are expected to fall, which will stimulate more demand. The overall average airfare is expected to fall by 4.5%, and total passenger volume is expected to increase by 5.9% (Exhibit 4.3.8). In the short term, the carriers are not likely to increase their frequency, thus load factors is expected to increase a result of the increased traffic volume, from 82.5% to 87%.

Exhibit 4.3.8 Expected Short Term Outcome When Air Canada and Air China Compete

YVR - PEK	Air Canada		Air China		Total/Average	
	Base Case	Expected Outcome (Δ)	Base Case	Expected Outcome (Δ)	Base Case	Expected Outcome (Δ)
Airfare (US\$)	1,610	1,567 (-2.7%)	1,357	1,266 (-6.7%)	1,483	1,417 (-4.5%)
Passenger	118,593	131,361 (10.8%)	134,499	136,743 (1.2%)	253,092	268,104 (5.9%)
Frequency	719	719 (0.0%)	708	708 (0.0%)	1,427	1,427 (0.0%)

On the YVR-PVG (Shanghai-Pudong) route, Air Canada currently operates seven flights per week, while China Eastern operates four flights per week (5 flights during peak season). It is unlikely that the airlines would increase frequency in the very short term when restrictions on price and frequency are removed.

Scenario 2: Removing Restrictions on price, frequency and entry (Open Skies)

Under this scenario, new airlines are expected to enter the markets. For example, in the long term Westjet may enter the Vancouver – Beijing route, and Shanghai Airlines may enter the Vancouver – Shanghai route. With all the restrictions removed, the overall airfares are expected to decrease further.

Exhibit 4.3.9 presents the expected market outcomes under Scenario 2 for the **YVR-PEK route**. The results indicate that the overall airfare is expected to fall by 19.7%, whereas the passenger traffic is expected to increase by 39.2%, respectively. It is noted that both Air Canada and Air China are expected to carry more passengers under Open Skies, despite the potential new entrant in the market.

Exhibit 4.3.9 Expected Market Outcome in the YVR-PEK Market Under Open Skies

YVR - PEK	Air Canada		Air China		New Entrant	Total/Average	
	Base Case	Expected Outcome (Δ)	Base Case	Expected Outcome (Δ)		Base Case	Expected Outcome (Δ)
Airfare (US\$)	1,610	1,317 (-18.2%)	1,357	1,065 (-21.5%)	1,191	1,483	1,191 (-19.7%)
Passenger	118,593	127,082 (7.2%)	134,499	137,291 (2.1%)	87,809	253,092	352,182 (39.2%)
Frequency	719	807 (12.2%)	708	825 (16.5%)	558	1,469	2,189 (53.4%)

*Assumption: the new entrant has a similar cost structure as Air Canada.

In the **YVR-PVG market**, the overall airfare is expected to fall by 12% under Open Skies, and total passenger volume is expected to increase by 24.6%, assuming the new entrant has a similar cost structure as Air Canada (Exhibit 4.3.10).

Exhibit 4.3.10 Expected Market Outcome in the YVR-PVG Market under Open Skies

YVR - PVG	Air Canada		China Eastern		New Entrant	Total/Average	
	Base Case	Expected Outcome (Δ)	Base Case	Expected Outcome (Δ)		Base Case	Expected Outcome (Δ)
Airfare (US\$)	1,454	1,316 (-9.5%)	1,202	1,022 (-14.9%)	1,169	1,328	1,169 (-12.0%)
Passenger	119,526	101,908 (-14.7%)	104,529	82,845 (-20.7%)	94,508	224,055	279,261 (24.6%)
Frequency	723	673 (-7.0%)	485	371 (-23.6%)	568	1,208	1,611 (33.4%)

In the **YYZ – PEK market**, Air Canada is the only carrier currently serving the market with four flights per week (5 flights in peak season). Once entry restriction is removed, we expect Air Canada (AC) would increase its flight frequency in the short term in order to block potential competitors from entering the market. If AC increases its operations to

seven flights per week (daily flights), the average airfare is expected to fall by 9.2%, and passenger volume is expected to increase by 47.4% (Exhibit 4.3.11).

Exhibit 4.3.11 Expected Short Term Outcome When AC Operates Daily Flights

YYZ – PEK	Air Canada	
	Base Case	Expected Outcome (Δ)
Airfare (US\$)	2,271	2,063 (-9.2%)
Passenger	105,230	155,064 (47.4%)
Frequency	465	728 (56.6%)

*Assumption: the average load factor in the short term is 75%

In the long term, new entrant(s) will enter the market, which would lead to significant reduction in airfares, and consequently increase in passenger traffic volume (Exhibit 4.3.12).

Exhibit 4.3.12 Expected Market Outcome in the YYZ-PEK Market Under Open Skies

YYZ- PEK	Air Canada		New Entrant	Total/Average	
	Base Case	Expected Outcome (Δ)		Base Case	Expected Outcome (Δ)
Airfare (US\$)	2,271	2,016 (-11.2%)	1,630	2,271	1,823 (-19.8%)
Passenger	105,230	95,511 (-9.2%)	64,541	105,230	160,052 (52.1%)
Frequency	465	448 (-3.6%)	303	465	751 (61.6%)

Impacts on Tourism

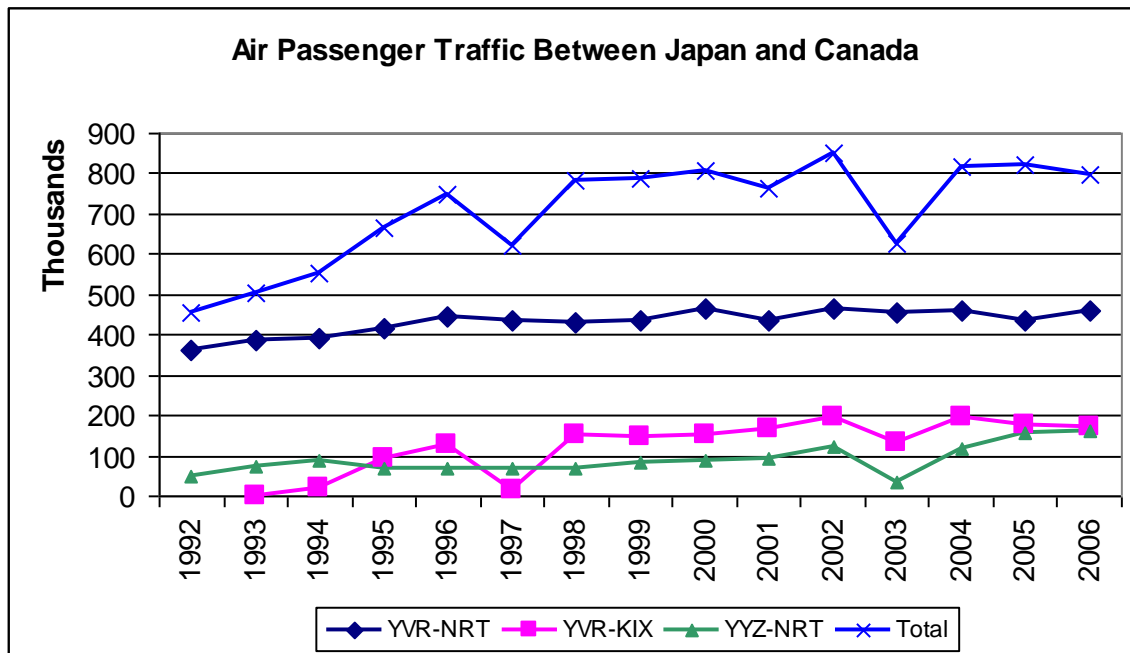
Chinese visitors currently account for more than \$150 million per year of tourism spending in Canada. Their average length of stay is 30 days and they spend an average of \$1,857 per person-trip. The majority of current visitors from China are business travellers, students, or people visiting friends and relatives.

Assuming that 36.5% of the air travelers are visitors to Canada²⁶, the effects of ASA liberalization in the Canada-China market on tourism are estimated by multiplying the average spending per Chinese visitor (\$1,857), by the additional passengers generated under the two alternative scenarios. Scenario 1 is expected to contribute \$5 million, and Scenario 2 is expected to contribute \$71 million to the tourism industry.

4.3.3 Canada – Japan Open Skies

Exhibit 4.3.13 shows that total air traffic on the Vancouver- Tokyo route experienced a modest increase from 360,000 in 1992 to 460,000 passengers in 2006.²⁷ The air traffic on the Vancouver-Osaka route peaked in 2002 at 197,884 passengers, and has since declined. The Toronto-Tokyo market has remained relatively small (suspended in 2003), but has experienced considerable growth since 2004 (163,201 passengers in 2006). The year-around average passenger load factors of both Air Canada and Japan Airlines exceeded 83% in 2006 on both the Vancouver-Tokyo route and the Vancouver-Osaka route while reaching 80% on the Toronto-Tokyo route. This indicates that flights are likely to be full most of the peak and shoulder periods.

Exhibit 4.3.13 Air Passenger Traffic between Japan and Canada by Route



Source: ICAO Traffic by Flight Stage Database

²⁶ Based on Statistics Canada: International Travel Survey 2007.

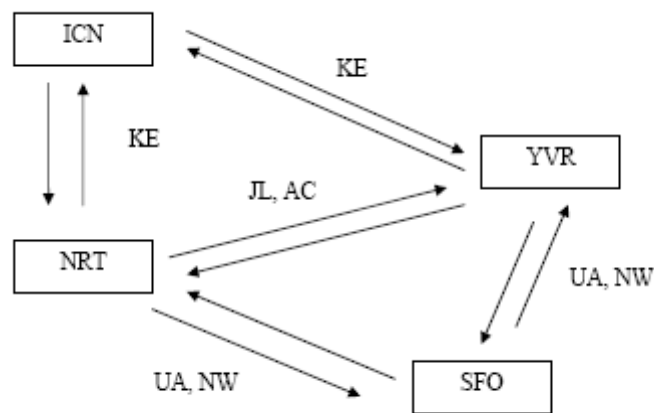
²⁷ Vancouver – Nagoya service was suspended from 2006.

In the past, Japan has appeared to be the reluctant partner in further opening up the air transport market between Canada and Japan. However, the Japanese government has recently started to actively pursue new initiatives to open up its international air transport markets. Therefore, it is timely to conduct an assessment of the potential market outcomes under Open Skies between Canada and Japan.

For simplicity, we focus our analysis on the Vancouver (YVR) -Tokyo (NRT) market. At present, there are five potential route-carrier combinations for serving the OD traffic between YVR and NRT (Exhibit 4.3.14):

- YVR-NRT, Japan Airline (JL) non-stop services
- YVR-NRT, Air Canada (AC) non-stop services
- YVR-ICN-NRT one-stop services by Korean Air (KE)
- YVR-SFO-NRT one-stop services by United Airlines (UA)
- YVR-SFO-NRT one-stop services by Northwest Airline (NW)

Exhibit 4.3.14 Alternative Routing Choices for YVR-NRT OD Traffic



If Open Skies is adopted in the Japan-Canada market, new carriers may enter the market. Suppose that in the long run, two new carriers²⁸ enter the YVR-NRT market following Open Skies, the number of competing route-carrier combinations for serving Vancouver-Tokyo market will increase from five to seven, which will increase the competition in the market.

²⁸For example, one new Japanese carrier (say, ANA), and one new Canadian carrier (say, WestJet).

However, both Air Canada and Japan Airlines may increase their flight frequencies to prevent other carriers from entering the market once the regulatory restrictions are removed. Assuming both carriers will increase their frequencies to 8 flights per week²⁹, the overall airfare will fall by 4.1% and total passenger volume will increase by 3.6% (Exhibit 4.3.15). However, JAL may not be able to sustain at this frequency level as its operating cost is still considerably higher than that of Air Canada, and other potential competitors.

**Exhibit 4.3.15 Expected Short Term Market Outcome
When both AC & JAL Operates 8 Weekly Flights**

YVR – NRT	Air Canada		Japan Airlines		Total/Average	
	Base Case	Expected Outcome (Δ)	Base Case	Estimate (Δ)	Base Case	Expected Outcome (Δ)
Airfare (US\$)	1,232	1,252 (1.7%)	1,598	1,462 (-8.5%)	1,415	1,357 (-4.1%)
Passenger	175,548	188,620 (7.5%)	286,673	290,387 (1.3%)	462,221	479,007 (3.6%)
Frequency	734	832 (13.4%)	801	832 (3.9%)	1,535	1,664 (8.4%)

Assuming 80% load factor in the short term.

Over the long term, new entrant will likely to enter the market. The entry by new carriers is expected to further reduce the overall airfare and generate additional passenger traffic in the market. The new entrant is expected to attract new demand and divert existing traffic from JAL (and some from Air Canada). Assuming the new entrant has a similar cost structure as Air Canada, the overall airfare is expected to decline by 10.6%, and passenger volume is expected to increase by 15.8% (Exhibit 4.3.16).

Exhibit 4.3.16 Expected Outcome in the YVR-NRT Market under Open Skies

YVR - NRT	Air Canada		Japan Airlines		New Entrant	Total/Average	
	Base Case	Expected Outcome (Δ)	Base Case	Expected Outcome (Δ)		Base Case	Expected Outcome (Δ)
Airfare (US\$)	1,232	1,152 (-6.5%)	1,598	1,377 (-13.8%)	1,265	1,415	1,265 (-10.6%)
Passenger	175,548	180,628 (2.9%)	286,673	185,510 (-35.3%)	169,143	462,221	535,281 (15.8%)
Frequency	734	850 (15.8%)	801	567 (-29.2%)	627	1,535	2,044 (33.1%)

²⁹ Assuming no airport capacity constraint at Tokyo.

Impacts on Tourism

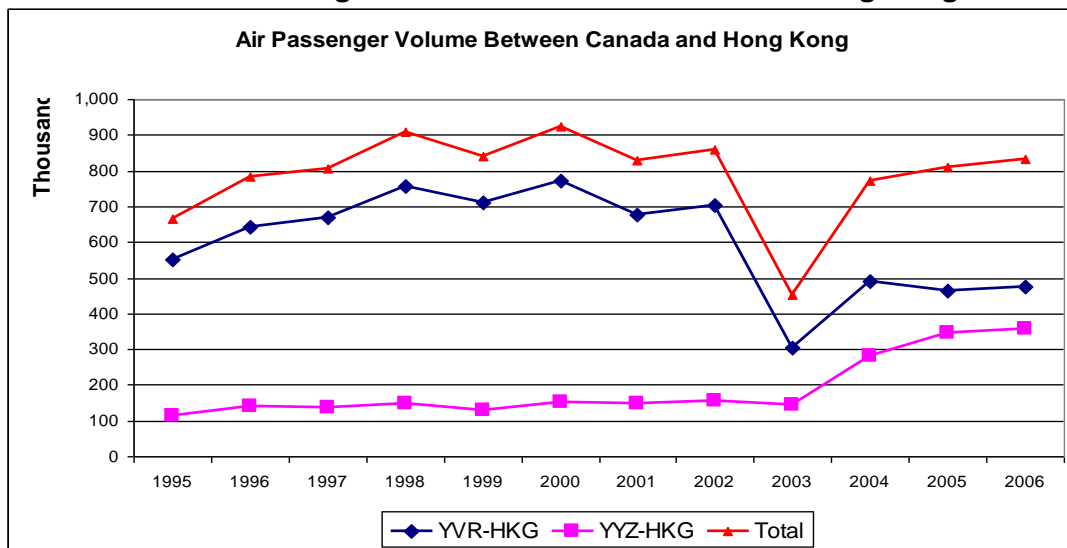
Japan is one of BC and Canada's top ten tourist markets, following the US and the UK. Japan is the largest Asia/Pacific market to BC, and accounts for 25% of BC's Asia/Pacific tourist market and 25.3% of Canada's Asia/Pacific market.

Japanese visitors on average spend \$1,950 during their visit to Canada (Tourism BC). The Canada-Japan Open Skies is expected to bring additional 73,060 air travelers on the Vancouver-Tokyo market, which is expected to contribute \$54 million additional revenue to the tourism industry assuming that 76% of the air travelers are Japanese visitors to Canada³⁰.

4.3.4 Canada - Hong Kong Open Skies

The total air passenger traffic between Canada and Hong Kong peaked in 2000 with 925,363 passengers, and has since been hovering around 800,000 passengers per year. The big drop is due to SARS. It is noted that the air traffic on the Toronto-Hong Kong route has increased considerably since 2003 whereas the traffic on the Vancouver – Hong Kong route has decreased (Exhibit 4.3.17). In terms of market share, Cathay Pacific accounted for 80.7% in the Toronto-Hong Kong market, and 79.1% in the Hong Kong-Vancouver market, whereas Air Canada accounted for 19% and 20.6%, respectively.

Exhibit 4.3.17 Air Passenger Volume between Canada and Hong Kong 1995-2006



Source: ICAO Traffic by Flight Stage Database

³⁰ Based on Statistics Canada International Travel Survey 2007.

Compared to the previous three markets, the Canada-Hong Kong market is relatively well served with 42 flights per week. However, our simulation results suggest that “Open Skies” between Canada and Hong Kong is expected to further improve the services in the market.

If we use Year 2006 as the base case when Cathay Pacific (CX) operated 14 flights per week and AC operated 7 flights per week on the YVR-HKG route. Exhibit 4.3.18 indicates that if we had Open Skies in place in Year 2006, the average airfare would have been 7.3% lower, and air traffic 11.7% higher in that year, and Air Canada would have operated eight flights per week, and Cathay Pacific 17 weekly flights.

Exhibit 4.3.18 Simulated Market Outcomes under Price and Capacity Deregulation

YVR – HKG	Air Canada		Cathay Pacific		Total/Average	
	Base Case	Estimate (Δ)	Base Case	Estimate (Δ)	Base Case	Estimate (Δ)
Airfare (US\$)	1,345	1,191 (-11.5%)	1,362	1,318 (-3.2%)	1,354	1,255 (-7.3%)
Passenger	167,006	177,219 (6.1%)	308,459	353,912 (14.7%)	475,465	531,131 (11.7%)
Frequency	731	832 (13.8%)	1,459	1,768 (21.2%)	2,190	2,652 (18.7%)

* Assumed that the average load factor to be 75% for AC and 60% for CX.

In the long term, however, both Air Canada and Cathay Pacific are likely to lose traffic as new carrier(s) enters the market. Overall, Open Skies is expected to reduce the average airfare by 9% and increase passenger traffic volume by 15.2%. (Exhibit 4.3.19)

Exhibit 4.3.19 Expected Outcome in the YVR-HKG Market under Open Skies

YVR - HKG	Air Canada		Cathay Pacific		New Entrant	Total/Average	
	Base Case	Estimate (Δ)	Base Case	Estimate (Δ)		Base Case	Estimate (Δ)
Airfare (US\$)	1,345	1,170 (-13.0%)	1,362	1,295 (-4.9%)	1,233	1,354	1,233 (-9.0%)
Passenger	167,006	144,630 (-13.4%)	308,459	226,642 (-26.5%)	176,656	475,465	547,927 (15.2%)
Frequency	731	679 (-7.1%)	1,459	970 (-33.5%)	829	2,190	1,649 (13.2%)

4.3.5 Canada-Philippines: Remove Capacity Restriction

As discussed earlier, there is a severe capacity shortage in the Canada-Philippines market. Under the current ASA, Philippines Airlines (PAL) and Air Canada are entitled to field up to four flights per week in each direction. Air Canada does not operate in the market, whereas PAL has been operating 5 flights (with one borrowed from AC) per week between Vancouver and Manila. The actual air traffic number is not available at this point. However, according to PAL, it provides 264 seats per flight with about 90% load factor. The estimated one way passenger volume, therefore, is 61,776 passengers per year. The current economy fare for direct flights is about \$1,446. We were not able to apply our full model to the Canada-Philippine case because of lack of data. However, simple estimation based on commonly accepted price and frequency elasticities indicates that if the PAL's frequency increases from 5 flights to 7 flights per week, the average airfare will decrease by 24%, and passenger volume will increase by 39%; PAL is actively seeking to increase its number of flights on the Vancouver – Manila to 14 flights per week under which the airfare will fall by 56% and passenger volume will increase by 176% (Exhibit 4.3.20).

Air Canada benefits from the current capacity shortage situation on the direct flight to Manila because they route many of AC passengers to/from Manila via Hong Kong with its partner airlines.

Exhibit 4.3.20 Expected Results after removing Capacity Restriction: YVR-MNL.

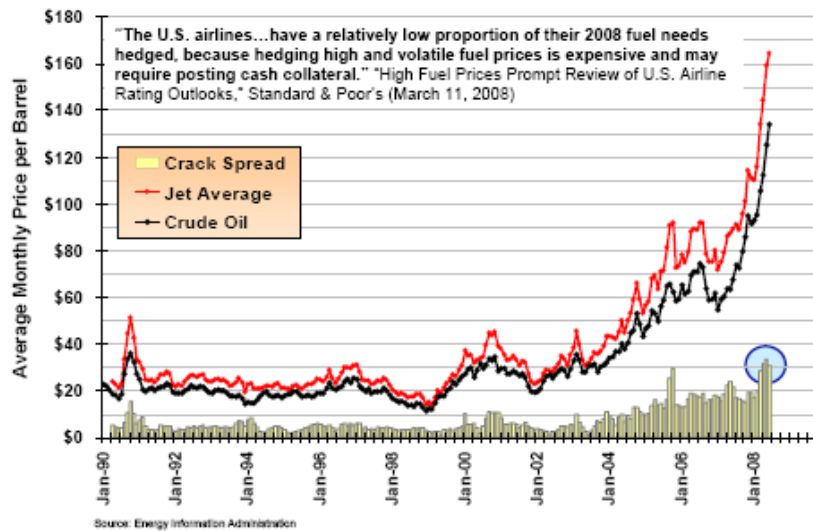
Frequency Flights / week	% Change in Airfare	%Change in Passengers	Expected Passengers
7	-24%	39.3%	86,068
10	-43%	98%	122,325
14	-56%	175.8%	170,427

Assuming: (1) the aircraft size remains the same;
(2) price elasticity at -1.2, frequency elasticity at 0.15;

4.4 The Impacts of Fuel Price Increase on the Market Outcome

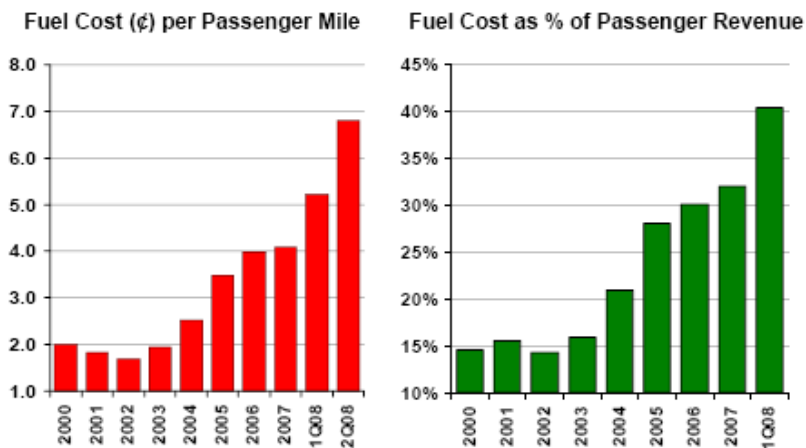
Fuel costs accounted for 26.5% of the operating costs of US carriers in 2007. However, the soaring fuel price over the past year (Exhibit 4.4.1) has pushed the share of fuel costs over 40% for many airlines, surpassing labour as the largest single cost item (Exhibit 4.4.2). According IATA, for every dollar that the price of fuel increases, airline costs go up by US\$1.6 billion.

Exhibit 4.4.1 Changes in Jet Fuel Prices



Source: Air Transport Association of America, July, 2008

Exhibit 4.4.2 Fuel Costs as % of Passenger Revenue



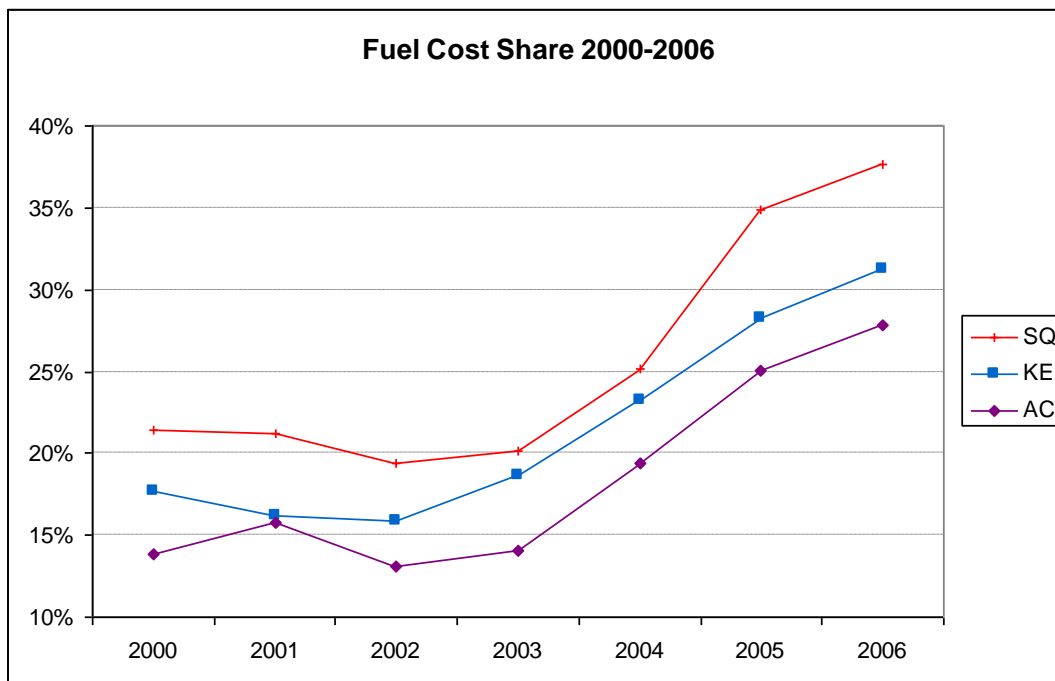
Source: Air Transport Association of America, July, 2008

Airlines have no choice but to pass on the cost of fuel to passengers because of their extremely low operating margin. Every time the price of fuel increases the cost of a ticket by a dollar, a percentage of travelers opt not to fly. Therefore it is important to examine how fuel price increases will affect the market outcomes.

Because the fuel price increase will affect all airlines on all routes, we will illustrate the potential impacts of fuel price increase using the case of YVR-ICN as an example. It is noted, however, that the extent of fuel price impact depends on the length of a particular route, thus indirect routing alternatives (with connections) will be subject to higher fuel cost increases, consequently, larger potential fare increases.

For the YVR – ICN route, the historical fuel cost shares for the three incumbent carriers are presented in Exhibit 4.4.3. The fuel price increased by 10.6% between 2005 and 2006, and the average fuel cost share of the three airlines in the YVR-ICN market increased by 9.74%. Accordingly, if the fuel price increases by 100%, the total operating costs would increase by 25%, 28%, and 35% for Air Canada, Korean Air, and Singapore Airlines, respectively, assuming other costs remain the same.

Exhibit 4.4.3 Historical Fuel Cost Share for Carriers in the YVR-ICN Market, 2000 – 2006



Source: ICAO Financial Statistics, 2000 – 2006

Assume that airlines pass 100% of the cost increases to passengers, the overall average airfare would increase by about 30%. As a result, the air travel demand would decrease by 36% when we assume the price elasticity at -1.2. Exhibit 4.4.4 shows the impacts of a 100% fuel price increase on passenger volume, airfare and frequency in the YVR-ICN market with and without Open Skies.

- **The case of doubling fuel price under the current restrictive bilateral ASA:**
Assume that the regulatory condition in the Korea-Canada market remains the same as today, the overall average airfare would increase from the base airfare \$1,620 to \$2,106; and AC's passenger volume would decrease from 145,412 to 95,624, Korean Air's passenger volume would decrease from 86,296 to 55,229, and Singapore Airlines' passenger volume would decrease from 81,111 to 51,271. The total passenger volume in the YVR-ICN would decrease 315,819 to 202,124 passengers.
- **The case of doubling fuel price under an open skies agreement:**
If all regulatory conditions are removed in the Korea-Canada market under an Open Skies agreement, the overall average airfare would be \$1,468, 30.3% lower than the airfare in the absence of Open Skies ($\$1,468 / \$2,106 = 0.697$). The total air passengers on the YVR-ICN route would be 330,226, 63.4% larger than that in the absence of Open Skies.

Comparing the results in Exhibit 4.3.4 (**long-run expected market outcome under open skies at the current fuel price**) and Exhibit 4.4.4 (**long-run expected market outcome under Open Skies when the fuel price doubles**), it is noted that the impacts of Open Skies on the market outcome are even more significant in the case of doubling fuel price. For example, in the case of doubling fuel price, Open Skies would increase the traffic volume by 63.4% and decrease the average airfare by 30.3% whereas the same Open Skies would increase the traffic volume by 62.5% and decrease the average airfares by 30.0% in the case of fuel price remaining at current level. That is, Open Skies would bring an additional 0.3% reduction in average airfare, and an additional 0.9% traffic increase on the direct YVR-ICN route if fuel price doubles as compared to the case of fuel price remaining at current level. This is because a higher fuel cost would lead to a higher cost increase, consequently a higher air fare increase, on the longer-distance indirect (one-stop) routes than on the direct non-stop route. This in turn would

results in proportionately more passengers switching to the direct routes in the case of fuel price doubling than in the case of fuel price remaining at current level.

However, the differences in the impacts of Open Skies on the increase in traffic volume and the reduction of average airfare are very small, and thus are negligible even when fuel price doubles. That is, Open Skies is expected to reduce the overall airfare by about 30%, and increase the total passenger volume by about 63% in the YVR-ICN market regardless of fuel price levels. **In light of this finding, we do not believe it is necessary to examine the impacts of fuel price increase for the other markets since YVR-ICN results show that there won't be any noticeable difference in the effects of open skies agreement.**

Exhibit 4.4.4 Impacts of a 100% Fuel Price Increase on Market Outcomes: with and without Open Skies

YVR - ICN	Air Canada		Korean Air		Singapore		New entrant	Total/Average	
	Without Open Skies	With Open Skies (Δ)	Without Open Skies	With Open Skies (Δ)	Without Open Skies	With Open Skies (Δ)	With Open Skies	Without Open Skies	With Open Skies (Δ)
Airfare	2,106	1,393 (-33.8%)	2,106	1,543 (-26.7%)	2,106	1,468 (-30.3%)	1,468	2,106	1,468 (-30.3%)
Passenger	95,624	118,446 (23.9%)	55,229	100,605 (82.2%)	51,271	23,979 (-53.2%)	87,196	202,124	330,226 (63.4%)
Frequency	529	707 (33.6%)	211	417 (97.7%)	200	105 (-47.3%)	411	940	1,641 (74.5%)

5.0 Comparison of the Canadian Approaches to the Bilateral ASAs with the USA

In the previous sections of this report, we have shown that Canada's bilateral ASA systems with Asian countries did not serve economic interest of Canada by imposing constraints on growth of Canada's trade, investment, tourism, logistics, education and other related industries as well as constraining growth opportunities of the air transport sector itself in the long run. It is important to ask why this has happened in Canada while the United States has been very successful in making itself the Open Skies hub nation, and enjoying the resulting trade and other economic benefits.

As of June, 2008, the United States has signed Open Skies agreements with 92 countries on six continents, whereas Canada has Open Skies agreements only with six countries (US, UK, Ireland, Iceland, New Zealand, and Barbados) while retaining restrictive clauses in most of the other 76 bilateral ASAs.

In particular, Canada's bilateral ASAs do not reflect the shifting trade, investment and economic interest of Canada with respect to Asia. As described in previous sections of this report, the United States has Open Skies agreements with 11 Asian countries and has so-called "liberal bilaterals" with most of the other Asian countries. The United States has exchanged a memorandum of understanding (MOU) with China to negotiate a full open skies agreement by 2011. Canada does not have any open skies agreement in Asia. Virtually all of Canada's bilateral agreements with Asian countries are restrictive, as government officials in charge of bilateral negotiations try to use "a visible hand" to achieve desirable market outcomes in this sophisticated modern economy where air transportation plays important roles in many economic sectors and markets.

In order to understand why Canada's air transport sector has failed to provide the ranges of prices and service quality options available to consumers and businesses, and has missed out on the opportunities to contribute more to various sectors of the economy, this section will review briefly the recent history of international air policies and the ways in which those announced policies have NOT been executed by the responsible branches of the government.

We will then discuss what needs to be done, and what the Government of British Columbia can do to influence the federal policies and approaches on bilateral ASAs, especially with Asian countries.

5.1 The US International Air Transport Policy and Principles Behind their Bilateral ASA Negotiations³¹

As stated previously, the United States now has Open Skies agreements with 92 countries (counting each of the 27 EU countries separately). Philosophically, the US government stance is to sign Open Skies agreement with any willing country. Although some incumbent airlines may employ delay tactics at times, it usually is not effective because there are competing airlines that want to serve those markets, as well as strong voices for liberalization coming from tourism, international trade, regional and consumer interests. Even the Air Transport Association of America (ATA), which represents the U.S. airline industry, supports the US government's Open Skies initiatives for the benefit of the airline industry as a whole.

During the 1980s, US bilateral negotiators tried to reflect US carriers' interest by adopting a "bean counting" approach to their bilateral ASA negotiations, i.e., US gave a right to bilateral partner carriers only if US airlines were interested in entering and/or expanding services to that market.

A significant shift in approaches to international air transport negotiations occurred at the beginning of Clinton Administration (1992-93). From that time, the US negotiating mandate shifted completely towards increasing competition in the bilateral and/or multilateral air services markets, and largely abandoned the archaic negotiation principle of 'bilateral reciprocity' in favor of offering equal opportunities to carriers of both sides. In other words, the US abandoned the "bean counting" approach in bilateral negotiations, and changed their negotiation regime in favor of increasing competition in international market. This means that the US would grant entry of foreign carriers in a bilateral

³¹ The discussions in this sub-section are based on Tae Oum's interviews with the following individuals in Washington DC. John P. Heimlich, VP and Chief Economist, Air Transport Association (ATA); Cecilia Bethke, Managing Director, International Affairs, ATA; Paul Gretch, Director, International Air Transport, US Department of Transportation (DOT); and Keith Glatz, US DOT, Manager, International Air Transport.

market even if no US carrier is interested in entering the market or expanding existing services to that market. The preamble of the template “Air Transport Agreement Between the United States of America and The Government of [Country]” downloaded from the US Department of State’s website (Appendix X) contains the following clear messages to readers:

- Desiring to promote an international aviation system based on competition among airlines in the market place within minimum government interference and regulation;
- Desiring to make it possible for airlines to offer the traveling and shipping public a variety of service options, and wishing to encourage individual airlines to develop and implement innovative and competitive services;
- Desiring to facilitate the expansion of international air transport opportunities;

What is interesting to observe is that this preamble does not include any [provision](#) about providing “a reasonably level playing field” for U.S. carriers which is one of the principles of Canada’s Blue Sky policy.

When the United States signed their first open skies agreement with the Netherlands in 1992, the US did not have much reason to increase service to Amsterdam (other than increasing pressures on other European countries to participate in US Open Skies initiatives) since they had many 5th freedom rights for offering services on intra-European routes. The US carriers did not oppose the shift in US government’s approach to bilateral ASA negotiations. They recognized the inevitability of an open market that would bring benefits to consumers, trade and foreign investment, tourism and other industries.

If an airline uses delay tactics to protect its profitable international markets, the US DOT would invite the airline to explain why and how keeping the restrictive bilateral ASA with the particular country benefits the US economy as a whole. At the same time, DOT solicits opinions from consumers, trade and industry sectors. Airlines realize that they cannot win such debates, thus they usually do not attempt to block or employ delay tactics to Open Skies proposals.

The US bilateral negotiation teams usually consist of officials of Department of State, Department of Transportation (DOT), Office of the United States Trade Representatives (advisory role), airlines, airport associations, and consumer organizations. The size of the negotiating team depends on how high the economic stakes are. For example, in the case of the recent negotiations with China, about 40 people on the US side attended the bilateral ASA negotiation sessions.

Aside from the difference in fundamental approaches to bilateral negotiations, there is another important function housed within US DOT organization that does not exist in Canada: a quasi-independent Aviation Economics Office that is responsible for research on international air transport.

The Aviation Economics Office conducts cost-benefit analysis on the US economy of liberalizing or forming Open Skies with each of the foreign countries, with which bilateral negotiations will occur. Therefore, there appears to be an automatic signaling to the DOT Branch in charge of bilateral negotiations that the Open Skies with certain countries are beneficial to the US economy as a whole, although there may be some short-term pain to the US carriers who enjoy market power in the restricted bilateral markets.

One striking difference exists between Canada and the US in the way the bilateral ASA negotiations occur. By law, the US government is not allowed to sign any confidential addendum to the bilateral ASAs or other treaties. As negotiating counterpart countries are aware of this policy, they do not approach the US negotiators to sign any confidential addendum. US DOT officials pointed out that Canada's bilateral agreements with various Asian countries including Japan, Hong Kong, Vietnam, South Korea, Indonesia, and Singapore include confidential addenda on commercial matters including air fares, seat capacity, and flight frequencies.

Our subsequent investigation on Canada's bilateral ASA found the following facts:

- As recently as July 11, 2007, Canada signed an ASA with confidential addendum (Iceland);
- Among Canada's currently active bilateral ASAs, 35 contain confidential addenda;

- Most of these confidential addenda include provisions on flight frequency and/or seat capacity, routes airlines can serve, prices and/or associated commercial rights;
- Among Asian countries, Canada's bilateral agreements with Hong Kong, Vietnam, Indonesia, Japan, South Korea and Singapore contain confidential addendum.

As a result, important information on the Canada's bilateral agreements are hidden from the public and from independent analysis by academics.

The US Government officials are happy about the progress they made in bilateral negotiations with China in May 2007. Not only were US airlines able to get a gradual addition of 70 more flights per week over the next three years, but the US and China also agreed to negotiate for Open Skies by 2011. The US government believes that Open Skies ASAs will help US air carriers to deepen and expand complementary alliance relationships with Chinese airlines (see, Oum, Park and Zhang [1996, 2001] for definition and economic benefits of complementary alliances). For example, Air China and Shanghai Airlines joined Star Alliance in early 2008. The DOT officials we interviewed told us that, by and large, alliances improve services.

The US negotiating priorities are set, taking into account the following factors:

- High level political agenda and strategic economic agenda
- Department of State and Department of Transportation schedules
- Issues for negotiation suggested by carriers
- Issues raised by the partner government
- Expiring bilateral ASAs (usually every five years)

At the moment, negotiations with Vietnam, Laos and Japan (for internationalization of Haneda) in Asia and further negotiation with EU on foreign ownership and environmental (ETS) issues are on their list of high priority items.

5.2 Recent History of Canadian International Air Policy

While the US was signing pro-competitive liberal bilaterals, the Canadian government continued to pursue a traditional and restrictive international aviation strategy, protective of “flag” airlines’ interests at the expense of consumers and the national economy. Dresner and Tretheway (1987) examined 13 agreements signed between 1978 and 1986 and found that 8 allowed only single designation of air carriers (i.e., each country could designate only one carrier per route), that 7 required a carrier or governmental agreement on capacity levels and that all 13 specified that the preferred means of price-setting was through the industry rate-setting association, IATA, or by airline agreement (rather than through market forces). The Canadian agreements may be even *more* restrictive than they appear to be. According to Mitchell (1991), of the 60 bilateral agreements Canada had in place at the time, 20 had attached *confidential* instruments (addenda). These confidential addenda likely enforce revenue sharing, capacity restrictions and/or price-setting agreements not included directly in the main bilateral agreements.

Since the mid-1980s, Canada has cautiously altered its bilateral approach and signed a limited number of bilateral agreements with more liberal features. Two of the most important liberalized agreements are those with the United Kingdom (Canada, 1988) and the Netherlands (Canada, 1990). The agreement with the United Kingdom allows carriers open access to any route between the two countries, allows carriers limited freedom to set prices without the approval of both governments, and allows multiple designation of carriers. The bilateral with the Netherlands allows carriers freedom to match prices on routes without governmental approval and does not restrict a carrier’s ability to unilaterally determine capacity levels. In contrast, the bilateral with Germany (originally signed in 1973 and amended in 1992) allows for multiple designation of carriers, and allows carriers freedom to set capacity levels without governmental approval. However, unlike the bilaterals with the UK and the Netherlands, the German agreement tightly controls price competition by requiring competing carriers to agree on prices. Although the bilateral with Germany is somewhat more restrictive than those with the UK and the Netherlands, it is regarded as substantially more liberal than Canadian ASAs with most of the other countries (Mitchell, 1991).

In sum, despite the fact that during the late 1980s and 1990s Canada signed reasonably

liberal agreements with the UK, the Netherlands and Germany, they were far more restrictive than the liberal bilaterals and later Open Skies agreements that the US signed with these and many other countries.

5.2.1 Canada's (New) International Air Transport Policy of 1994

In 1994, the Honorable Doug Young, then Minister of Transport, announced a new, pro-competitive international air policy for Canada. The new policy stated **“Balance of Opportunities” Policy Replaces “Balance of Benefits” Policy**. The previous ‘balance of benefits’ policy essentially said that unless Canada’s flag carriers can operate profitable services between Canada and a foreign country, Canada would not allow a carrier from the foreign country to offer services on the bilateral market. This meant that if a Canadian flag carrier(s) provide, say, 1,000 seats per week on a bilateral market, the bilateral partner country’s flag carriers will only be allowed to offer up to 1,000 seats per week; i.e., precisely a “bean counting” approach. This meant that if the Canadian flag carrier did not wish to launch a service to a bilateral market, the foreign carriers from that country would not be allowed to serve on the bilateral market even if they could provide profitable services.

When the “balance of benefits” policy was the norm for Canada’s bilateral ASA negotiations, theoretically a national airline could receive compensation from an interested foreign carrier for allowing them to serve the market (even though the national carrier had no intention of serving that market).

Even though the balance of benefits policy was formally replaced by the ‘Balance of Opportunities’ policy in 1994, this policy was never reflected in any major bilateral negotiation. In the meantime, it is not difficult to find a large number of bilateral negotiation cases that were guided by the restrictive ‘balance of benefits’ policy, even up to today. It is not uncommon that flag carriers from the bilateral partner countries first try to persuade Air Canada before they approach Transport Canada, in order to increase their seat capacity and/or flight frequency in the markets where traffic volumes have been increasing.

5.2.2 Canada's Blue Sky Policy and Bilateral ASA Records

The Objectives of Negotiation of the Bilateral Air Services Agreements

The new Blue Sky Policy announced by the Honorable Lawrence Cannon, Minister for Transport, in 2006 lists the following goals (Appendix II):

Canada's principal goals when negotiating air agreements are to:

- Provide a framework that encourages competition and the development of new and expanded international air services to benefit travelers, shippers and the tourism and business sectors,
- Provide opportunities for Canadian airlines to grow and compete successfully in a more liberalized global environment,
- Enable airports to market themselves in a manner that is unhindered by bilateral constraints to the greatest extent possible.
- Support and facilitate Canada's international trade objectives.
- Support a safe, secure, efficient, economically healthy and viable Canadian air transportation industry.

The Blue Sky policy statement further clarifies what the bilateral ASA negotiators are supposed to accomplish, by listing the following "Principles":

- Recognize that air transportation is a direct contributor to a dynamic economy and is a leading trade and tourism facilitator.
- Market forces should determine the price, quality, frequency and range of air services options.
- Canadian carriers should have the opportunity to compete in international markets on a reasonably level playing field.
- Air liberalization initiatives will continue to be guided by safety and security considerations.

Under the title "Policy Approach for Air Transportation Negotiations", Transport Canada states, "As a primary objective, Canada will seek to negotiate reciprocal "Open Skies"-type agreements, similar to the one negotiated with the US in November, 2005", which would cover the following elements for scheduled passenger and all-cargo services:

- Open bilateral markets/access (third and fourth freedom rights);
- No limit on the number of airlines permitted to operate;
- No limit on the permitted frequency of service or aircraft type;
- Market-based tariff/pricing regime for bilateral and third country services;
- Open and flexible regime for the operation of code-sharing services
- Unrestricted services to and from third countries (fifth and sixth freedom rights);
and
- Rights for stand-alone all-cargo operations (seventh freedom rights).

These are encouraging words and consistent with a market economy's vision for air transport markets. These statements listed in the Blue Sky Policy announcement go beyond the "Balance of Opportunities" principle adopted in words in 1994. This policy clearly acknowledges the importance of air transport for consumers, tourism and other industries, and for national economic benefits, emphasizing the totality of economic benefits to Canada.

The practical question is "Will this policy get implemented in actual bilateral negotiations with countries with which Canada exchanges high volume of traffic and thus have substantial economic benefits?"

Given that we failed to implement the "Balance of Opportunities" principle adopted more than a decade ago in 1994, and the principle has been ignored in actual bilateral negotiations for such a long time, it is difficult to predict whether or not the pro-competitive principles imbedded in the Blue Sky policy will really change Canada's approach to bilateral negotiations.

It is true that since the Blue Sky policy announcement, Canada has signed Open Skies agreements with Ireland, Iceland, New Zealand, and Barbados. However, these are countries with which Canada does not exchange much traffic. Hopefully, this momentum carries over to countries with which Canada has major economic ties. These Open Skies agreements may be symbolic achievements for Canada, and may represent incremental first steps in achieving a pro-liberalization mind-set. The real work begins as we deal with countries with which we exchange large volumes of traffic and thus, have a

major economic stake. This is especially true with Asian markets, in which Canadian trade and investment are experiencing large and rapid growth.

Bilateral ASA Negotiating Team and Priorities

The Chief Air Negotiator appointed by Foreign Affairs and International Trade Canada (DFAIT) leads the negotiation of ASAs. Transport Canada develops and implements Canada's international air transport policy and plays a lead role in establishing the mandate which DFAIT takes to ASA negotiations. The Canadian Transportation Agency (CTA) is in charge of managing Canada's air agreements.

Canada's negotiating team consists of:

- Chief Air Negotiator, DFAIT
- Transport Canada (one or two representatives including a Senior Policy Advisor);
- Foreign Affair Advisor/Coordinator
- Canadian Transportation Agency – (one person)
- Observers: Schedule Carriers, Charter Carriers, Pilot Unions, Airports (allowed observer status only in the Canada-EU negotiation case).

Although the office of the Chief Negotiator is located within DFAIT, Canada's negotiating priorities and negotiating positions on substantive matters are *de facto* decided or at least heavily influenced by Transport Canada, particularly those that relate specifically to carrier concerns (e.g. in-market carrier regulations, taxation). Although airlines attend the bilateral process only as observers, they have substantial influence on the negotiation agenda and priorities, as they identify the necessity of a new bilateral or revisions to the existing bilateral based on their own determinations and needs. Only recently has Canada started to incorporate inputs from airports, tourism and international trade sectors in the bilateral process. It is clear that Canada's bilateral negotiation process has been heavily tilted in favor of protecting carrier interests, at the expense of consumers, regional economic development, trade and investment, tourism and other related industries in Canada. Officials need to understand that the producer surplus generated by airline sector in Canada is miniscule compared to the economic effects of air transport on consumer welfare, tourism, trade and foreign investment, and other related sectors, and thus, they need to adjust their priorities accordingly.

5.3 Interviews with the Canada's Bilateral Negotiators

The discussions in previous sections indicate that the main issue with Canada's ASA negotiation is not with policy direction, but with actual implementation. In order to have a better understanding of the key determinants in developing Canadian negotiating positions, how government prioritizes these factors, and why Open Sky bilateral negotiations with key Asian Pacific countries such as South Korea and the Philippines, among others, appear to be impeded, or negated in favour of bilateral reciprocity, despite the specifics of the Open Skies policy, and the underlying principles of Blue Sky, we conducted a series of interviews with officials from Transport Canada (TC) and Foreign Affairs and International Trade (DFAIT) who are members of Canada's air bilateral negotiation teams. This section reports on our observations on the responses from these interviews.

Observations from the DFAIT Interview (Department of Foreign Affairs and International Trade):

- DFAIT clearly understands that the overall national economic benefits including trade, regional development and consumer benefits should be the criterion for adopting Canada's stance on bilateral ASA negotiation;
- DFAIT appears to understand that in the dynamic free economy like Canada, it is not possible to regulate air transport markets in order to achieve specific objectives in a market.
- DFAIT believes that they are and can be an effective leader in setting and executing the trade and consumer-friendly bilateral negotiations for Canada. In view of the past history and bilateral records, DFAIT may be too optimistic in this regard, in the absence of a major support for such a change from the Federal Cabinet and/or a legislative mandate on the federal government.

Observations from Transport Canada Interview:

- Transport Canada considers bilateral benefits in terms of "risk management", and measure the "risk" of liberalization vs. the status quo. Their primary economic concern is about impact on carriers and entries/exits from market, rather than letting market forces determine level of capacity over time (more protectionist in approach than free-market). TC considers the fairness of foreign tax and other economic regimes, and if Canadian carriers are operating on a "level playing field" within that

regime. One of the potential problems with the “level playing field” is that Canadian carriers may be able to play this card when it is in their self-interest to stall negotiations, but disregard the same issues when they see an opportunity for themselves in those markets.

- They appear to be reluctant to accept the full potential of an open marketplace, which provides opportunities for great success of carriers, but also runs a risk of failure by those airlines who cannot respond to market demands. The result is a negotiation stance that favors carriers (and, by extension, their shareholders) rather than the greater good for Canada and Canadian economy.
- The Canadian and United States’ stances are in stark contrast in dealing with national flag carriers. The United States favors an “opt out” approach; the default position is YES, unless the airlines can make a convincing argument that it is in the United States’ interest NOT to liberalize. In Canada, the default is to defer to carriers at a conceptual level, and requires “proof” from other stakeholders that 1) the current market is being underserved because of restrictions imposed on the ASA and 2) the “risk” is manageable.
- Once concerns about safety and security are assuaged, we believe that TC proceeds with liberalization when they can determine that a more open regime will have, at worst, no effect on Canadian carriers’ market position, or at best, a clear benefit to Canadian carriers.
- We speculate that negotiation for new services may be intentionally slowed, waiting to see if Canadian carriers could evolve to fill a larger role in some way first and establish a Canadian presence before opening the market to foreign competition. This may be the case in developing routes to the Middle East (UAE have been lobbying for access to Canada) or even waiting for WestJet to evolve to a point that it can handle interlining and other cooperative carrier services, to serve the Canadian constituency directly. However, there may be merit in this cautious approach, from their point of view. In the past, demands for increased access by foreign carriers – and the promise of increased service – tended to be vague, and have sometimes over-promised, under-delivered. The unfortunate result was that TC was convinced that a cautious, incremental approach was best, because it appeared that the initial, restrictive agreement had indeed provided for sufficient capacity and that promised improvements through liberalization had not materialized.

- We believe that the TC officials believe that they are still representing the best interests of Canada (in our view erroneously), both in terms of Canadian carriers and in terms of overall approach to trade/market liberalization, by balancing needs, risks and opportunities.
- Despite this government's direction as seen in Blue Sky and in larger trade policy, changes at TC have been at best, evolutionary, not revolutionary.
- TC misunderstands marketplace dynamics, and sees the failure of any carrier as a sign that liberalization has "gone too far" or "hasn't worked", rather than as a consequence of corporate business practices, and short term market forces. Studies have proven beyond a reasonable doubt that corporate (including airline) failures occur both in free market competition situation and under regulatory protections.
- We do not agree with TC in the view that charter can be a substitute for scheduled service. The development of seasonal, leisure-based travel cannot by itself, evolve into scheduled service, as the operations, strategies, costs, business practices. between charter and schedule are not the same. Furthermore, when a foreign carrier has an option of coming to Canada tolerating this type of restricted charter environment versus launching a service to an open skies country, say US, their choice is obvious if business conditions for the two markets are similar. They will increase flight services to the other country (US) instead of coming to Canada.

6.0 Strategies for Dealing with the Current Restrictive Bilateral ASA Regime

6.1 The Issue of Confidential Addenda in Canada's bilateral ASAs

As indicated in the previous section, Confidential addenda are included in 35 of the 82 bilateral ASAs Canada currently has with other countries. These confidential addenda deal with flight schedules, routes, air fares, and other associated commercial rights, not security or intelligence matters.

The fact that Canadian ASA negotiators are allowed to sign confidential Addendum to the bilateral ASAs is a major concern, especially when the matter does not involve national security issues. In contrast, even in the security-conscious US, US Bilateral ASA negotiators are not allowed to sign an agreement that have confidential addendum. Many of the bilateral agreements Canada signs do not provide much detail for the public or independent academics to examine and assess, since most of the important details are only found in confidential addenda. Such a practice should be abandoned as soon as possible.

As a result, Canada is not getting benefit of free and independent academic analysis on the economic effects of Canada's bilateral ASAs from the academics who are publicly financed via Canadian granting councils to do policy research. They instead focus on analysis of the U.S. policies primarily because it is easier to get data and information on them.

This issue should be exposed in the media, as negative publicity may end this practice. Since air transport is commercial business, there is no reason whatsoever that the ASA negotiators should sign confidential agreements on how air fares would be set, or how flight frequency and seat capacity should be determined. All of these things should be open for public consumption and analysis.

Making all of the contents of our bilateral air treaties (ASAs) open to the public (and by not allowing confidential addenda) would pressure the bilateral negotiators to look after the overall benefit of the agreement to the Canadian and regional economies, related industry sectors such as tourism and passengers and other users of airlines services.

6.2 Possible Advocacy Approaches Based on the Knowledge Gained from Our Interviews

(A) Supporting and Encouraging DFAIT Bilateral Team:

As DFAIT ultimately signs off on the agenda and priorities, advocacy efforts should be made directly to the ASA negotiators to influence the process. As the policy stance is one that we agree with (i.e. liberalization as the driving principle), we can take the following actions

- Publicly support this stance and the efforts of DFAIT and the government
- Demonstrate the benefits of Open Skies with credible studies and analysis
- Develop specific advocacy programs and positions to speed negotiations with individual countries/trading blocs that have been slowed, to Canada's economic detriment. Depending on circumstances, such programs might entail: market research, cost/benefit analysis, advocacy in foreign countries, public advocacy, joint advocacy, advocacy to (and through) other government departments or levels of government.
- Looking at the big picture, we must educate senior officials, the public and politicians about larger benefits of liberalized air access and open skies to the economy, and how government interventions, protection and other forms of the "visible hand" could lead to major long term damage to the economy
- As one step we should publicize the results of this study as well as sectoral studies that demonstrate the impacts of air bilateral ASAs on tourism, export of Canada's educational services, trade, and investment.
- Whenever these studies are done, the national media should be informed, in order to encourage informed public discussion and support of liberalized ASAs.
- In the interests of continued good relations, both DFAIT and TC should be given an advance notice that these studies will be released publicly.

6.3 Complementary Approaches to deal with Federal Government on ASA matters

As indicated previously, Transport Canada officials in charge of bilateral ASAs believe that their 'visible hand' approach to ASA process and negotiations protects overall interest of Canada as well as the interest of Canadian flag carriers. Simply, many of

these officials do not appear to understand that the ‘visible hand’ approach can not deal with the dynamic adjustments needed for managing competition in air transport industry and related sectors of the modern economy. Transport Canada officials do not disagree that bilateral ASAs should be done to benefit the Canadian economy as a whole. However, they differ (and rather strongly) on the ways to achieve this in the long run. That is by giving opportunities, excuses, and time for Canadian airlines to stall negotiations for opening markets where they are not competitive. Such delays in opening up the markets clearly harms air travelers, Canadian business, regional economies, and Canadian economy as a whole.

As far as we know this Transport Canada officials’ assertion that their visible hand approach to bilateral ASAs benefits Canadian economy has not been tested by any rigorous public process or even via independent studies because much of the information and the carrier-specific and route-specific passenger volumes and pricing data are confidential in Canada.³²

In dealing with this situation, the Province of BC should make use of the fact that TC officials agree at least publicly that bilateral ASAs should be negotiated and executed for the benefit of whole Canadian economy, not just for Canadian airlines. Based on the findings of this study, literature and experience review, and interviews we conducted, we propose the following complementary strategies/approaches to overcome the Transport Canada’s resistance and associated delay tactics by airlines to the liberalization of bilateral ASAs.

- (A) Increasing Transparency of the Bilateral ASA, its Process and Results
- (B) Open Process for Seeking Major Stakeholders’ Input including airline’s input
- (C) Dealing with the Transport Canada Officials’ Visible Hand Approach
- (D) Tilting Balance of Power on Negotiations to DFAIT and Chief Negotiator
- (E) Political and Legislative Approaches

³² The United States makes all of the carrier-specific and route-specific travel volume, flight frequencies, prices by each fare class, etc. available to its citizens. However, in Canada largely because of a limited nature of Statistics Canada Act, none of the carrier-specific and route-specific data are available for independent academic analysis. As a result, most Canadian academic researchers use the US Data when they do independent research on air transport policies.

- (F) Investigating the Possibility of making British Columbia an Open Skies region in Canada.
- (G) Other issues and approaches

6.4 Increasing Transparency of the Bilateral ASA, its Process and Results

- **Eliminating Confidential Addenda to the Bilateral ASA:**

Confidential addenda within ASAs are undemocratic. There is no good reason to hide such information as how air carriers set airfares, limitation on seat capacity and frequency of air services, from the Canadian public. By not allowing the bilateral ASA negotiators to sign an ASA with confidential addenda especially on economic issues the bilateral process will become more transparent and open to healthy criticism. This issue may easily be addressed by publicizing this issue in the national media indicating that US' ASAs contain no confidential addendum.

- **Expanding Number of observers in the bilateral negotiation teams:**

Observers, though they make no official statements during negotiations, provide important technical and economic information to the negotiation team. As well they ensure negotiations are transparent and reflect the priorities of all Canadian stakeholders. In the interest of balancing various stakeholders' interest it would be useful to invite more observers from stakeholder communities. Airport official, tourism sector, trade and investment sectors could be invited to join as observers. Canadian airport authorities, being well organized, and representing regional and community's interests, are ideal observers.

6.5 Open Process for Seeking Stakeholders' Input including Airlines' Input

Formalizing the process of seeking inputs from all major stakeholders (airlines, provinces and regions, tourism sector, trade and investment, airport authorities, educational business sector) to the bilateral ASA process will ensure greater transparency in priority setting. The bilateral negotiation team can then come up with its negotiating position taking into account stakeholder suggestions, preference

and comments. These inputs should be available to all stakeholders and the public at large.

In particular, the bilateral ASA negotiation process should require airlines who oppose liberalization to prove why such liberalization will harm the Canadian economy, not just to show such liberalization would hurt the airlines themselves. This approach is consistent with the spirit of Canada's Blue Sky policy. The US Department of Transportation found such approach very effective to curb airline opposition and delay tactics.

6.6 Dealing with the Visible Hand Approach:

- **Need for Creating Analysis Capability within CTA**

As stated earlier in this report, the US Department of Transportation has an Office of Aviation Economics semi-independently from the ASA Negotiation arm. This former Office does studies on economic effects of liberalizing the US Bilateral agreement with each of the foreign countries. Although they are under the same Undersecretary of Transportation Policy, they send their findings independently in report forms to the ASA Negotiating unit.

Creation of an arms-length unit as the (US) Office of Aviation Analysis within Transport Canada or in Canadian Transportation Agency (CTA) in charge of analyzing economic benefits and costs of bilateral liberalization with each country would be helpful to make TC Bilateral ASA officials to base some objective calculations and opinions. In other words, such a unit would find that the visible hand approach being employed by the current TC bilateral officials are unworkable.

- **Addressing Short Term Concerns of Bilateral Officials**

The creation of an arms length unit will take some time. Therefore, we advise a subtle approach for dealing with the immediate cases such as South Korea and Singapore by finding concrete answers to Bilateral officials' concerns and objections.

A complete and neutral analysis of routes, capacity, and load factors that demonstrates stability/room for capacity growth, by market, may help mitigate perceptions of risk. For example, TC allowed Icelandair back in to Canada, in part, because officials believed the “risk was manageable”, while other stakeholders saw the risk as non-existent. We can also help mitigate calls for ‘level playing field’ (which carriers may take to extremes as a stalling tactic) by a penetrating analysis of these regimes, including an analysis of what the imbalances are, supplemented with support and ideas of ways to alter those regimes that are patently unfair to consumers or businesses who use air transport.

The arguments for Open Skies can be built upon the extensive trade negotiations completed (Singapore) or underway (South Korea) with these countries.

6.7 Tilting Balance of Power on Negotiations to DFAIT and Chief Negotiator

DFAIT ultimately signs off on the agenda and priorities, and they genuinely believe that liberalization of bilateral ASAs will benefit the Canadian economy as a whole. It is important to enhance the balance of power on negotiations to DFAIT by demonstrating the benefits of Open Skies with credible studies and analysis, and by publicizing the results of this study, and doing more sectoral studies which can demonstrate the impacts of air bilateral ASAs on tourism, export of Canada’s educational services, trade, and investment. The results of such studies should be highly publicized.

Since the dependency of Canadian economy on international trade and investment is far higher than the United States, the inputs from the international trade and business sector should be taken more seriously in bilateral ASA negotiation process.

6.8 Political and Legislative Approach

The following are the range of options for BC government may want to consider in order to change the Transport Canada’s approach to the bilateral ASAs.

- **Long Term Legislative Action**

As indicated previously in this report, the United States enacted a law entitled “*International Air Transportation Competition Promotion Act*” (IATCPA) in 1979, soon after its domestic market deregulation in 1978. IATCPA mandated the U.S. Department of Transportation to seek opportunities to liberalize international air transport markets including signing of so-called ‘liberal bilateral’ ASAs with many countries throughout the 1980s.

Although it may take some time for Canada to debate on the costs and benefits of undertaking a similar legislative action, it is a measure that BC and Canadian Governments may want to explore. Such a law would obligate Transport Canada and its officials to seek opportunities to liberalize Canada’s bilateral ASAs including those with the Asian countries. It would move the negotiating mandate from the policy realm to the legislated realm.

- **Vancouver 2010 Olympics as an opportunity**

There will be increasing demand for international air travel to and from Vancouver as we move closer to the 2010 Olympic Games. In virtually all countries where Olympics were held in the past, there have been increased liberalization of international air services. For example, in preparation for Beijing Olympics (and Shanghai Expo scheduled in 2010) Chinese government relaxed foreign carrier access to their markets. 2010 Vancouver Olympic Games is a unique opportunity for B.C. government to capitalize in order to convince Ottawa the need for substantial liberalization of bilateral ASAs, especially on the major markets to/from Vancouver.

- **Pacific Gateway Strategy**

Ottawa has declared the Pacific Gateway an important economic strategy of Canada. Consequently, the need for bilateral ASA liberalization is an essential element for supporting the Federal government policy. Such an approach is likely to be very effective especially when the political parties are looking for economic agenda for their election platform.

In order to influence the federal government on the above issues, obviously it is important to work with federal Cabinet Ministers, other politicians, and lobbyists who need to be armed with economic arguments, facts and figures supporting the air transport ASAs as well as using national media effectively.

6.9 British Columbia as an Open Skies region within Canada.

The Open Skies agreement between South Korea and Shandong Province of China enjoyed spectacular success. Yet previously, Chinese government was reluctant to liberalize its bilateral ASA with South Korea fearing that Chinese airlines may lose out in competition with Korean carriers.

When the South Korean government suggested a localized Open Skies between Shandong Province (and Hainan Province) and South Korea, this proposal was acceptable to China for two important reasons. First, on risk management stand point Chinese carriers would only be affected in a small market. Second, Chinese government recognized that such localized Open Skies attract Korean firms to establish plants and factories and improve the economy of Shandong Province. China's small game has resulted in a spectacular success on both counts. First, direct flights between Korea and Shandong Province increased from 4 per week to 260 per week one-year after the open skies. Furthermore, Chinese carriers captured nearly 70% of the market shares, winning in a major way over Korean carriers. Second and more importantly, the Open Skies and convenience of travel induced thousands of Korean firms to establish their plants and factories throughout Shandong Province.

Similarly, Transport Canada officials worry about the risk to Canadian carriers in competition with Korean carriers. Therefore, a similar approach of localized Open Skies between British Columbia and South Korea may be more palatable. As both Korean and Canadian carriers would need to make dynamic adjustment to the competition, it is difficult to predict who will capture a higher market share. But our model simulation results reported in Section 4 indicates that total traffic volume carried by either Canadian carriers or Korean carriers will not be reduced because of Open Skies.

Given the current climate of BC-Alberta economic cooperation under the *Trade, Investment and Labour Mobility Agreement* (TILMA), it is possible to think about creating BC+Alberta Open Skies region in the future.

Should a full Canada – South Korea Open Skies agreement be stalled at the November 2008 negotiations, a BC Open Skies region may be a viable alternative and open the door to further liberalization of the rest of Canada.

6.10 Travel and Tourism Facilitation Issues

- China has not granted the Approved Destination Status (ADS) to Canada. The majority of current visitors from China are business travellers, students, or people visiting friends and relatives. The growth potential with ADS is substantial.
- A transit visa is required for all Chinese travellers make connections at Canadian airports. This requirement deters Chinese travellers from routing their travel to other countries via a Canadian airport. It is especially difficult to understand why Canadian immigration authority requires entry visa for the passengers making a connection to US airports within the protected area of the Canadian airports as these passengers already have entry visas to the United States.

6.11 Other Issues and Approaches

- Examine the desirability or possibility of introducing Canada's second international carriers (e.g., WestJet) on Asian routes. This will help build political pressures;
- Greater frequencies of meetings between BC government officials and TC officials including the bilateral ASA negotiating team
- Mobilizing lobbying power of the bilateral partner countries and their flag carriers on Ottawa via diplomatic channels and their own influences on Transport Canada (For example, Singapore has been very proactive, and thus, Singapore Airlines currently maintain Singapore-Seoul-Vancouver route service).

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