

**LIBERALIZING AND INTEGRATING AVIATION  
MARKETS IN NORTHEAST ASIA:  
PROSPECTS AND PERILS**

by

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# **Liberalizing and Integrating Aviation Markets in Northeast Asia: Prospects and Perils**

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## **Abstract**

Governments in Northeast Asia have undertaken numerous unilateral, bilateral, and multilateral steps to reduce tariffs and quotas in manufacturing and service sectors. These same governments have, however, been extremely reluctant to dismantle regulatory restrictions segmenting national markets and raising the cost of air cargo and air passenger transport. This paper evaluates reasons why liberalization and integration of aviation markets in Northeast Asia have proceeded so slowly and gauges prospects for future reform. It argues that a Northeast Asia Transportation Area (NATA) be incorporated into the proposed South Korea-Japan and South Korea-Japan-China free trade areas. Regional negotiations over liberalization and integration of national aviation markets should, however, be coupled with multilateral talks within the World Trade Organization framework.

Since World War II, trade volumes in fast-growing Asian economies have increased more rapidly than total output. Whether the growth in trade caused higher economic growth or the higher growth induced higher trade is a question that has been much debated by economists, but the pendulum has recently swung to the view that increased trade induces higher economic growth (Sachs and Warner, 1995; Frankel and Romer, 1999).<sup>1</sup> Governments have, therefore, strong incentives to reduce barriers to trade as well as the transaction and transportation costs associated with trading goods and services, as the increased trade will stimulate additional economic growth. And over the last three decades, fast-growing Asian economies have taken numerous unilateral, bilateral, and multilateral steps to reduce tariffs and quotas in manufacturing and service sectors. These same governments have, however, been extremely reluctant to dismantle regulatory restrictions segmenting national markets and raising the cost of air cargo and air passenger transport. This is particularly puzzling, since reduced air transport costs would stimulate trade in a wide variety of manufactured products and services. This paper's goal is to evaluate reasons why liberalization and integration of aviation markets in Northeast Asia have proceeded so slowly and to gauge prospects for future reform.

## **I. Barriers to Reform and Integration in Aviation Markets in Northeast Asia**

### **A. Park's Analysis of Trade Barriers in Aviation**

Kichan Park (ch. x, this volume) argues that high trade barriers separate the major Northeast Asian air transport markets because of the three major players—China, South Korea, and Japan—only South Korea really wants increased market integration. Park identifies multiple factors constraining Chinese-South Korean liberalization. These

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<sup>1</sup> For a contrary view, see Rodríguez and Rodrik (2001). An efficient aviation sector also helps a country participate in internationally specialized intermediate production processes wherein finished intermediate goods need to be quickly transported to production centers in other countries.

include the differential market size of the two countries; the lack of a civil aeronautics negotiating agency in China; conflicts among Korean carriers with respect to liberalization; poor Chinese aviation facilities; restricted economic cooperation due to China's special relationship with North Korea; strong Chinese control over visas; limited Korean airports to serve Chinese traffic; lack of implementation of their 1999 air cargo agreement; and poor management of Chinese aviation companies. Park also identifies significant barriers blocking integration of the Korean and Japanese markets, including Japan's protectionist tendencies in aviation; large gaps in per capita income; the two countries' history of conflict; restrictive visa policies; professional manpower gaps; and problems in airport capacities in Japan, particularly at the two airports serving Tokyo, Narita and Haneda. He uses a variety of survey techniques to evaluate government and industry attitudes toward the airline industry environment in all three countries. Barriers are categorized as (1) subject, (2) environment, (3) resources, and (4) mechanism. Separate surveys are conducted of each type of barrier.

Perhaps the most interesting results are those related to perceptions of managerial competence. On a scale of 1 (very low) to 5 (very high), Japanese companies (3.70) receive higher ratings for managerial competence than Korean companies (2.95) and Chinese companies (2.41). Such findings indicate that Chinese firms may have difficulty providing services of the requisite quality in an integrated market. Other findings of interest pertain to the perception that physical barriers and bilateral air services agreements are more important in constraining Korea-Japan service than Korea-China service; and that attitudes towards liberalization are more significant barriers constraining the Korea-China service than the Korea-Japan service.

Differential size is often a problem in negotiating air service agreements between two countries, and is a clearly a worry for China with respect to a liberalized China-South Korea air services agreement. China worries that South Korea will send huge numbers of flights into its large market, bringing along travelers and cargo from countries with more restrictive air service agreements with the large country, such as the United States.<sup>2</sup>

Compounding this worry is that China cannot counter with the same strategy, as it has only gained access to a relatively small market. This argument loses its appeal, however, if China is also pursues liberalized aviation agreements with other countries. China will then gain access to a group of other aviation markets that collectively comprise a large market. In sum, differential market size should not be an impediment to liberalization unless China intends to maintain high trade barriers in aviation with other countries.

The poor management of the three major state-owned Chinese airlines may, however, be a more significant barrier to integration of air transport services in Northeast Asia. La Croix and Wolff (1995) argued that integration of regional aviation markets can succeed only when major airlines participating in these markets have been privatized. Competition among state-owned firms receiving substantial subsidies from their national governments is unlikely to generate a stable competitive equilibrium. The multilateral aviation arrangement that has evolved in Western Europe in tandem with the growth of the European Union (EU) has been plagued by just this difficulty. Measures to liberalize EU aviation were phased in between 1987 and 1997. Currently, any EU-based airline is allowed to serve any two cities in the European Union and to set fares unilaterally, regardless of the airline's home country. Many airlines in the European Union are,

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<sup>2</sup> Of course, the argument may be limited by restrictive aviation agreements between the small country and the third country. This may prevent passengers from the third country from traveling to the small country in order to fly on to the large country.

however, still state owned. Enhanced competition has led to huge losses at numerous European airlines, including state-owned carriers in France and Greece. In a competitive market, money-losing airlines would respond by cutting costs, possibly by laying off workers or cutting wages, and rationalizing service. In contrast, many European governments have responded to losses at state-owned airlines by providing multi-billion dollar subsidies. Under these conditions, competition among firms for customers will not necessarily improve overall welfare, as inefficient firms neither lose market share nor leave the market and efficient firms find that fares are artificially low due to government subsidization of additional supply from inefficient firms.

The European example is particularly applicable to Northeast Asia, as most major airlines in China, Mongolia, North Korea, and Russia remain state-owned firms. Until these airlines are at least partially privatized, national governments are likely to have too large of a stake in their success to allow for regional liberalization of air services. In China, the poor management of the three state-owned firms provides a compelling rationale against early integration of China into a liberal, integrated Northeast Asian aviation market. More extensive privatization of the three major Chinese carriers would appear to be a prerequisite for a much more liberal air services agreement between China and Korea or China and Japan.

### **B. Zhang's Analysis of Chinese Barriers**

Anming Zhang (ch. x, this volume) surveys a fast-growing Chinese aviation market that is held back from even more rapid growth by daunting regulatory, administrative, political, and development barriers. Airport infrastructure in China expanded rapidly during the 1990s, particularly in Hong Kong, Beijing, and Shanghai,

yet not rapidly enough to meet increasing cargo and passenger demands. The three major Chinese airline groups (Air China, China Eastern, and China Southern) were assembled from smaller regional airlines in April 2001, and the state retains roughly 85% ownership stakes in them. Using International Air Transport Association (IATA) data, Zhang finds that the labor productivity of Chinese carriers is only about a quarter of the labor productivity of other IATA carriers. This may help to explain China's protectionist international air policy. It allows no Fifth Freedom rights to foreign carriers. Only one Chinese carrier is assigned rights to most international routes. And China shows only limited interest in opening new international routes.

Zhang is somewhat pessimistic about immediate prospects for full regional integration of air transport service due to the low productivity of China's carriers. He spends considerable space reviewing the case for initial liberalization in air cargo rather than passenger services. Ultimately, he remains pessimistic about this alternative due to the large proportion of cargo revenues that Asian (and particularly Chinese) carriers derive from cargo on their passenger flights (p. 19). Zhang (pp. 24-35) presents five areas of the air cargo market that would need to be reformed in all three countries if air cargo liberalization is to proceed: (1) repealing restrictions on foreign couriers; simplifying procedures for transshipped cargo; (3) expediting processing of imported air cargo undergoing minor processing; (4) allowing foreign air carriers/terminal operation to operate at each other's airports; and (5) deregulating ancillary support services critical to efficient provision of integrated air cargo service. Each of the five areas could be dealt with expeditiously if the three countries had a strong desire to proceed towards achieving a liberalized, integrated air cargo market

Given this panoply of barriers facing regional air cargo or passenger integration, Zhang focuses his policy recommendations primarily on the customs barriers facing cargo shipments as well as business and tourism passengers. It is, of course, critical to consider these costs when evaluating China's transportation network as such transaction costs can constitute a significant proportion of the overall cost of shipping products. Zhang correctly argues that even countries with restrictive air transport policies have incentives to reduce customs costs, as the rents available for extraction by national carriers and governments can subsequently increase and delivery times, particularly important in a world of just-in-time inventory systems, can be reduced.

Since the task of simplification of trade procedures, including customs, has already been placed on the WTO agenda (by the 1996 Singapore ministerial conference) and has been significantly advanced by the 1999 revision of the Kyoto Convention (setting standards and practices for customs administration), Zhang emphasizes the improvements that can be effected by reforms in complementary sectors to air transport. While Zhang's recommendation is understandable, Zhang's five reforms (listed above) could very likely be implemented in the medium term. A better policy recommendation would be to focus on achieving immediate agreement on deferred, medium-term liberalization of the air cargo market. Deferred agreements may seem unrealistic in some respects (by pushing implementation into the future and onto the backs of a new government), but they change current perspectives from defending current rents (as they are still being earned) to preparing for future liberalization. Phasing in Zhang's five proposed reforms over a backloaded five-year period could, in fact, spur activities by all parties that would expedite future integration of regional air passenger markets.



### **C. Yamauchi's Analysis of Japanese Barriers and Prospects**

Hirota Yamauchi's article (ch. x, this volume) analyzes pertinent features of the China-Japan and Korea-Japan bilateral air service agreements; identifies major issues pertaining to each agreement; and considers in depth the constraints imposed by the lack of capacity at Tokyo's Haneda and Narita airports. He finds that the China-Japan bilateral designates carriers for a fixed number of assigned routes and specifies capacity on each route. Capacity is adjusted somewhat to reflect seasonal variations in cargo and passenger demands. Japanese airlines are restricted to serving just 13 Chinese cities and have very limited beyond rights to Europe, Asia, and the Middle East. Chinese airlines are also restricted to serving 13 Japanese cities and have very limited beyond rights to North and Central America. The restriction on Japanese airlines serving just 13 Chinese cities is particularly important, given China's huge geographic expanse and its 34 cities with over one million people.<sup>3</sup> Expansion of these rights could be an important impetus to attracting additional foreign direct investment to China's interior regions. Slot restrictions at Narita Airport are particularly important, as Japan has little capacity to expand Chinese service to the Tokyo area (or Japanese service from the Tokyo area to China) until the government completes major expansion of its Tokyo airport facilities.

The Korea-Japan bilateral also requires carrier designations; assigns a fixed number of routes; and specifies the capacity on each route. Yamauchi observes that "in practice, the capacity limits are not binding."<sup>4</sup> In contrast to Chinese airlines, which are permitted to serve 13 Japanese cities, Korean airlines are permitted to serve 19 Japanese cities. Current issues in this bilateral include slot allocation at Narita Airport; limitation

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<sup>3</sup> In contrast, Japan has just 11 cities with over one million people.

<sup>4</sup> This could be the result of well-coordinated oligopoly pricing.

of sixth freedom rights (whereby carriers are allowed to use third and fourth freedom rights to serve B from A and C from B to directly serve A and C); short-term demand increases on certain routes due to 2002 World Cup Soccer; and opening additional airports in Japan to service from Korea. In lieu of opening new air transport services/routes between the two countries, Yamauchi also details other ways in which user costs can be reduced.<sup>5</sup>

The opportunities presented by 2002 World Cup Soccer should not be viewed as temporary. Instead they should provide the defining moment whereby the two countries agree on a permanent expansion of service on Seoul-Tokyo routes. Shuttle service similar to that on Boston, New York City, and Washington, DC air routes could be initiated by auctioning packages of landing/takeoff slots at major and minor airports to Korean and Japanese airlines. The recent opening of the huge new airport at Incheon to serve the Seoul metropolitan area would facilitate provision of shuttle service from the Korean side and the expected opening of the second runway at Narita Airport in April 2002 and better utilization of Haneda Airport during morning and evening hours (as suggested by Yamauchi) could facilitate expanded services between Seoul and Tokyo.

The Japanese and Korean governments are currently discussing the possibility of a free-trade area between the two countries.<sup>6</sup> Transportation issues have been incorporated into the provisions of other major free trade areas, including NAFTA and

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<sup>5</sup> Yamauchi's suggestion, that Japan institute high-speed train service from Narita to downtown Tokyo, parallels Zhang's suggestions with respects to customs services. If the air transport service itself cannot be improved, there can still be substantial savings to users from taking action to reduce other costs associated with air travel, such as the ground travel time required to reach final destinations. While this may only have limited effects on increasing the volume of shipments/passengers, it can nonetheless improve service quality and reduce total user costs.

<sup>6</sup> Proposals for a China-South Korea-Japan free-trade area were also aired during 2001. China and ASEAN agreed in November 2001 to form a free-trade area within ten years. The discussion in the text clearly could also be applied to these potential free-trade areas.

the EU, and there is no reason why a bilateral agreement deregulating air service between and within the two countries could not be included in the provisions for a Korea-Japan Free Trade Area. Consider the following plan: Both countries would essentially agree to form a single aviation market by 2012. Airlines would be free to totally restructure their services to realize economies from multiple hubs in the two countries and a more efficient hub-and-spoke network. The Korea-Japan unified aviation market would be phased in over a 10-year period, much as the European Union aviation liberalization was phased in over a 10-year period, 1987-1997. Cabotage, i.e., service provided by a foreign carrier between two cities in the same country, would not be allowed until the end of the phase-in period, and perhaps could be subject to phased-in implementation according to specific routes. The agreement could be structured to allow China, Mongolia, Russia, and even North Korea to join unilaterally if they were able to meet one critical criterion: substantial private ownership stakes in their major airlines. As I argue above (see section I.A.), unless major airlines are primarily privately owned and managed, an open-entry open-exit competitive market is likely to attain a stable equilibrium.

The result of Japan-Korea integration of their aviation markets would probably be very similar to the results observed in the United States and Europe: a total restructuring of the aviation network away from government dictates and towards efficiency (Winston, 1993, 1998). While the resulting hub-and-spoke systems often increased the number of stops and decreased the number of direct flights, they also produced surprising results in both countries. In the United States, service frequency between many destinations increased with the development of the hub-and-spoke system despite airline competition under regulation to offer excessive numbers of flights (Winston, 1998). In Europe, the

deregulation of aviation produced unprecedented cooperation and code-sharing among national airlines as well as the formation of small regional hubs serving relatively small cities across the entire Western European region.

If an open skies agreement between South Korea and Japan devolved route assignments to regional authorities, there could be a dramatic expansion of air service between the two countries. Many small Japanese cities, such as Tottori and Yonago, could serve as micro-hubs, collecting passengers from other small cities on the Sea of Japan for onward service to larger cities in both Korea and Japan. In turn, development of these small regional hubs in Japan could serve as a major stimulus to growth for the cities surrounding the Sea of Japan.

The benefits from such arrangements to Japanese and Korean businesses in these small cities could be large. Consider the costs, primarily in time, for a businessperson in Yonago or other small cities in the Kansai region to travel to Seoul. The businessperson must first take a train to Osaka, connections to Kansai Airport, and then a flight to Seoul.<sup>7</sup> This often means a full day devoted to travel. A micro-hub would allow the businessperson to take a short commuter flight to Yonago Airport or Tottori Airport and then a flight to Seoul. A full day of travel could be cut in half. Similar micro-hubs could also form in smaller Korean cities.

The benefits to smaller Japanese and Korean cities facing the Sea of Japan could be quite large. Lower transportation costs are complementary to foreign direct investment, to resource shipments, and to trade. Mini-hubs and airline deregulation would not, of course, go unopposed. There would be some losers from mini-hubs,

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<sup>7</sup> An alternative would be to fly to Itami Airport in Osaka, take a bus to Kansai International Airport (offshore of Osaka), and then fly to Seoul.

particularly airlines serving Kansai and Itami Airports in Osaka and railroads bringing travelers from small cities to Osaka. Japanese airlines would surely be opposed, as they would most likely lose market share to the more competitive Korean airlines.

Nonetheless, unless Northeast Asian countries are willing to take some bold action to deregulate their airline markets, they risk losing substantial market share to American airlines with their new-found rights in both the Japanese and Korean aviation markets.

Since Japanese airlines would probably lose market share in a Japan-Korea aviation area, the institution is probably not politically viable unless it is combined with other trade initiatives. Joh (1998, p. 9) has suggested that the Northeast Asian region consider forming a regional shipping area in which free trade in shipping is allowed. He found that "total regional benefit can be maximized ... when a common shipping policy is pursued. As Europe's common transport policy has expedited the creation of [the] EU, a Northeast Asia common shipping market could enhance cooperation and interaction of the region." Joh's proposal and my proposal could be combined: a Northeast Asian Transportation Area (NATA) allowing free trade in air and shipping services, with participation restricted initially to Japan and Korea. While this proposal would increase the total welfare gains to be shared by the two countries, some problems with the distribution of gains and losses still remain, as Joh has argued that Korean ports would gain at the expense of Japanese and Chinese ports. Opposition from Japanese shipping firms and ports is to be expected.

A more feasible proposal might be constructed by bundling the NATA proposal with the proposal for a Japan-South Korea or Japan-South Korea-China Free Trade Area. This would allow other difficult subject areas to be included in the negotiations and final

agreement, areas in which liberalization would generate gains for Japan, offsetting losses in the transportation sector. It would also dilute opposition from Japanese transportation firms and employees by creating a new group of Japanese producers in other industries with incentives to lobby for the legislation. Finally, inclusion of NATA in the Free Trade Area Agreement would increase the overall benefits to be reaped by both parties from the trade pact as well as its overall political appeal.

## **II. The Doha Round: A Global Opportunity**

The latest round of multilateral talks on international trade (the Uruguay Round) achieved significant reductions in tariff and non-tariff barriers to trade, yet barely touched on air transport services. While the General Agreement on Trade in Services (GATS) in the 1993 World Trade Organization (WTO) Agreement contained an Annex on Air Transport Services, the Annex did not cover any issues pertaining to traffic rights and services.<sup>8</sup> Despite government protests to the contrary, nothing in the economic structure or organization of the international airline industry warrants the protection of domestic airlines in either international or domestic markets. Multilateral negotiations have, however, been successful in dismantling other sensitive trading regimes, in particular the Multifibre Agreement regulating trade in textiles. There is absolutely no reason why air transport services could not be similarly addressed in the just launched Doha Round of WTO negotiations.<sup>9</sup>

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<sup>8</sup> The Annex covers aircraft repair and maintenance services; marketing of air transport services; and services stemming from computer reservation systems.

<sup>9</sup> Colombia submitted a proposal to the WTO in November 2001 to extend the Annex on Air Transport Services in the WTO's General Agreement on Trade in Services to include trade in supporting aviation services such as "ground handling services, rental and leasing services, catering services, and other supporting services, notably cleaning and disinfecting services." For text of the proposal, go to [http://www.wto.org/english/tratop\\_e/serv\\_e/s\\_propnewnegs\\_e.htm](http://www.wto.org/english/tratop_e/serv_e/s_propnewnegs_e.htm).

How should a WTO agreement on air transport services be structured? It is critical that it respect the fundamental principles of the WTO: opening of domestic markets, transparency, tariffication, most-favored nation treatment, and national treatment.

Zhang (ch x, this volume, pp. 8-9) points out significant problems with applying the WTO's principles of national treatment and MFN. Similar problems were faced by the WTO in its incorporation of intellectual property rights into the GATT process via the 1994 Trade-Related Intellectual Property Rights Agreement (TRIPS). Although the Berne and Paris Conventions provided for national treatment and MFN for patents and copyrights, the Conventions did little to establish or enforce foreign intellectual property rights (IPRs) in countries with poor internal laws and enforcement standards. TRIPS revolutionized the international IPR regime by establishing minimum standards for copyrights, patents, and trademarks and specified minimum enforcement standards. Developing countries were provided with a 5-year transition period and very poor developing countries with a 10-year transition period. A similar agreement in the air transport field providing minimum standards of access by foreign airlines could revolutionize the air transport industry in the same way that TRIPS has radically changed the IPR environment.

A WTO aviation agreement would be more difficult to negotiate than the TRIPS Agreement, as geography and physical constraints play important country-specific roles in air transport that are not present in intellectual property rights. Zhang suggests that conditional MFN may be a better standard than MFN in this area, as it "would enable bilateral and multilateral arrangements to co-exist depending on national and regional

preferences” (ch. x this volume, p. 10). There is precedent in the WTO for the use of conditional MFN, as it was incorporated in the WTO’s Agreement on Government Procurement.

Regional trade arrangements can play a critical role in stimulating trade and dismantling trade barriers, as the EU and NAFTA have shown. Yet Jagdish Baghwati and Anne Krueger rightly remind us that those experiments are fraught with peril and have the potential to divert as much trade as they create. While a Northeast Asian Transportation Area and a Korea-Japan Free Trade Area are steps in the right direction, they are complements to, not substitutes for, multilateral negotiations. The difficulty of including air transport services in the Doha Round is immense, yet one for which the roadmap to the destination is in the briefcases of trade negotiators. Both paths to liberalization and integration need to be pursued.



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