4

Effects of Airline Alliances and Partnerships on Competition

The series of mergers and failures of domestic carriers from the mid-1980s to the early 1990s led to ominous predictions that the decade would end with a more concentrated industry consisting of a few large airlines exploiting their market power. *Winds of Change*, released shortly after several major airline mergers and failures, expressed concern that these trends might continue, possibly jeopardizing the many consumer benefits achieved from deregulation.

These concerns may have been exaggerated or premature. The industry did not become significantly more concentrated during the 1990s, despite the failure of some large incumbent carriers (e.g., Eastern and Pan American) early in the decade. Unanticipated developments—such as the expansion of Southwest Airlines and the emergence of many other low-fare carriers—have counteracted any industry tendency toward concentration. In 1992, 95 percent of domestic passenger trips were on the top 10 airlines, and 70 percent on the top five. These percentages have declined slightly. By 1998, 91 percent of trips were on the top 10 air-

lines, and 67 percent on the top 5 (Table 4-1). Likewise, 78 percent of the revenue was generated by the top 5 carriers in 1992, compared with 71 percent in 1998. These declines occurred mainly during the first half of the decade; levels have been stable since.

Though industry-wide trends do not indicate increased concentration, trends at the airport and city-pair levels suggest slight increases. As discussed in Chapter 2, many hub markets remain highly concentrated and the number of medium- to high-density city-pair markets with three or more competitors declined during the 1990s. Concentration at the city-pair level—where airlines compete for passengers—raises the possible exertion, or exploitation, of market power.

For various reasons—including the difficulties of integrating unionized work forces—future consolidations of airlines might eschew outright mergers and take more indirect forms, such as strategic "codesharing" alliances, joint ventures, and other collaborations and partnerships. Codesharing agreements among major carriers, commonplace in international aviation, also have taken root in the domestic sector, as have certain other partnerships, such as shared frequent-flier programs. These developments, both international and domestic, suggest how the industry might evolve in the next decade.

BACKGROUND AND KEY COMPETITION ISSUES

Airline alliances are not a new phenomenon. Major carriers have shared their codes with regional and commuter airlines for more than 30 years.

Table 4-1 Share of Domestic Passenger Trips and of Revenues for Top 10 U.S. Carriers 1992, 1995, and 1998

	Percentage of Industry Total					
	Trips			Revenue		
	1992	1995	1998	1992	1995	1998
Top 3 Carriers	63	41	45	53	49	49
Top 5 Carriers	70	65	67	78	72	71
Top 7 Carriers	85	78	81	91	90	85
Top 10 Carriers	95	91	91	98	95	95

SOURCE: Database Products, Inc.

These "vertical" alliances benefited consumers and did not involve airlines that competed or were likely to compete in the same markets. What is new over the last half-dozen years is that codeshare agreements and other airline partnerships have become common in international aviation, and now are being adopted by some large domestic carriers. The competitive implications of these partnerships, sometimes involving rival airlines, has become an issue only recently; the long-term implications for competition in the airline industry remain open questions.

Early Commuter Codeshare Agreements

In the codeshare's earliest and simplest form, a commuter carrier would adopt the two-letter identifier of a major carrier to list its flights in the *Official Airlines Guide* (OAG), and later in computer reservation systems (CRSs). By relinquishing its own code, the commuter carrier could have its offerings listed prominently as online itineraries in the CRS, increasing its traffic from travel-agent bookings. The major carrier would gain from an additional online source of feed traffic for its hub-and-spoke system without having to serve low–volume commuter markets directly at its own higher cost structures.

Commuter codesharing started in 1967, when Allegheny Airlines, obligated by the Civil Aeronautics Board (CAB) to serve some unprofitable short-haul routes, shared its codes with commuter airlines operating smaller, less costly propeller aircraft. Since then, codesharing agreements between major and commuter airlines have become more comprehensive and common. Just about every commuter carrier now has a codesharing agreement—often exclusive—with a major carrier. Frequently, the commuter airline adopts a variation of the major carrier's name (e.g., Delta Connection, US Airways Express, American Eagle), along with common aircraft color schemes, flight attendant uniforms, and ticket stock. Commuters participate in the major carrier's frequent–flier programs; marketing, advertising, and reservations are often handled by the major airline; and revenues are allocated among the partners according to an agreed formula. Many commuter airlines have become—or act as—subsidiaries of their larger codeshare partners.

Such integrated relationships offer economies of traffic density and allow for tighter connections and coordinated baggage handling, check-

in, and ticketing, as well as other less tangible benefits, such as the enhanced service level and safety requirements major carriers can impose on their codeshare partners. Because only some of these results could be achieved under the once-common "interline" agreements between independent commuter and major carriers, these more integrated relationships generally are viewed as favorable to travelers. Only rarely did the commuter and major carrier compete with one another for traffic in the same markets.

As codeshare arrangements proliferated during the 1980s, however, some observers expressed concern that carriers without these agreements—especially unallied commuters and larger start–up and secondary carriers at major hub airports—effectively would be denied flow traffic, not only resulting in increased dominance by the hubbing carrier but also in a decline in independent commuters (*Winds of Change*, 288–289). The latter has certainly occurred—unaligned commuter airlines have become rare, and the total number of commuter airlines has declined by more than half since 1981 (FAA 1998, IV-6).

International Codeshare Affiliations and Partnerships

In much the same manner as domestic codeshare affiliations, arrangements between U.S. and foreign airlines can benefit travelers in smaller markets by connecting nonrival networks. But foreign airline codesharing also has raised many of the same concerns as those of domestic affiliations—plus some others. Nearly all large foreign carriers offering international service—as well s many smaller foreign carriers that focus on domestic and connecting service—have entered into codesharing or other marketing agreements, such as shared frequent–flier programs, with U.S. carriers. Some of these are highly integrated affiliations, involving not only schedule coordination but sharing aircraft, ground support, reservations, and marketing programs. As with the major U.S. carriers and their affiliated commuters, many of the participants in international alliances do not normally compete with one another. For instance, a U.S. carrier might share its codes with a foreign airline that offers connecting service within its own country or region. Denied an opportunity to carry this connecting traffic itself—perhaps because of

national restrictions on ownership and entry (or cabotage)—the U.S. carrier might find it advantageous to coordinate with foreign airlines.

There are some fundamental differences, however, between the international and commuter codeshare agreements. Besides scale, the most obvious difference is that many international alliances involve airlines that compete with one another or have done so in the recent past. Neither carrier relinquishes its own code. The international codeshare arrangement described earlier—in which a U.S. international carrier shares its code with a foreign airline serving internal domestic routes—is rare, because most foreign airlines also operate internationally, sometimes in the same gateway-to-gateway markets as their U.S. partners. An undesirable consequence, therefore, might be a decline in rivalry on some overlapping routes, especially on the dense, gateway-to-gateway, intercontinental segments. Large international operators also can become significant global competitors in the future, especially if national restrictions on foreign ownership and entry are substantially eased or lifted. In contrast to airlines in a typical commuter code-sharing arrangement, partners in the international arena are more likely to be actual or potential competitors.

Domestic Airline Partnerships

In most initial cases of domestic codesharing involving major U.S. airlines, the partners were not competitors in many markets—and certainly not in the markets where codes were shared. The codeshare routes have consisted mainly of lightly traveled city-pairs, requiring transfers at two hub airports, each operated by one of the partners. Continental and America West entered into a limited codeshare arrangement in 1994, when the two linked their networks to serve small, peripheral city-pair markets such as Tucson, Arizona, to Portland, Maine. However, the 1998 agreement between Northwest and Continental—the fifth and sixth largest in the United States in terms of passenger trips—to share codes on many routes introduced a much more comprehensive arrangement (GAO 1999). Whether other carriers will pursue similar codeshare alliances is unclear. After the Northwest-Continental plan was announced, several other major U.S. carriers unveiled intentions to share codes on flights (e.g., United-Delta and American-USAirways). However, none of these other codeshare plans involved equity transfers, unlike the

Northwest-Continental plan—and none has developed further; yet each opens up the possibility of two major competitors joining on routes between their hubs.

Many partners share their frequent-flier programs. Typically, reciprocal programs allow members of both frequent-flier programs to earn miles on either, although restrictions vary on whether miles can be combined or redeemed on all flights, including international service. Joint availability of some other services, such as airport club lounges, is also common.

Key Competition Issues

As noted, adverse effects on travelers in nonstop, gateway-to-gateway and hub-to-hub markets—where now-allied carriers once competed—are a potential drawback of codesharing, and have received much attention. However, less attention is given to the possible cumulative effects of these alliances, both domestically and internationally, on the U.S. domestic industry, particularly on the viability of unaffiliated U.S. airlines.

Although alliances forged with equity transfers are routinely subject to merger review by the Department of Justice (DOJ), there are no clear guidelines for when domestic codeshare agreements that do not involve such holdings—or when other domestic collaborations, such as reciprocal frequent-flier programs—should be reviewed under the merger principles. A concern is that some of these domestic affiliations might lead to outright or de facto mergers with potentially negative consequences for consumers. A longer-range issue that perhaps has received the least attention is how the global alliances among some of the world's largest carriers will affect industry competition if national and international restrictions on ownership are lifted.

ALLIANCES AMONG MAJOR DOMESTIC CARRIERS

Airline mergers were commonplace in the 1980s. At that time, the Department of Transportation (DOT) had authority to review mergers and allowed many to proceed, including several involving failing airlines as well as carriers competing in many of the same airports, cities, and city-pair markets. The 1986 mergers of TWA with Ozark and North-

west with Republic are prominent examples involving competitors—TWA and Ozark shared a hub in St. Louis, and Northwest and Republic shared hubs in Detroit and Minneapolis.

DOJ, which had objected to those two mergers, since has been given authority to review airline mergers and acquisitions. Although DOJ has not disapproved of mergers between carriers that have no significant carrier network overlap—for example, the purchase of Reno Air by American Airlines—it generally has opposed mergers when networks overlap or when the two carriers could develop into significant competitors in the future. *Winds of Change* endorsed this approach, recommending that "DOJ oppose mergers or asset acquisitions in which the carriers offer substantial parallel service or share a hub airport; however, DOJ should not necessarily oppose mergers or asset acquisitions of carriers with complementary or end-to-end routes" (p. 17).

Early Limited Codesharing Agreements

The first significant codeshare affiliation between two large jet operators—the arrangement between Continental and America West—involved several dozen low-volume routes in which neither carrier previously had competed against the other. Alaska and Northwest subsequently entered into a similar partnership on a small number of low-density routes. In these codeshare agreements, neither partner previously had operated over the entire route, making the alliances essentially vertical, or end-to-end, with no overlaps in service and limited potential for competition. Travelers flying on codeshare itineraries normally transferred twice, once at each of the partners' hubs, benefiting from the link between the two hub-and-spoke networks. These agreements did not raise antitrust concerns.

Proponents of limited codesharing point to two kinds of consumer benefits. First, codeshare partners can coordinate connections, baggage handling, and other services more effectively than under interline arrangements. Second, the codeshared itinerary would appear on CRS displays as an online service, preferred by travelers and listed ahead of interline offerings. In markets where there already was true, single-carrier online service, the creation of another ostensible online option, it is argued, could spur competition among airlines, benefiting travelers. Of

course, some travelers might feel misled by the portrayal of interline service as online.

From the standpoint of the codesharing airlines, other advantages are possible. A preferential online listing for each of the partners could displace other options from schedule displays and lead to more bookings from travel agents.

More Extensive Domestic Codesharing Agreements

Northwest's planned ownership position in Continental in 1998 raised the possibility of more extensive codesharing among the nation's fifth (Northwest), sixth (Continental), and ninth (America West) largest airlines in terms of passengers carried. Starting in 1999, Northwest, Continental, and America West began sharing codes on additional domestic and international routes. However, these arrangements have not involved nonstop routes between the hubs of the three airlines.[1]

Unlike earlier codeshare agreements, the Northwest-Continental-America West arrangements have involved many markets, usually one-stop destinations, where one or more of the carriers already had offered through-service. In these cases, no completely new online service has been created, and the codeshare has not introduced new competition. Table 4-2 shows the scheduled OAG listings created by a codeshare among Continental, Northwest, and America West in a one-stop market. In this example, Continental already had offered service in the market through its Houston hub. Rather than create new online services, the codeshare simply tripled the number of schedule listings for Continental's flights. Only one new online connection was created (the 1:30 p.m. flight) through a combination of Continental and Northwest flights.

In the committee's opinion, it is plausible that consumers benefit from codesharing by major carriers on low-volume routes in which neither partner previously had offered service over the entire route and was not likely to do so. Such agreements might lead to more convenient con-

[1] The carriers may have abstained from agreements partly because of a suit by DOJ seeking to block Northwest's acquisition of Continental and also because of concerns raised by DOT.

Table 4-2 Example of Domestic Codeshare Schedule Listing in *Official Airline Guide*

OAG FlightDisk – Worldwide Edition
Effective 5/1/99 thru 6/14/99

CONNECTIONS

Outbound Date: **5/19/99** From: **Corpus Christi, Texas**
To: **Wayne County Airport – Detroit**
Airlines: **All**

Days	Connecting Flights	Depart		Arrive		Connect	Duration
XThSaSu	CO 1888/CO 1746	6:00a	CRP	11:24a	DTW	IAH	04:24
XThSaSu	HP*1888/HP* 1746	6:00a	CRP	11:24a	DTW	IAH	04:24
XThSaSu	NW*7888/NW*7746	6:00a	CRP	11:24a	DTW	IAH	04:24
Daily	DL 4571/DL 294	6:00a	CRP	11:52a	DTW	ATL	04:52
Su	WN 8/WN 487	6:55a	CRP	3:50p	DTW	LIT	07:55
Daily	CO 3712/CO 1748	9:00a	CRP	2:22p	DTW	IAH	04:22
Daily	HP*3712/HP* 1748	9:00a	CRP	2:22p	DTW	IAH	04:22
Daily	NW*7748/NW*7748	9:00a	CRP	2:22p	DTW	IAH	04:22
XSa	WN 34/WN 875	1:20p	CRP	9:35p	DTW	HOU	07:15
XSaSu	CO*3674/CO* 6836	1:30p	CRP	7:54p	DTW	IAH	05:24
XSaSu	CO*3674/NW 1836	1:30p	CRP	7:54p	DTW	IAH	05:24
XSaSu	NW*6974/NW 1836	1:30p	CRP	7:54p	DTW	IAH	05:24
XSa	CO 3704/CO 1752	5:00p	CRP	10:44	DTW	IAH	04:24
XSa	HP*3704/HP* 1752	5:00p	CRP	10:44	DTW	IAH	04:24
XSa	NW*7204/NW* 7752	5:00p	CRP	10:44	DTW	IAH	04:24
XSa	CO 4198/CO 1712	8:10p	CRP	1:35a+1	DTW	IAH	04:25
XSa	HP*4198/HP* 1712	8:10p	CRP	1:35a+1	DTW	IAH	04:25
XSa	NW*7498/NW*7712	8:10p	CRP	1:35a+1	DTW	IAH	04:25

*Codeshared flight (excluding commuter codeshares with affiliated major carriers).

DL = Delta Airlines
NW = Northwest Airlines
CO = Continental Airlines
HP = American West Airlines
WN = Southwest Airlines
See Appendix D for key to airport codes.

nections and create some additional competitive routes for travelers in smaller markets.

Less plausible, however, are the consumer benefits from codesharing that major carriers have claimed for single-connect or nonstop markets in which one or both of the partners already operates through-service. The concern is that such arrangements will reduce competition in these markets, because it is likely that the partners have—or had—competing

flights in the market, or that they had the potential to become rivals in the market, because most nonstop and one-stop routes involve the partners' hubs either as an end or transfer point.

These arrangements also might aim at increasing market share by diverting traffic from competitors through the preferential listings of online itineraries in CRSs. This problem can be corrected as travel agents learn to sort through the displays to locate competing itineraries. Close scrutiny of the intent, fairness, and competitive effects of such practices, however, is warranted. As discussed in Chapter 3, it is critical that the ticket distribution system present unbiased and reliable information. DOT should evaluate these listings through its oversight of CRSs.

Recommendation on CRS Listings of Codeshares

The committee recommends that DOT consider revising existing CRS rules to prohibit listings of the same itinerary under more than one carrier's code when one of the major codeshare partners—or its commuter affiliate—serves the entire itinerary.

Shared Frequent-Flier Programs and Other Partnerships

Reciprocal frequent-flier programs have not been restricted by either DOT or DOJ, and are generally viewed as less potentially harmful to competition than codesharing (GAO 1999). Reciprocal programs benefit some travelers by allowing them to accumulate more frequent–flier credits and redeem them for free travel to a larger number of possible destinations. Participating airlines benefit by making their frequent–flier programs more enticing and more difficult to match. It is unclear whether joint frequent–flier programs spur collaboration among partners in other ways or cause them to compete less aggressively, or make them reluctant to compete directly. The net benefits to consumers depend on these competitive effects and on the creation or enhancement of market power. Whether shared frequent–flier programs and limited codesharing relationships might evolve into more comprehensive and substantive relationships, undermining the partners' incentives to compete and increasing the potential of de facto mergers, deserves attention.

DOT has authority to review the competitive effects of partnerships among major U.S. airlines. New legislation, passed in October 1998, gives it authority to impose waiting periods on certain newly created or proposed partnerships—for example 30 to 60 days for reciprocal frequent-flier programs and up to 150 days for codeshare agreements.[2] However, the legislation does not offer DOT guidance on how to assess these partnerships nor on the bounds of its authority to oppose them. Because DOT's authority does not limit DOJ's authority to review alliances, the waiting period can be used by DOJ to evaluate joint venture proposals under the merger standards.

In the committee's opinion, early notification and evaluation of domestic airline alliances and partnerships by DOJ's Antitrust Division should be formal and obligatory, because the affiliations can be irreversible and possibly precursors of de facto mergers.

Recommendation on DOJ Review of Airline Collaboration Plans

The committee recommends that all collaboration plans among major U.S. airlines be subject to traditional, economic-based merger analyses by DOJ, and that these plans—even if they do not involve exchanges of equity or transfers of assets—be subject to advance notification requirements similar to those required under the Hart-Scott-Rodino process.[3]

INTERNATIONAL ALLIANCES

Although the primary purpose of this study is to assess airline competition in U.S. domestic markets, most large U.S. domestic carriers also

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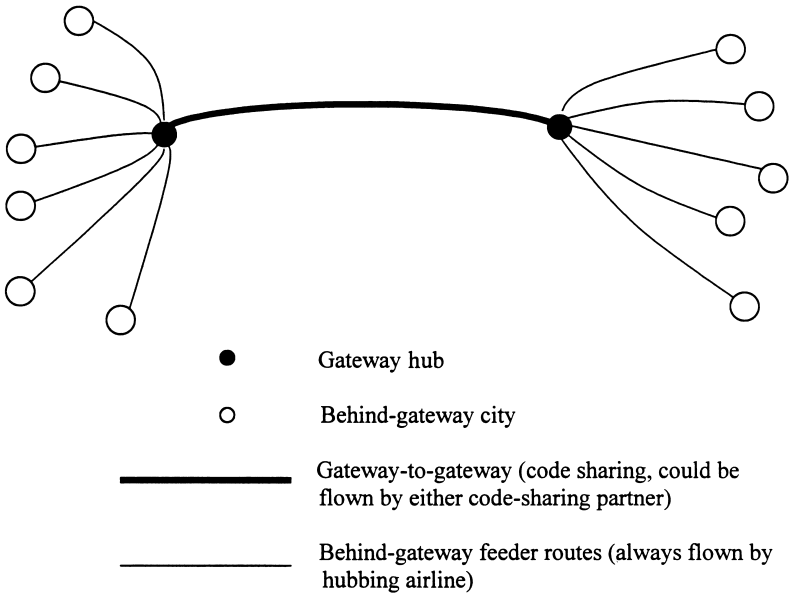
[2] Public Law 105-277 Sec. 4176 (a).

[3] The Hart-Scott-Rodino Antitrust Improvements Act of 1976 requires that certain proposed acquisitions of stock or assets be reported to the Federal Trade Commission (FTC) and to the Antitrust Division of DOJ before consummation. The parties then must wait a specified period—usually 30 days—before they complete the transaction. The pre-merger notification program, with its filings and waiting-period requirements, provides the antitrust enforcement agencies with the time and the information to conduct the review. DOJ's and FTC's principles of merger analysis are contained in the 1992 Horizontal Merger Guidelines (revised in 1997), which is widely accepted by economists and courts as an analytical approach to assessing the competitive effects of a transaction, including joint ventures that fall short of outright mergers.

have important international operations. International traffic headed to and from major gateways such as JFK and O'Hare account for a significant share of passengers on some carriers' domestic routes, affecting their overall route structure, revenues, competitive position, and possibly ability to survive.

During the past half dozen years, many U.S. and foreign airlines have formed codesharing alliances. As already discussed, these arrangements allow carriers to reach more passengers by linking two or more hub-and-spoke systems serving different markets and geographic regions. Schematically, this creates a barbell-shaped dual-hub network, depicted in Figure 4-1. Such partnerships can be appealing to airlines because of the constraints on airline entry and expansion imposed by national governments and embodied in aviation treaties as well as national citizen ownership laws. Aviation treaties generally are negotiated country-by-country in a bilateral framework. Most countries still limit entry by foreign carriers in international markets and prohibit entry in domestic markets.



SOURCE: GRA 1994.

Figure 4-1 Schematic of an alliance.

DOT generally has favored the formation of international alliances, granting several of them immunity from antitrust laws, in the belief that the public will benefit from the network efficiencies as well as from the new competition, and will suffer relatively little from the allied airlines cooperatively setting fares and capacity. In its early approvals, DOT reasoned that immunity would enhance competition in international markets by allowing airlines with small market shares to combine their networks and become more effective in competing against larger airlines. Some of these larger international carriers operated from countries with significant restrictions on market entry and competition; competition from the immunized allied airlines was a way to prompt these countries to open their markets. In approving later alliances, DOT's emphasis has changed, focusing instead on the benefits of creating alliances that could compete against one another, rather than against individual airlines. This new emphasis has compelled the approval of antitrust immunity for more alliances.

A concern of the committee is that in advocating international alliances and also granting antitrust immunity, DOT might not have given sufficient consideration to the potential effect of international alliances on the competitive structure of the domestic airline industry.

Requests for Antitrust Immunity

As noted earlier, travelers tend to prefer online, single-carrier service, believing that connections are likely to be smoother, baggage service more dependable, and check-in faster and more convenient. For travelers requiring several transfers, the appeal of online service—or service that works similarly—is even stronger. These travelers, moreover, seldom care about which hub they must travel through to transfer to or from their origin and destination points.

Recognizing this, Northwest and KLM Royal Dutch Airlines formed the first significant international codeshare agreement in 1993,[4] connecting Northwest's main hubs in Minneapolis and Detroit with KLM's main

[4] Some codeshare itineraries between U.S. and foreign airlines had existed before 1993, but only on a small number of route extensions.

hub in Amsterdam. In this way, passengers traveling to and from many interior points in the U.S. and Europe could fly through these gateways, using one carrier for an internal segment and the Atlantic crossing, and then transferring to the other for the remaining itinerary. The traffic densities created by linking hub-and-spoke systems had the added benefit of supporting new nonstop, international service for travelers in what once had been much smaller gateway cities, such as Minneapolis and Detroit.

Although certain features of these agreements—such as joint ticketing, single check-in, and coordinated baggage handling—could be achieved through traditional interline agreements, Northwest and KLM maintained that enhanced service in low- to moderate- volume markets would require a highly integrated partnership (GRA 1994, 9). In earlier, more limited agreements, fare and capacity levels were set independently by each carrier and the revenue from passengers flying on codeshare itineraries was divided on a predetermined, prorated basis. Northwest and KLM claimed that intensive coordination of operations, pricing, and marketing would be needed, including yield management, scheduling, utilization, seat inventories, gates, ground support, marketing, reservations, and advertising. As a practical matter, the two airlines proposed a merger of their transatlantic operations.

To facilitate this integration, the two carriers asked DOT for an exemption—or immunity—from antitrust prohibitions.[5] DOT granted the exemption, citing potential public benefits that, in its judgment, outweighed potential costs. DOT's assessment was that the alliance would falter without antitrust immunity; but there also was an additional consideration—the infusion of KLM capital would increase the likelihood of Northwest's survival. The Northwest–KLM alliance's immunity—initially granted for six years[6]—was seen as a way to strengthen the com-

[5] As a result of the Airline Deregulation Act of 1978, CAB's authority to grant immunity in the domestic industry was substantially curtailed, and DOJ was given an expanded role in enforcing domestic antitrust proscriptions and, later, responsibility to review airline merger plans. The Deregulation Act, however, did not affect CAB's longstanding authority, granted in the 1938 Civil Aeronautics Act, to approve agreements involving international air transportation or to confer antitrust immunity on an agreement, if necessary for diplomacy and the public interest. In 1985, DOT inherited these authorities from CAB.

[6] The immunity order called for the parties to resubmit an application in May 1999. Procedures have not been defined, however, for reviewing resubmissions.

petitive position of two relatively minor transatlantic airlines and to introduce international service to several U.S. cities. DOT was persuaded that the alliance and its activities could not be open to antitrust proscriptions or to legal challenges from other airlines without being inherently unstable. The antitrust immunity would encourage the two airlines to invest in service improvements that might take several years before returning a profit.

Since this first grant, other alliances with international airlines have applied for antitrust immunity, including large transatlantic carriers like United with Lufthansa; Delta with SwissAir, Sabena, and Austrian; and American with British Airways. DOT has approved the immunity requests involving United and Delta. In some important respects, these alliances—and the rationale for approving them—differed from the Northwest–KLM case. The United–Lufthansa alliance certainly would affect competition on some large, international, gateway-to-gateway routes—such as Frankfurt–Washington Dulles—where United and Lufthansa had been transatlantic rivals. However, in 1996, when these alliances were approved, DOT's emphasis was on creating competing alliances to offer fare and service alternatives for connecting passengers. Under its original grant of immunity, the Northwest–KLM alliance had diverted traffic from larger international carriers. The effect made it more difficult for DOT to oppose subsequent alliances, and each successive grant of immunity has increased expectations of more approvals.

As party to the public review of carrier requests for antitrust immunity, DOJ has emphasized the potential adverse effects on travelers in mainline, gateway markets where the partner airlines had been rivals. DOJ recommended that DOT should condition antitrust approval on "carving out" overlapping routes from the immunity agreements. Allied carriers still could share codes and coordinate other activities on the carve-outs, but would not have immunity for highly coordinated pricing, inventory, and yield management. DOT has required carve-outs in nonstop markets, such as Chicago–Frankfurt, before conferring immunity on some alliances. In general, the carve-outs apply only to nonstop passengers who purchase full-fare tickets in the United States; the joint development of corporate, group, promotional, and discounted fares still is sanctioned and accepted.

In the case of American Airlines' proposed alliance with British Airways, however, DOJ expressed concern that competition in too many U.S.–U.K. city-pairs would be affected. DOJ therefore suggested other countermeasures, such as the divestiture of slots at London Heathrow Airport; nevertheless, it concluded that the alliance should not be granted immunity on competitive grounds.[7] The American Airlines–British Airways immunity request is still pending before DOT.

Open Skies Initiatives

In negotiating open skies agreements with foreign countries, the U.S. has sought, among other things, the lifting of limits on

- The number of airlines that can operate between the U.S. and the other country;
- The frequency and capacity of their service; and
- The fares they can charge.[8]

All of these goals represent significant alterations of longstanding bilateral agreements.

The State Department formally negotiates the bilateral agreements, but DOT has final approval. During the 1990s, more than 30 open skies agreements were signed, with such nations as Germany, Canada, The Netherlands, Belgium, Norway, Italy, Austria, Sweden, and Switzerland. Other negotiations continue but have not achieved all of the market-oriented goals; for example, France, Australia, Japan, and the United Kingdom have not agreed to open skies treaties.

DOT's dual roles in approving bilateral treaties and reviewing requests for antitrust immunity have raised concerns that immunity might be

[7] Comments of the Department of Justice Before the Department of Transportation, Joint Application of American Airlines, Inc. and British Airways, PLC for approval of antitrust immunity for alliance agreement, Docket OST-97-2058 (May 21, 1998).

[8] Another important element of open skies initiatives is the right of an airline from one country to carry traffic between two countries outside of its own country of registry, as long as the flight originates or terminates in its own country. Another is the right of an airline to carry traffic between two countries via its own country.

used as an enticement or concession in negotiating agreements, without regard to direct competitive effects. Certainly, DOT must recognize the important role that antitrust immunity has played in inducing foreign governments to renegotiate bilateral treaties under the open skies regime. Since the 1993 approval of immunity for Northwest–KLM, three dozen new treaties have been negotiated.

Concerns about the increasingly explicit link between antitrust immunity and open skies negotiations were most evident following the American Airlines–British Airways application. The application was filed with DOT in January 1997; 10 weeks later the department began processing it and accepting comments from interested parties, even though the open skies negotiations with the United Kingdom had not yet been concluded.[9] Several parties commenting on the American Airlines–British Airways application noted that by openly associating antitrust immunity with open skies goals, DOT was creating the expectation among foreign countries and their airlines that completing an open skies treaty was not only necessary but sufficient for antitrust immunity.

Benefits and Concerns from Immunized Alliances

In its International Air Transportation Policy Statement,[10] DOT has professed the strong belief that expanding cooperative arrangements among international carriers is desirable and beneficial to travelers. It has identified two main benefits, as well as several other positive side effects. First, end-to-end alliances develop connecting markets that have historically suffered from poor service, stimulating travel in these low–volume markets. Second, the alliances can form competing networks, providing travelers from spoke—nongateway—cities with more competing options for international service. A significant side benefit is that, by funneling traffic from both ends, alliances allow cities such as Memphis and Cincinnati to obtain nonstop international service.

Both DOT and DOJ recognize, however, some possible disadvantages to alliances. First, they can diminish competition in some traditional or

[9] See AuBuchon 1999 for a more complete chronology.

[10] DOT. 1995. Statement of U.S. International Air Transportation Policy. *Federal Register*, Vol. 60, p. 21841, May 3.

mainline gateway routes, if the allied carriers previously had been rivals or might have competed directly after liberal open skies agreements were implemented. If accompanied by barriers to competitive entry—such as slots—this possible negative effect could be more severe. Even when nonstop, overlapping routes are carved out of the immunity grant, the risk to competition remains. As DOJ has noted, codesharing airlines might compete less aggressively in price or capacity in overlapping markets, to avoid undermining the agreement on connecting traffic.[11]

Early effects of alliances on international passenger traffic, fares, and service can be assessed empirically. Analyses by DOT and others [e.g., Brueckner and Whalen (1998)] suggest that alliances have produced net gains in traffic and service and reductions in fares for millions of overseas travelers. Other DOT analyses provided to the committee show that nonstop, gateway-to-gateway traffic accounts for about one-third of all transatlantic trips, and that transatlantic traffic from connecting markets accounts for the remaining two-thirds. Transatlantic traffic from connecting airports grew by more than 2 million passengers between 1992 and 1997—the period when the immunized alliances were established. Because of this evidence, DOT has adopted a generally favorable position on international alliances.

However, some of this observed growth in traffic also might stem from the more market-oriented open skies agreements. Since the two developments—open skies and immunized alliances—coincided, it is unclear whether the liberalized bilateral agreements, given more time to take hold, would have spurred competition without the grants of antitrust immunity. More generally, given the haste with which the alliances were formed, it is reasonable to question whether the intent of immunity requests was protectionist, producing open skies nominally, but with the underlying aim of protecting foreign national carriers from free competition.

A longer-term issue is whether the number of international alliances—each of which is developing into a large, multicarrier alliance—will ulti-

[11] Comments of the Department of Justice on the Order to Show Cause Before the Department of Transportation, American Airlines and the TACA Group Reciprocal Antitrust Services Proceeding, Docket OST-96-1700, January 28, 1998, p. 6.

mately dictate the number of U.S. carriers that can maintain international operations, possibly reducing the number of domestic airlines capable of survival. DOT has acknowledged the potential for unfavorable domestic effects if a small number of large, international alliances cannot accommodate all of the current U.S. carriers offering international service. DOT's 1995 International Aviation Policy Statement noted that "global systems and the growing use of codesharing will put significant pressure on carriers whose strategy does not include participation in such systems or in codeshare alliances or whose options to participate are limited. We expect these responses to lead to restructuring of service and airlines, similar to the U.S. domestic experience in 1980s."[12] The absence of unaffiliated carriers abroad, or even of carriers willing to interline, raises the possibility that independent U.S. airlines might be weakened and possibly would not survive.

In general, the committee favors the development of a broad-based, multinational framework governing international aviation. Even better would be an open and unrestricted international market in which any carrier could serve any market without restrictions on services and fares. If this remains the long-term goal of the deregulation policy initiated 20 years ago, then the emergence of global alliances linking some of the world's largest airlines could be either helpful or obstructive. On the positive side, highly integrated global alliances might prompt countries to harmonize their bilateral treaties to facilitate adoption of a multilateral framework. On the negative side, once accustomed to alliance arrangements, airlines and transportation policy makers alike might be reluctant to advocate additional necessary market reforms.

While the long-term net benefits from international alliances remain unclear, the committee is concerned that DOT has endorsed such arrangements openly while reviewing requests for antitrust immunity and also approving aviation treaties. A neutral position on international alliances would be preferable while negotiating for open skies reforms, giving the market-oriented reforms an opportunity to take hold.

A concern of the committee is that DOT has taken a position of promoting these alliances while also being responsible for objectively

[12] DOT. 1995. Statement of U.S. International Air Transportation Policy. *Federal Register,* Vol. 60, p. 21841, May 3.

assessing the competitive effects of antitrust immunity requests, a potentially conflicting set of consequences. Although it is not evident that DOT overtly has exchanged approval of antitrust immunity for open skies, it clearly and repeatedly has linked the two issues, giving weight to open skies as a precondition for antitrust immunity. It is reasonable to infer that by making such a direct association, DOT has found it easier to convince foreign countries to agree to bilateral reforms. Many foreign countries are determined to protect their national airlines; DOT has eased their concern over more liberal bilateral agreements—which might explain the recent surge in open skies treaties. It is likely that successive approvals of immunity after the signing of open skies treaties has raised the expectations of foreign carriers and nations that immunity will be conferred after meeting that prerequisite. As immunity grants begin to expire in the next few years, DOT should anticipate significant diplomatic pressure to renew them.

However, DOT has not established a formal process for reviewing alliances nearing the end of their approved terms—typically 5 years. In the committee's opinion, applications for renewal of immunity require careful consideration of the competitive effects on both domestic and international air transportation.

Recommendation on Antitrust Immunity

The committee recommends a two-part process for reviewing applications for antitrust immunity by international airline alliances. DOJ should perform the initial review and then forward to DOT only those applications acceptable on competitive considerations. DOT then should review these applications for approval with respect to other issues of public interest and international policy. In addition, DOJ should perform follow-up critiques of immunized alliances approaching renewal.

SUMMARY

Contrary to what some had predicted 10 years ago, the domestic airline industry has not consolidated to the point that competition is threatened. Nevertheless, the emergence of airline alliances and other partnerships, both domestically and internationally, bears close watching.

Outright mergers—widespread 10 to 15 years ago—have become the exception. Other collaborations among airlines have become more common, such as sharing codes and frequent–flier programs. Though not as straightforward to identify and assess as mergers, these partnerships can be steps toward horizontal consolidation and should not be overlooked.

To assess the potentially adverse competitive effects from these domestic alliances and partnerships, the committee recommends the following:

- DOT should revise CRS rules to prohibit listings of the same itinerary under more than one carrier's code when one of the partners already serves the entire itinerary.
- All collaboration plans among major U.S. airlines should be subject to traditional, economic-based merger analyses by DOJ. Even if the collaborations do not involve exchanges of equity or transfers of assets, they should be subject to advance notification requirements similar to those required under the Hart-Scott-Rodino process.

International airline alliances and partnerships also present issues involving the competitive structure of the domestic airline industry. One issue that deserves explicit attention is whether a small number of global airline alliances will result in a similarly small number of U.S. carriers capable of offering international service and therefore only a small number capable of surviving domestically as well. Airlines with reduced opportunity for international traffic and revenues might become weaker domestic competitors, less likely to emerge or survive as challengers to the major U.S. airlines. An aim of open skies aviation agreements was to increase competition in international markets. Public policy favoring international alliances, strengthened by exemption from antitrust laws, assumes that the world's largest airlines will be the main competition. In the committee's opinion, this assumption should be examined skeptically. In addition, the process for reviewing antitrust immunity should be modified to emphasize both the short- and long-term competitive effects of these agreements and their impacts on domestic, as well as international, travelers. The following procedural change is recommended:

A two-part process should be established for reviewing and approving applications for antitrust immunity by international airline alliances. DOJ should perform the initial review and forward to DOT only

those applications acceptable on competitive considerations. DOT then should review these applications with respect to other issues of public interest and international policy. In addition, DOJ should perform follow-on critiques of immunized alliances approaching renewal.

Competitive and economic circumstances are subject to change, possibly requiring new conditions for an immunized alliance or even for the alliance to be discontinued. A full review by DOJ is desirable for each immunized alliance seeking renewal, with attention to its effects on competition generally.

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ABBREVIATIONS

FAA Federal Aviation Administration
GAO General Accounting Office
GRA GRA, Inc.

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