REVISITING ANTITRUST IMMUNITY FOR
INTERNATIONAL AIRLINE ALLIANCES

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I. INTRODUCTION

The debate over competition in the U.S. airline industry has focused to date on high profile developments in domestic airline markets.¹ These issues include mergers between domestic legacy (i.e., network) and low cost carriers (LCCs); concerns over market entry such as access to takeoff and landing slots at congested airports; and alleged anticompetitive coordination on airline capacity and ancillary fees. Concerns over dwindling choice and quality of air service have also come sharply into focus in recent years.² In an industry that could not be more consumer-facing, these concerns should be a priority for competition enforcers, policymakers, and legislators.

Other important issues have recently worked their way onto the domestic aviation radar screen. One is U.S. Department of Transportation (DOT) policy toward granting antitrust immunity (ATI) for the international airline alliances. The large U.S. network carriers dominate the three large alliances – Star, SkyTeam, and oneworld. The alliance engage in joint-venture type coordination on schedules and fares and share resulting revenues and profits. DOT policy toward ATI appears to be shifting as competitive concerns over immunizing coordinated conduct escalate and claims of public benefits are viewed more skeptically.

A related issue is entry by non-allied foreign carriers on international routes that serve U.S. destinations. These include Norwegian Air UK Limited (Norwegian) and the Gulf Carriers (Qatar, Emirates, and Etihad). The large U.S. legacy carriers have vigorously opposed entry into U.S. markets by these carriers.³ In parallel, domestic airlines are also expanding their stakes in foreign carriers. This is likely motivated by expansion opportunities abroad but also

¹ AAI is The American Antitrust Institute is an independent, nonprofit organization devoted to promoting competition that protects consumers, businesses, and society. We serve the public through research, education, and advocacy on the benefits of competition and the use of antitrust enforcement as a vital component of national and international competition policy. See www.antitrustinstitute.org for more information. Many thanks to Darren Bush for helpful review and Mark Angland for research support.


by gaining strategic control over foreign airlines’ decisions regarding expansion into U.S. markets.4

The foregoing developments highlight the growing nexus between international developments and domestic passenger aviation competition. This white paper examines the implications of this issue for U.S. consumers. It focuses particularly on the implications of antitrust immunity for U.S. consumers that travel on nonstop and connecting international itineraries that utilize U.S. alliance gateways (i.e., hubs). Many of these gateways have become significantly more concentrated as the result of sweeping U.S. airline consolidation over the past decade, raising concerns about foreclosure of smaller, non-allied carriers and higher fares, less choice in carriers, and lower quality for consumers. Such changes undercut claims that immunity can bring substantial benefits to consumers in nonstop and in the behind-the-gateway and beyond-the-gateway markets served by the alliances.

The paper proceeds in several parts. It begins with a review of alliance growth over the past 25 years, the growing dominance of U.S. carriers in the alliances, and the accumulation of immunity over time. The analysis then moves to discuss the policy concerns that generally surround antitrust immunity and exemptions, how DOT handles immunity, and the shift in economic evidence regarding the costs and benefits of ATI. The last section addresses growing competitive concerns over immunity for U.S. consumers. It provides a two-pronged analysis that provides some insight into why immunity policy should consider the fundamental changes in U.S. aviation markets in order to protect U.S. consumers.

The paper concludes with suggestions and recommendations that might guide future policy. Among them are:

• **DOT's policy on ATI should be more proactive in responding to fundamental competitive changes in U.S. markets by including and enforcing sunset provisions.**

• **In light of increased concentration at U.S. alliance hubs, DOT should look skeptically at arguments that immunity creates benefits for consumers in behind-the-gateway and beyond-the-gateway markets.**

• **DOT should conduct periodic reviews of grants of immunity, per the standard 5-year requirement that is written into almost every final ATI order.**

• **Ease of market entry (or lack thereof) by non-alliance carriers should be one of the DOT’s top considerations in reviewing existing and prospective grants of immunity.**

• **The DOT should routinely reject arguments that alliances require immunity because they need to compete in the “alliance market.”**

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4 See, e.g., Hugo Martin, Big U.S. airlines’ foreign buying spree raises competition questions, LA TIMES (Feb. 27, 2018) (citing Diana Moss “From a competition standpoint, it is a clear move to entrench the U.S. legacy airlines’ influence over foreign entry into the U.S.”), http://www.latimes.com/business/la-fi-airlines-invest-in-foreign-carriers-20180227-story.html.
II. Growth of the International Airline Alliances, Dominance of the U.S. Carriers, and Accumulation of Antitrust Immunity

A. Expansion of the International Airline Alliances

There are three major international airline alliances and a number of smaller alliances that serve thousands of global routes. Alliances are agreements among member carriers to cooperate, often in ways that have significant implications for competition and consumers. These arrangements include, in increasing order of the intensity of cooperation among carriers, agreements to: (1) “interline” with carrier partners (i.e., transferring passengers traveling on connecting itineraries), (2) share frequent flyer programs, (3) codeshare, (4) coordinate pricing and schedules, and (5) engage in almost fully integrated revenue and profit-sharing joint-venture type coordination (i.e., “full metal” integration). 5

In the 25 years since the first international alliance was founded, their key features have changed significantly. For example, Star was formed in 1997 with five founding members: United, Lufthansa, Air Canada, Thai, and SAS. Since then, membership has increased to 27 airlines. 6 SkyTeam, founded in 2000, had four original members: Delta, Air France, Aeromexico, and Korean. Eighteen carriers are currently members of SkyTeam. 7 Five airlines founded oneworld in 1999: American, British Airways, Canadian, Qantas, and Cathay Pacific. By 2017 the alliance had grown to 13 members. 8 With the expansion of the international alliances, they now account for a substantial portion of international traffic – over 60% in 2016. 9 Star had the highest market share of all alliance traffic with 38%, followed by SkyTeam with 33%, and oneworld with 29%. 10

B. U.S. Carriers Now Dominate the Alliances

U.S. carriers have a significant international presence. In 2015, American, Delta, and United together accounted for almost 45% of total scheduled international passenger-miles. 11 The major U.S. carriers have also come to dominate the international airline alliances. For example, Continental left SkyTeam to join Star just prior to its merger with United in 2010. 12 Likewise, U.S. Airways left the Star alliance to join oneworld after its merger with American

10 IATA, More than 7% increase in Air Travel Compared to Last Year, IATA (Oct. 9, 2017), http://www.iata.org/pressroom/pr/Pages/2017-10-09-01.aspx. Shares based on total alliance passenger-kilometers scheduled.
in 2013.\textsuperscript{13} Northwest is the only major domestic airline to remain in its original alliance, SkyTeam, after its merger with Delta in 2009.\textsuperscript{14} In contrast, the only major European merger combined Air France and KLM Royal Dutch Airlines in 2004.\textsuperscript{15} To get a better sense of the growing dominance of the U.S. carriers as a result of consolidation, we examined changes in the shares of the major members in each of the three alliances in 2008 and in 2016.

As shown in the figure below, United’s share of Star alliance traffic increased from 35% to almost 60% from 2008 to 2016.\textsuperscript{16} Likewise, American’s share of oneworld traffic increased from 47% to 67% over the same period. And Delta’s share of SkyTeam traffic increased from 37% to 56%. The growth of the U.S. carriers within the alliances has come at the expense of their largest European partners. British Airways’ market share in oneworld dropped from 22% in 2008 to 12% in 2016. Similarly, Lufthansa’s share in Star declined from 18% to 6% and Air France-KLM’s market share fell from 19% to 13%.

\begin{figure}
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\includegraphics[width=\textwidth]{changes_in_market_share.png}
\caption{Changes in Market Share for Alliance Founders (2008 and 2016)}
\end{figure}


\textsuperscript{15} \textit{Air France seals takeover of KLM}, BBC NEWS (May 4, 2004), http://news.bbc.co.uk/2/hi/business/3682279.stm.

\textsuperscript{16} Data for 2008 and 2016 extracted from T-100 International Segment: All Carriers, Department of Transportation. \textit{Air Carrier Statistics}, BUREAU OF TRANSPORTATION STATISTICS, https://www.transtats.bts.gov/Tables.asp?
C. Alliance Carriers Have Amassed Antitrust Immunity Over Time

Alliance carriers have incrementally amassed immunity over the last 25 years. The U.S. founding members and largest European partners in the three alliances have been the most active in seeking ATI. For example, United (Star) was granted immunity a total of 11 times between 1992 and 2016 while major European alliance partner Lufthansa received six grants.\(^\text{17}\) Delta (SkyTeam) was granted ATI nine times over the same period and alliance partner Air France-KLM received six grants. American Airlines (oneworld) was granted ATI 14 times and alliance partner British Airways received immunity three times.

As shown in the figure below, there are currently 24 active immunized alliances. Each of the bubbles represents a grant of immunity and the size of the bubble corresponds to the number of carriers included in the grant. Some of these are older agreements between smaller numbers of carriers that have been folded into or expanded into larger alliances over time. The largest of the active immunized alliances includes the nine members in Star that were granted ATI in 2009. American obtained immunity in 2010 with five other oneworld members. And Delta obtained immunity in 2008 for its alliance agreement with five members of SkyTeam. Three of the four largest grants of immunity have been obtained in the last decade -- the period corresponding to dramatic growth in alliance membership and the consummation of the largest U.S. legacy mergers.

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III. Antitrust Immunity and the Alliances

A. Skepticism Surrounding Immunities and Exemptions

Antitrust immunities and exemptions protect certain forms of conduct that would otherwise violate the U.S. antitrust laws. They cover forms of unilateral (single-firm) conduct or joint (coordinated) conduct that adversely affects price, output, and other non-price dimensions of competition such as quality or market “rules.” Immunities and exemptions are statutory judicially created through legal interpretation and precedent. Immunities and exemptions from the antitrust laws are disfavored. The Supreme Court has repeatedly held that exemptions and immunities are “disfavored” and should be “strictly construed.”\(^{18}\) The bipartisan Antitrust Modernization Commission (AMC or Commission) recommended in 2007 that Congress “should not displace free-market competition [with immunities or exemptions] absent extensive, careful analysis and strong evidence.”\(^{19}\)

The AMC went further to explain that in evaluating the need for existing or new immunities, Congress should consider, among other things, “the likely adverse impact of the existing or proposed immunity on consumer welfare[…] and … [w]hether a particular societal goal trumps the goal of consumer welfare, which is achieved through competition.”\(^{20}\) The Commission also recommended imposing sunset provisions on all immunities enacted by Congress and amending existing immunities and exemptions to include sunset provisions.

B. Arguments for Immunity

Alliance carriers typically support requests for immunity by downplaying competitive concerns and highlighting the public benefits that are required to justify immunized coordination.\(^{21}\) These arguments generally cover three areas. One is the claim that immunity does not eliminate competition. Carriers argue that immunized coordination is not equivalent to the loss of a competitor, because both partners generally continue to serve overlap routes.\(^ {22}\) Because of this, fares are allegedly lower and capacity at alliance hubs expands.

A second argument for immunity is that it creates significant, countervailing public benefits. For example, applicants assert that immunity benefits passengers by integrating itineraries on connecting (e.g., one-stop) routes. They maintain that this enhances competition in behind-


\(^{19}\) Antitrust Modernization Commission, Report and Recommendations 334 (April 2007), http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf. The AMC went on to explain that the courts should “construe all immunities and exemptions from the antitrust laws narrowly.” Id. at 337.

\(^{20}\) Id. at 350.


or beyond-the-gateway segments and leads to lower fares than what non-alliance interlining carriers can offer.23 Finally, alliance carriers claim that immunity is needed so that the alliances can compete with other alliances. Immunity seekers argue that revenue and profit sharing and closer integration allows them to compete more effectively against the immunized portions of other alliances that also serve the same or similar international routes.24

C. DOT’s Approach to Granting Immunity

Immunity for airline alliances is a form of express statutory immunity that is granted pursuant to 49 U.S.C. §§ 41308-309.25 The U.S. DOT uses a two-step process to review alliance agreements. In the first step, DOT may approve an agreement that “substantially reduces or eliminates competition” only if it meets a “serious transportation need” or “achieve[s] important public benefits.”26 The burden of showing that an agreement is anticompetitive rests on the parties opposing the request. The parties proposing the agreement bear the burden of showing need or public benefits. Second, the Department has the discretion to exempt parties to an agreement from the antitrust laws “to the extent necessary to allow the person to proceed with the transaction.” In other words, DOT must grant immunity in order to approve an otherwise anticompetitive agreement that meets the public benefit test.

The DOT has increasingly insisted on “full metal neutral” integration for immunized alliance agreements to maximize incentives to realize claimed public benefits.27 Such joint-venture type coordination affects pricing, scheduling, service levels, and other factors on international overlap routes that mimic the fully integrated operations of a single carrier. Encouraged by the U.S. Department of Justice’s (DOJ’s) comments on various immunity applications, DOT has raised a number of competition concerns associated with immunized alliance agreements.28 Among these is the significant loss of head-to-head competition on international “overlap” routes where both alliance carriers serve routes. Another leading

23 Other benefits of integration also include streamlined ticketing and baggage handling and consolidated frequent flyer benefits across alliance carriers.
24 See, e.g., Terry Maxon, DOT approves antitrust immunity for Continental, Star Alliance partners, DALLAS NEWS (July 2009), https://www.dallasnews.com/business/airlines/2009/07/10/dot-approved-antitrust-immunity. American Airlines responded to DOT’s grant of immunity for the Star alliance with "Moreover, the lack of consistent grants of antitrust immunity would distort competition among Star, SkyTeam and oneworld."
26 The showing must also demonstrate that a need or benefits cannot be met or achieved by reasonably available alternatives that are materially less anticompetitive. Public benefits include international comity and foreign policy considerations.
27 Dempsey, supra note 5, at 19.
issue is the loss of access by non-alliance carriers to interlining with alliance carriers at alliance gateways.\textsuperscript{29}

\textbf{D. Recent Economic Evidence on Immunized Alliances Shows Fewer Benefits Than Costs}

We now have more that two decades of experience with and evidence relating to the competitive effects of immunized alliances. During this time there have been significant underlying changes in alliance structure and the markets they serve. It is not surprising therefore that economic studies of alliance immunity reflect these changes. Economic studies of ATI performed in the late 1990s generally showed that immunity delivered more public benefits than costs in the form of lost competition. Empirical studies performed in the late 2000s to the present tell a very different story of the effects of ATI on fares, capacity, and non-alliance rivals.\textsuperscript{30}

Recent studies find that even \textit{without} immunity, cooperation under alliance agreements can enhance incentives to collude on price on parallel routes between a U.S. and European hub. As a result, passengers traveling on such routes may pay higher prices, unless there are offsetting efficiency gains.\textsuperscript{31} As for immunized nonstop service offered by alliance partners on transatlantic routes, recent studies find that immunity may lead to less competition in all markets, i.e., both non-stop and one-stop routes.\textsuperscript{32}

For example, one study based on data from 2005-2010 found that immunized service offered by two alliances partners on a transatlantic route has a “fare effect that is equivalent to the loss of an independent competitor,” with significantly higher fares on routes with fewer independent competitors.\textsuperscript{33} This is consistent with the presumption that eliminating competition enhances the market power of remaining suppliers. More recent studies also find that while immunized joint ventures led to a three to five percent increase in capacity between alliance partners’ hub airports, this capacity expansion came at the expense of services elsewhere in the network.\textsuperscript{34} These findings stand in contrast to carriers’ claims that immunity does not eliminate competition because both alliance partners continue to offer service on non-stop routes.

\textsuperscript{29} See, e.g., James Reitzes & Diana Moss, \textit{Airline Alliances and Systems Competition}, 45 HOU S. L. REV. 293 (2008).
\textsuperscript{31} Xian Wan, Li Zou, & Martin Dresner, \textit{Assessing the Price Effects of Airline Alliances on Parallel Routes}, 45 TRANS. RES. PART E LOGISTICS & TRANS. REV. 627, 628 (2009).
\textsuperscript{33} Gillespie and Richard, \textit{supra} note 30.
\textsuperscript{34} At the same time, productive efficiencies (as measured by load factors) is .5 to 5% lower for JV routes as compared to those where alliance partners operate with ATI. See Volodymyr Bilokach & Kai Hüschelrath, \textit{Balancing Competition and Cooperation: Evidence from Transatlantic Airline Markets} (Discussion Paper No. 15-059, August 2015), http://ftp.zew.de/pub/zew-docs/dp/dp15059.pdf.
Recent economic analysis also shows that when an alliance member competes with a non-alliance interlining carrier, foreclosure of the latter at alliance hubs increases disparities in market share and potentially lowers interlining traffic.\(^{35}\) Moreover, research indicates that immunity does not lead to alliance fares for passengers below those sold under non-immunized arrangements. This undermines claims that ATI induces competition in behind-or beyond-the-gateway markets and is necessary to achieve pricing and network benefits.

Last are arguments that immunity is needed to enable an alliance to compete in the alliance “market.” These claims are ill-founded and put immunity policy onto a slippery slope. For example, granting immunity to a rival alliance simply to keep up with other alliances is a non-containment policy. It is akin to granting mergers that are motivated by the quest for enhanced market power to compete more effectively against a powerful buyer or seller.

The changing evidence on the costs and benefits of immunity raises many questions. These include how ATI policy should change in response to such evidence and lessons learned from past immunity cases. But it also highlights the importance of a significantly more cautious approach to immunities and exemptions. The foregoing section further opens the door to growing concerns over the competitive implications of immunized alliances. We now turn to the immunity cases themselves to identify important trends that reinforce those concerns.

**IV. Trends in Immunity Cases**

**A. U.S. Legacy Airlines Have Long Stopped Objecting to Rivals’ Requests for Immunity**

The U.S. airlines have all but stopped objecting to requests for immunity by rival alliances. Between 1993 and 2007, the U.S. legacy carriers vigorously opposed rivals’ requests for immunity, filing comments in almost 45% of DOT dockets over this period.\(^{36}\) In contrast, during the 10-year period between 2007 and 2017, there were no objections to immunity requests by rival legacy carriers. The only carriers that opposed immunity requests were some U.S. regional carriers and U.S. and Mexican LCCs. Two major reasons may explain the fall off in carrier objections to immunity.

One is that the DOT’s relatively lenient policy on immunity discouraged rivals from devoting resources to opposing requests. A second is based on the observation that the drying up of complaints by legacy rivals corresponds to the diminution of competition in U.S. markets following the spate of mergers over the last 10 years. More competition tends to stimulate objections to competitors’ attempts to gain special treatment or engage in strategic maneuvering to get a “leg up.” The entrenchment of the three alliances in a tight oligopoly during this period signals stronger incentives to cooperate rather than compete. It also explains the growing argument that an alliance cannot compete against the other alliances without additional immunity.


\(^{36}\) LCCs objected to 2 immunity requests in the early 2000s through their trade association Air Carrier Association of America.
B. The DOJ Regularly Warns DOT About the Competitive Perils of Immunity

The role of the DOJ in providing comments to the DOT on immunity requests is vitally important. DOJ filed seven formal comments in immunity proceedings between 1996 and 2008. As an antitrust agency, DOJ evaluates competitive issues under a “no competitive harm” standard. This differs fundamentally from the broader, regulatory public interest standard employed by the DOT. The DOJ’s recommendations to the DOT in immunity cases have ranged from recommending that immunity be denied to imposing conditions such as carve-outs and slot divestitures.

In Aloha-Hawaiian, for example, the DOJ recommended against immunity that would have allowed the parties to a joint venture to coordinate capacity on inter-island routes. In the American-British Airways-Iberia-Finnair-Royal Jordanian Airlines case, the DOJ identified a likely 15% fare increase on affected transatlantic routes, found no public benefits, and recommended that the DOT deny immunity. The DOJ suggested that DOT deny immunity in Alitalia-Czech-Delta-KLM-Northwest-Air France case as well. In other cases, the DOJ recommended slot divestitures or route carve-outs as necessary conditions under which immunity could be granted.

DOJ comments in the oneworld matter are particularly helpful in clarifying the agency’s competitive concerns. The DOJ noted, for example, that fares are higher on immunized non-stop routes as a result of less competition. DOJ also pushed back against claims that alliance carriers’ market power is diluted by increases in capacity and traffic that immunized coordination allegedly fosters. The agency also rebutted arguments that immunity pushes down fares for alliance interlining, citing evidence that alliance carriers (without immunity) are capable of managing pricing and inventory in order to compete with non-alliance interlining.

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43 Id. at 16-17, 32-33.
C. Changes in Remedies and Denying Immunity

Between 1993 and 2009, the DOT required route carve-outs in eight cases where immunity would lead to anticompetitive effects and consumer harm. Of the active immunized alliances, carve-outs are still in place in three cases. Carve-outs do little to improve competitive conditions in highly concentrated markets where applicants, likely because they create “holes” in the alliance network. Carve-outs appear to have been replaced since the late 2000s by slot divestitures. This shift may track the DOJ’s use of slot divestitures in more recent airline merger cases such as United-Continental and American-US Airways. Slot divestitures are purported to encourage new entry in the markets where there are competitive concerns.

DOT first required slot divestitures in the 2008 oneworld transatlantic case. The agency required the sell-off of fixed slots in the Boston-London market and fixed slots that could be used in any U.S.-Heathrow market. A second case was the 2016 decision to grant immunity to Delta and Acromexico for a joint venture involving the route from Mexico City (MEX) to New York’s John F. Kennedy (JFK) where the carriers would have an 81% market share. The agency required divestiture of slots at MEX and JFK to out-of-market LCCs. Other important requirements included removal of exclusivity clauses in the joint venture agreement and limiting ATI to a 5-year period due to the long-term uncertainty surrounding revisions to the slot regime at MEX. DOT stated “The Department cannot endorse provisions in the agreement, however, that could allow either partner to prevent pro-competitive measures, such as interlining or code sharing with a third-party carrier on the other partner’s network.”

The DOT has also denied immunity more often in recent years. In the 2013 immunity involving Air France/KLM-Air Tahiti Nui-Delta-Alitalia, the agency denied immunity for a trunk route between Paris and Los Angeles. DOT cited a reduction in the number of competitors and enhanced incentives to restrict capacity. In 2016, DOT tentatively denied immunity to American and Qantas for routes operated between Australia/New Zealand and the U.S., noting that the carriers would account for nearly 60% of non-stop capacity and have the largest share in almost 200 city-pair markets. The agency rejected applicants’ public benefits claims, noting that the viability of new routes was not dependent on ATI and that few passengers would benefit from an extended network.

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46 Id. at 2, 34. The DOT also required the parties to remove certain anticompetitive provisions in the alliance agreement. Id. at 2, 28.
47 Id., at 28.
50 Id. at 2, 19-21.
While DOT policy on ATI bears ongoing monitoring, we note that there is not yet a robust record on an uptick in denials or a shift to slot divestitures as remedies. It is also unclear how the agency is making determinations regarding the number of slot divestitures that are needed to support entry sufficient to discipline anticompetitive effects. Denials of immunity appear limited to unique trans-Pacific global routes where there is very little competition. We have yet to see denials of immunity on routes that particularly affect U.S. consumers, such as the heavily traveled trans-Atlantic markets.

V. Effects of Immunity on U.S. Consumers #1: High Alliance Carrier Shares Limits Needed Entry on Immunized Transatlantic Routes

The competitive implications of immunized alliances are particularly important for U.S. consumers because they utilize hubs (i.e., gateways) in the U.S. to service (1) nonstop itineraries and (2) connecting (i.e., one stop) itineraries to route U.S. passengers to behind-the-gateway markets. Consolidation in the U.S. over the last decade has adversely affected competition at alliance hubs and smaller U.S. airports. The tight oligopoly of U.S. legacy carriers raises questions about anticompetitive coordination on capacity and fares, the increasing domination of large hubs, high entry barriers, “de-hubbing” of smaller Midwestern airports, and enhanced market power at slot markets at congested airports. This tightly links immunity policy to the welfare of domestic consumers.

A. Alliances Continue to Dominate on Immunized Transatlantic Routes

Alliance carriers have maintained high market shares on important transatlantic routes between Europe and the U.S. Long-haul routes are difficult for smaller, non-allied airlines to enter. They require significant infrastructure and other capabilities that are often outside the scope of smaller carriers’ resources and business models. Yet such entry remains vitally important, domestically and internationally. For example, the DOJ has shifted its focus to slot and gate divestitures in domestic mergers and monopolization issues in order to encourage entry. To better understand the role of market entry in the broader context of immunized alliance coordination, we examined some of the most heavily travelled international routes involving U.S. alliance hubs.

Transatlantic traffic between Europe and the U.S. accounts for the highest proportion of total global traffic -- about 11% of global passenger-kilometers in 2015. One source

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estimates that immunized alliance carriers transported over 80% of the 50 million passengers who flew annually between the U.S. and Europe between June 2008 and June 2009. We calculated market shares on the busiest routes from Europe to the U.S., before the consolidation of the major U.S. carriers in 2007 and after consolidation in 2016. These include: (1) Paris Charles deGaulle (CDG)-JFK, CDG-Los Angeles (LAX), and CDG-San Francisco (SFO) and (2) London Heathrow (LHR)-Dallas Ft. Worth (DFW), LHR-JFK, LHR-LAX, and LHR-SFO.

As shown in Table 1, SkyTeam carriers Delta and Air France are the dominant alliance carriers on the CDG-based routes and oneworld’s American and British Airways are the dominant carriers on the LHR-based routes. On the majority of routes, there are relatively small changes in combined alliance carrier shares between 2007 and 2016. For example, the combined share of Delta and Air France on the CDG-FJK and CDG-LAX routes remained at around 80% over the period. The combined market share of American and British Airways remained at 100% on the LHR-DFW route. American-British Airway’s share dropped slightly on the LHR-JFK route, but increased somewhat on the LHR-LAX and LHR-SFO routes.

With the exception of the CDG-SFO route, where United’s entry forced down Delta-AirFrance’s market share by 25%, the major source of new or expanded entry on routes dominated by the immunized alliances is non-alliance carriers. For example, by 2016, Norwegian had entered the CDG-JFK and CDG-LAX markets and stolen share from the alliance carriers. These shares were small (~3-4%). Virgin Atlantic, which was already in the market in 2007, expanded modestly on the LHR-JFK and LHR-SFO routes (~3%) but not enough in the latter case to counter growth in market share by the alliance carriers.

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<tr>
<th>Origin Airport</th>
<th>Destination Airport</th>
<th>Dallas-Ft. Worth (DFW)</th>
<th>John F. Kennedy (JFK)</th>
<th>Los Angeles (LAX)</th>
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<tr>
<td>Paris Charles deGaulle (CDG)</td>
<td>SkyTeam (Delta + Air France)</td>
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<td>78%</td>
<td>75%</td>
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<td>100%</td>
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<td>62%</td>
<td>59%</td>
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B. Ease of Entry Should be a Central Factor in Deciding Grants of Immunity

The implications of the foregoing analysis important. Alliance carriers continue to dominate some of the busiest transatlantic routes from Europe to the U.S. With the entrenchment of the alliances, only entry or expansion of smaller carriers is likely to dilute highly concentrated route markets and introduce pricing discipline. Even so, entry by Virgin Atlantic on the

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54 Gillespie & Richard, supra note 30, at 1 and 3.  
55 Supra note 16.
LHR-based routes is limited and we do not have enough data to ascertain whether Norwegian Air’s foothold entry on the CDG-based routes will expand over time. Moreover, it is important to note that Norwegian’s entry into U.S. markets was a protracted process. Its application for a foreign air carrier permit under the U.S.-European Union Air Transport Agreement was at the DOT for over two years amid controversy over whether the airline’s labor practices complied with the requirements of Open Skies agreements. While the DOT’s final order in late 2016 indicated that no U.S. carrier opposed the decision to grant the permit, the airline unions were active in opposing the application.56

The Norwegian matter is similar to the opposition mounted by the three U.S. legacy carriers to the Gulf Carriers’ efforts to obtain an Open Skies agreement amidst controversy over alleged state subsidies.57 This highlights the tension surrounding foreign entry into alliance-dominated U.S. routes. Such entry may raise legitimate international trade issues that should be resolved in the appropriate forum. But it remains critically important for domestic aviation policy to recognize the importance of entry to competition and consumers in the U.S.58

VI. Effects of Immunity on U.S. Consumers #2 -- High Concentration at U.S. Alliance Connecting Gateways Limits the Benefits of Immunity

A. Many U.S. Alliance Gateways Have Become Highly Concentrated

Proponents of immunity claim that immunity is needed to allow alliance partners to create complementary, end-to-end alliance networks. The DOT has recognized such benefits in the case of the behind- and beyond-the-gateway markets involving itineraries where passengers connect to their final segment through an alliance hub. Immunized alliances, the argument goes, are able to offer new services to more city-pair markets, enhancing competition between airlines for traffic to or from cities behind and beyond-the-gateway. Such benefits, however, are entirely dependent on competitive conditions at U.S. alliance gateways where consumers connect to behind- or beyond-the-gateway markets.

The wave of consolidation over the last decade in the U.S. has increased concentration at many airports that are the point of connection for alliance traffic. This is particularly true of smaller and medium size airports in the U.S. To examine this, we identified the 22 domestic connecting airports for each of the three alliances (Star, SkyTeam, and oneworld) for the most heavily trafficked routes from Europe to the U.S. identified in the previous section. For example, U.S. gateways used by the Star alliance include Dulles International Airport (IAD) and Houston (IAH). SkyTeam uses, among others, Minneapolis (MSP) and Atlanta (ATL). And OneWorld connects passengers through airports such as Phoenix (PHX) and Philadelphia (PHL).

Table 2 below shows market concentration at the 22 U.S. alliance hub airports in 2007 and in 2016. Results show that concentration increased at over 60% of connecting airports on one-stop transatlantic itineraries between 2007 and 2016. Increases in concentration at selected airports were as high as 84% at PHX, 63% in PHL, 53% in SEA, and 49% SAN. Decreases in airport concentration were significant at IAH (-31%) and MSP (-31%). But such decreases were far outstripped by increases in concentration at other airports. And 50% of airports that showed increases in concentration over the period were highly concentrated in 2016. The U.S. Department of Justice (DOJ)/Federal Trade Commission (FTC) Horizontal Merger Guidelines recognize that highly concentrated markets are much more conducive to anti-competitive outcomes through the enhanced likelihood that market participants will exercise market power, either in coordination with rivals (coordinated effects), alone (unilateral effects), or both.60

Table 2: Changes in Concentration at Selected U.S. Alliance Connecting Airports (2007-2016)

<table>
<thead>
<tr>
<th>Airport</th>
<th>HHI in 2007</th>
<th>HHI in 2016</th>
<th>Percentage Increase in HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta (ATL)</td>
<td>4,454</td>
<td>5,633</td>
<td>26%</td>
</tr>
<tr>
<td>Boston (BOS)</td>
<td>1,391</td>
<td>1,892</td>
<td>36%</td>
</tr>
<tr>
<td>Charlotte (CLT)</td>
<td>5,681</td>
<td>7,598</td>
<td>34%</td>
</tr>
<tr>
<td>Las Vegas (LAS)</td>
<td>1,252</td>
<td>1,807</td>
<td>44%</td>
</tr>
<tr>
<td>Phoenix (PHX)</td>
<td>1,715</td>
<td>3,153</td>
<td>84%</td>
</tr>
<tr>
<td>Philadelphia (PHL)</td>
<td>2,272</td>
<td>3,700</td>
<td>63%</td>
</tr>
<tr>
<td>San Diego (SAN)</td>
<td>1,144</td>
<td>1,705</td>
<td>49%</td>
</tr>
<tr>
<td>San Jose (SJC)</td>
<td>1,387</td>
<td>1,997</td>
<td>44%</td>
</tr>
<tr>
<td>Seattle (SEA)</td>
<td>1,643</td>
<td>2,515</td>
<td>53%</td>
</tr>
</tbody>
</table>

B. Limited Competition at Connecting U.S. Alliance Hubs Should Factor into ATI Policy

Higher concentration at connecting U.S. alliance hubs has major implications for competition and consumers. First, higher concentration means less competition from other carriers and less choice for consumers. For example, the Dallas Ft. Worth airport supported oneworld’s application for immunity in 2010. DFW stated in its filing that immunity would “…benefit DFW and its travelers because the London-DFW route will develop into a “pipeline” route with improved services.” The reality is far different. Not only has oneworld maintained a monopoly on the LHR-DFW route in 2016, as it did in 2007 (see Table 1), it has not resulted in any discernable increases in behind-the-gateway benefits. For example, the number of airports served from DFW by American flights was 75 in 2007 and

had increased only to 78 in 2016. PHX, a connecting airport also used by oneworld, saw the highest increase in concentration (80%) and 20% fewer carriers operating between 2007 and 2016. And the number of cities served did not change at all over the period. Similar analyses can be done for other airports that serve as connecting hubs for alliance traffic.

A second reason why higher concentration at alliance connecting airports is potentially harmful to competition and consumers is because dominance in connecting markets increases the risk that non-alliance carriers will be foreclosed from interlining at alliance hubs. In the U.S. those carriers are likely to be the LCCs. Finally, with what competition there is on connecting alliance itineraries, there are stronger incentives for carriers to coordinate instead of competing. Only periodic reviews of existing grants of immunity will be able to detect the market changes and provide the DOT with the information needed to extend or eliminate ATI. These concerns undercut arguments that immunity promotes benefits for consumers in behind- and beyond-the-gateway markets in the U.S.

VII. Policy Implications for Antitrust Immunity

This white paper sketches out a potentially troubling competition picture surrounding antitrust immunity for the airline alliances. It shows dramatic growth in alliances, increasing dominance of the U.S. alliance carriers through domestic consolidation, and how the carriers have amassed immunity over time. It highlights skepticism about immunities more generally and economic evidence that buttresses growing concern that immunity increasingly does not pass the cost-benefit test.

Sustained high alliance market shares on the busiest transatlantic routes and increased concentration at connecting alliance hubs highlights strike at the heart of claims that immunity delivers benefits to U.S. consumers. It highlights the reality that injecting competition on transatlantic routes depends critically on entry by smaller foreign carriers, which is opposed by U.S. carriers. The foregoing analysis also emphasizes that declining competition at key connecting alliance airports in the U.S. potentially forecloses and raises entry barriers to smaller carriers, contradicting alliance carriers’ claims of benefits in behind-or beyond-the-gateway markets. These observations have potentially grave implications for U.S. consumers who are exposed to the risks of immunity. As such, we offer a number of suggestions and policy recommendations for ATI policy moving forward.

• **DOT’s policy on ATI should be more proactive in responding to fundamental competitive changes in U.S. markets by including and enforcing sunset provisions.**
  DOT should recognize that one-stop alliance itineraries involving U.S. hubs are distinctly less competitive as a result of domestic consolidation. The agency should therefore ensure that claims of behind- or beyond-the-gateway benefits are backed up by appropriate, current analysis. This means more aggressive denials of new immunity requests or appropriate, effective remedies designed to fully restore competition on affected routes or networks.

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62 *Supra* note 59, based on seat data.
63 The analysis compared cities offered by American and US Airways in 2007 to American in 2016. This was necessary to create consistency due to the American-US Airways merger in 2013.
• In light of increased concentration at U.S. alliance hubs, DOT should look skeptically at arguments that immunity creates benefits for consumers in behind-the-gateway and beyond-the-gateway markets. Alliance policies should not be viewed in an international vacuum. Behind- and beyond-the-gateway markets are directly connected to alliance markets. As such, competitive effects and claimed benefits in those markets are affected by immunity.

• DOT should conduct periodic reviews of grants of immunity, per the standard 5-year requirement that is written into almost every final ATI order. Moving forward, new grants of immunity should be reviewed every three years. As part of these reviews, immunized carriers should be required to demonstrate that immunity has in fact provided benefits to consumers.

• Ease of market entry (or a lack thereof) by non-alliance carriers should be one of the DOT’s top considerations in reviewing existing and prospective grants of immunity. The international airline alliances dominate major global routes and have become highly concentrated over time due to domestic U.S. consolidation. Entry plays a key role, not only on nonstop alliance routes, but also on one-stop routes where the only competitive discipline is likely to come from entry by smaller carriers. Such entry is difficult and the DOT’s analysis and decisions on immunity should reflect this reality.

• The DOT should routinely reject arguments that alliances require immunity because they need to compete in the “alliance market.” DOT’s ATI policy against the backdrop of highly concentrated alliances has fostered a paradigm shift from “all market” competition to “alliance market” competition. Competition and consumers are poorly served by an approach that assumes that head-to-head competition between only three alliances will produce benefits for consumers. It puts ATI policy onto the slippery slope of approving requests so that carriers can compete more effectively against the other alliances.