



## **Airline Mergers at a Crossroads: Southwest Airlines and AirTran Airways**

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**December 14, 2010**

### **Executive Summary**

The proposed merger of Southwest/AirTran could meet with relatively little antitrust enforcement resistance based on the Department of Justice's (DOJ) public statements in recent airline mergers. For example, claimed efficiencies are likely to get significant weight. Moreover, concerns over eliminating competition on Southwest/AirTran overlap routes could be mitigated because the number of routes is relatively small, there is rivalry (from low-cost carriers (LCCs) and legacies) on some of those routes, and entry may be relatively easy at some affected airports.

However, the proposed merger of Southwest and AirTran – the first major merger of LCCs – raises novel issues that may not be captured by analysis that focuses mainly on overlaps between the merging partners in city-pair or airport-pair markets. These novel issues include how the merger could potentially result in: (1) a transition from a point-to-point/hybrid system to a hub-and-spoke network model; (2) changes in the two LCCs' price discounting strategies; (3) changes in entry or expansion patterns in new and existing markets; and (4) changes in short-term output and/or longer-term capacity decisions. These questions deserve attention in an antitrust review of the proposed merger.

For example, combining the Southwest and AirTran systems may stretch the limits of Southwest's model, pushing the merged company away from a point-to-point or hybrid system and more toward a hub-and-spoke model. If so, then the combined company may be less able to inject the competitive discipline through lower fares, more choice, and entry and expansion than each LCC alone has brought to the industry. With the ranks of the LCCs reduced through a Southwest/AirTran merger, it is also important to consider how effective the rivalry offered by the remaining LCCs will be.

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Eliminating AirTran also means removing from the market the second largest LCC (based on its presence as a low fare carrier on top routes) and the source of some of the most aggressive price discounting and market entry. Combining the maverick-like AirTran with Southwest could change incentives for the merged company to discount. And because Southwest and AirTran, as LCCs, are closer competitors to each other than to the legacy airlines, potential post-merger price increases (or smaller discounts) may not be captured by standard market share and concentration analysis.

Finally, post-merger output restrictions and/or capacity reductions are demonstrated effects of airline mergers that have been largely overlooked in antitrust reviews. Not only do they raise fares, but they reduce choice for consumers. Well-publicized cutbacks at Cincinnati after Delta/Northwest and conditions imposed on United/Continental at Cleveland by the state of Ohio indicate the gravity of these effects. Mergers of LCCs should be no exception to an examination of the potential for post-merger output and capacity reductions. This is particularly true if the merger eliminates competition on routes/airports and the carriers are adept at managing capacity – as is the case in Southwest/AirTran.

This White Paper by the American Antitrust Institute (AAI) is the first of what is intended to be a series by the AAI on competition in the U.S. airline industry. It is based on publicly available information – no confidential information was provided to the AAI in the course of preparing this analysis. While we do not make a recommendation as to the legality of the proposed Southwest/Air Tran merger, the paper raises important questions that deserve investigation before a decision is made.

## I. Introduction

In the last several years, the U.S. airline industry has been subjected to numerous pressures, including fuel price volatility, low levels of profitability, limits to organic growth, and market penetration by low cost carriers (LCCs).<sup>2</sup> Legacy airlines have responded to these developments with reorganizations, spin-offs and acquisitions of regional subsidiaries, and new pricing and fee strategies. But consolidation among the legacy airlines is perhaps the most common remedy for these ailments. For example, in 2005, U.S. Airways and America West merged. In 2008, Delta and Northwest combined forces, followed by Republic's acquisition of Midwest and Frontier in 2009. Finally, in 2010, United and Continental followed with their own merger. All four deals went through – unchallenged by federal antitrust authorities – and eliminated five carriers in as many years.<sup>3</sup>

In September 2010, the industry saw the first significant proposal of marriage between LCCs in the domestic airline industry – Southwest Airlines (Southwest) and AirTran Airways (AirTran). The proposed merger raises novel policy issues, in large part because the two carriers are LCCs rather than part of the legacy segment of the industry. LCCs arguably impose some of the most effective price discipline in the domestic industry, leading us to ask: How will eliminating their rivalry between Southwest and AirTran alter competition and affect consumers? This paper explores what factors might be considered in making this determination, including, but not limited to, the standard city-pair and/or airport-pair analysis performed by the Department of Justice (DOJ) Antitrust Division in airline mergers. Can we predict from the DOJ's decisions in recent airline mergers such as Delta/Northwest and United/Continental what issues will take center stage in Southwest/AirTran? Or could merger policy be informed by exploring a number of additional factors that arise because of the important role LCCs play in the domestic industry?

The American Antitrust Institute (AAI) has often commented or testified on airline mergers and other matters relating to air transportation. This White Paper, which includes some results of current research, is the first of what is intended to be a series by the AAI on competition in the U.S. airline industry. It is based on publicly available information – no confidential information was provided to the AAI in the course of preparing this analysis. While we do not make a recommendation as to the legality of the proposed

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<sup>2</sup> An LCC has many characteristics that distinguish it from its competitors. In general, an LCC offers a simple fare structure with lower fares than its competitors, a single passenger class often with unreserved seating, single or limited types of aircraft, and operation of direct flights to and from less congested airports, such as secondary airports in large metropolitan areas. A legacy carrier is an airline that had established interstate routes at the time of route liberalization under the 1978 Airline Deregulation Act (Pub. L. No. 95-504, 92 Stat. 1705). Legacy carriers often offer a higher class of service (e.g., first class, business class, etc.) than non-legacy competitors, and other amenities such as meal service, airport lounges, and alliance membership.

<sup>3</sup> United and Continental likely offered concessions as a result of pressure by the U.S. Department of Justice Antitrust Division.

Southwest/Air Tran merger, we raise important questions that deserve investigation before a decision is made.

## **II. Implications of Recent Airline Mergers**

The merger of Delta and Northwest airlines was announced in April 2008. The \$3.1 billion transaction created the largest airline in the U.S. and the world.<sup>4</sup> In a well-predicted strategic response, United and Continental announced a deal in May of 2010 worth more than twice as much. The \$8 billion combination bumped Delta/Northwest out of the top spot in the passenger miles rankings to create the largest airline in the U.S. and the world.<sup>5</sup> In September 2010, Southwest and AirTran agreed to merge in a combination worth \$1.4 billion. The transaction is the first significant merger involving LCCs in the U.S. domestic market. Nationally, Southwest is ranked second overall and first for LCCs, while AirTran is ranked eighth overall and third for LCCs.

Once the dust settles on the \$12.5 billion worth of these three major consolidations, United/Continental, Delta/Northwest, and Southwest/AirTran will collectively account for more than one half of the national domestic market.<sup>6</sup> American will have close to 15 percent and the remaining dwindling fringe of remaining players includes U.S. Airways, JetBlue, and a handful of others, including Alaska and Republic. Understanding the motivation for, and the antitrust reviews of, previous recent mergers is useful for exploring potential issues in the Southwest/AirTran case.

### **A. Delta/Northwest and United/Continental**

The Delta/Northwest deal combined the third and fifth largest airlines in the U.S., respectively, in 2007. The transaction appears prompted by a number of factors, including record high aviation fuel prices beginning with the oil price run-up in 2007.<sup>7</sup> It is also clear, however, that the merger was motivated by the perceived need to compete

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<sup>4</sup> Jeff Bailey and Micheline Maynard, "Delta and Northwest in \$3 Billion Deal," *New York Times* (Apr. 15, 2008), <http://www.nytimes.com/2008/04/15/business/15air.html?pagewanted=1>.

<sup>5</sup> Perry Flint, "United-Continental Merger to Create Global Behemoth," *Air Transport World* (May 4, 2010), <http://atwonline.com/news/united-continental-merger-create-global-behemoth-0503>. All rankings reported in this section are based on passenger-miles.

<sup>6</sup> "Airline Domestic Market Share August 2009 - July 2010," Research and Innovative Technology Administration, Bureau of Transportation Statistics, <http://www.transtats.bts.gov/> (visited Nov. 8, 2010).

<sup>7</sup> Domestic jet fuel costs per gallon for U.S. airlines increased 19 percent from 2002-03, 36 percent from 2003-04, 44 percent from 2004-05, 18 percent from 2005-06, 7 percent from 2005-06, and 44 percent from 2006-07. "Airline Fuel Cost and Consumption (U.S. Carriers - Scheduled) January 2000 - September 2010," Research and Innovation Technology Bureau of Transportation Statistics, <http://www.transtats.bts.gov/fuel.asp> (visited Nov. 14, 2010).

on a global scale.<sup>8</sup> The Open Skies agreement, which eased restrictions on international aviation, furthered this objective.

Delta/Northwest forecast \$1 billion in annual merger-related synergies resulting from “right sizing” planes and routes, a more comprehensive and diversified route system, and cost synergies from reduced overhead and improved operational efficiency. The merging company also noted that combined, it could exercise options for delivery of 20 new wide-body jets to provide international service.

The airlines promoted the merger on the basis of complementary route networks that would create more choice, competitive fares, and higher quality. They emphasized enhanced connectivity and route diversity, particularly for small communities behind major hubs. Delta/Northwest also committed to “maintain” all hubs, including Atlanta, Cincinnati, Detroit, Memphis, Minneapolis, New York John F. Kennedy, and Salt Lake City. The merging parties also downplayed any adverse competitive effects on nonstop routes where one of the airlines would be eliminated as a competitor.

The United/Continental deal combined the third and fourth largest airlines in the U.S., respectively, in 2008. More so than Delta/Northwest, the United/Continental deal appears motivated largely by the parties’ desire to compete at a global level.<sup>9</sup> This is not a surprising rationale. Economic analysis shows, for example, that domestic airline mergers increase international efficiency (and profits) by driving traffic, increasing route densities, and lowering average costs per passenger. Enlarging domestic networks and eliminating domestic competition are the two primary mechanisms for achieving such efficiencies.<sup>10</sup>

United/Continental forecast significant net synergies of \$1.0-1.2 billion by 2013. These would flow from expanded domestic and international customer options resulting from the greater scope and scale of the network. The parties noted that the merger would allow the company to access new aircraft and create a modern, fuel-efficient fleet. Like Delta/Northwest, United/Continental also emphasized the complementary nature of their networks, suggesting that they would create enhanced scheduled service and more destinations for customers. They committed to provide enhanced service to underserved small- and medium-sized communities and to continue to serve all the communities each carrier then currently served from its hubs in four of the largest U.S. cities. United/Continental also downplayed “minimal” domestic route overlaps where the merger would eliminate a rival.

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<sup>8</sup> “Delta and Northwest Merge, Creating Premier Global Airline,” Delta.com (Oct. 29, 2008), <http://news.delta.com/index.php?s=43&item=216>.

<sup>9</sup> The release announcing the merger contains over 12 references to becoming more globally competitive. See “United And Continental Announce Merger Of Equals To Create World-Class Global Airline,” United.com (May 3, 2010), <http://www.united.com/press/detail/0,7056,62956,00.html>.

<sup>10</sup> Joseph A. Clougherty, “U.S. Domestic Airline Mergers: The Neglected International Determinant,” 20 J. INDUS. ORG. 557, 558 (2002).

## B. Recent DOJ Review and Their Implications

After a six-month investigation into the Delta/Northwest transaction, the DOJ concluded that the merger “is likely to produce substantial and credible efficiencies that will benefit U.S. consumers and is not likely to substantially lessen competition.”<sup>11</sup> The Antitrust Division counted as efficiencies those relating to cost savings in airport operations, information technology, supply chain economics, and fleet optimization. The DOJ also agreed with the companies that consumers would benefit from service improvements related to combining complementary networks. The DOJ concluded that Delta and Northwest competed with other legacy airlines and LCCs on routes where the two overlapped, implying that there was sufficient competition so that the public would not be faced with anticompetitive effects post-merger.

After a five-month investigation of the United/Continental deal, the DOJ closed its inquiry, following Continental’s agreement to transfer takeoff and landing rights (slots) at Newark Liberty airport to Southwest through a permanent lease arrangement.<sup>12</sup> The transfer occurred in response to the DOJ’s competitive concerns surrounding routes originating and terminating at Newark. Constraints at Newark would have made entry difficult. This fix-it-first approach obviated the need to codify the slot transfer agreement in a consent decree.<sup>13</sup> The DOJ noted that the airlines’ networks were “largely complementary,” and would create overlaps on only a limited number of routes where the merging parties both offered nonstop service. The DOJ expressed support for the several states investigating additional concerns associated with the merger.<sup>14</sup> Ohio subsequently extracted a concession from the parties to remain operational (at current service levels) at Cleveland’s Hopkins airport.<sup>15</sup>

Delta/Northwest and United/Continental present very different mergers than either U.S. Airways’ acquisition of America West in 2005 or United’s proposed acquisition of U.S. Airways in 2000-01. U.S. Airways/America West was motivated largely by the threat of

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<sup>11</sup> U.S. Department of Justice. “Statement of the Department of Justice’s Antitrust Division on its Decision to Close its Investigation of the Merger of Delta Air Lines Inc. and Northwest Airlines Corporation,” (Oct. 29, 2008), [http://www.justice.gov/atr/public/press\\_releases/2008/238849.htm](http://www.justice.gov/atr/public/press_releases/2008/238849.htm).

<sup>12</sup> U.S. Department of Justice, “United Airlines and Continental Airlines Transfer Assets to Southwest Airlines in Response to Department of Justice’s Antitrust Concerns,” (Aug. 27, 2010), [http://www.justice.gov/atr/public/press\\_releases/2010/262002.htm](http://www.justice.gov/atr/public/press_releases/2010/262002.htm).

<sup>13</sup> It is debatable whether such a consent decree could have withstood Tunney Act review, in part because the government cannot dictate the use of the transferred slots and because the transfers did not address competitive issues on non-Newark originating routes.

<sup>14</sup> These included Ohio, Texas, Virginia, Pennsylvania, North Dakota, New Jersey, Hawaii and the District of Columbia. *Supra* note 12.

<sup>15</sup> Office of the Ohio Attorney General, “Cordray Reaches Unprecedented Agreement with Continental, United Airlines,” (Sep. 13, 2010), <http://www.ohioattorneygeneral.gov/ContinentalUnitedMerger>.

America West's bankruptcy and was unchallenged.<sup>16</sup> In United/U.S. Airways, however, the loss of choice, higher fares, and lower quality of service were the DOJ's major concerns.<sup>17</sup> The merger would have yielded a monopoly or duopoly on nonstop service on over 30 routes and "solidify control" by the merging airlines over major connecting hubs for east coast traffic. The DOJ rejected a proposed remedy by the parties, including a divestiture of assets at Washington D.C. Reagan National airport and a promise by American to fly five of the routes that would be adversely affected by the merger.

The foregoing recap of the DOJ's approach to recent airline mergers reveals a number of themes. First, it is clear that the DOJ places a good deal of emphasis on claimed efficiencies resulting from combining operations. This is a controversial subject, as revealed by the ongoing debate in the economics literature network size versus economies of scale and density, efficiencies versus market power effects, and other key questions.<sup>18</sup>

Second, it appears unlikely that the DOJ would challenge cases even where competition would be substantially eliminated on routes if a number of conditions are present. For example, the number of routes with overlaps would need to be relatively small, some rivalry (from LCCs and legacies) would be required on routes, and the affected airports would not be slot- or gate-constrained to the point that rivals would find entry to be difficult. One or more of these factors were not present at Newark in the United/Continental merger, leading to the up front fix. Finally, the threat of unilateral or coordinated post-merger output restrictions or longer-term capacity reductions does not appear to be a significant concern at present – at least based on DOJ press releases on recent airline mergers. In United/Continental, these concerns were addressed at the state level.

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<sup>16</sup> Keith L. Alexander, "US Airways To Merge, Move Base To Arizona," *The Washington Post* (May 20, 2005), <http://www.washingtonpost.com/wp-dyn/content/article/2005/05/19/AR2005051901972.html>.

<sup>17</sup> U.S. Department of Justice, "Department of Justice and Several States Will Sue to Stop United Airlines from Acquiring US Airways: Deal Would Result in Higher Air Fares for Businesses and Millions of Consumers," (Jul. 27, 2001), <http://www.justice.gov/opa/pr/2001/July/361at.htm>.

<sup>18</sup> See, e.g., David Gillen, et al., "Airlines Cost Structure and Policy Implications," 24 J. TRANSP. ECON. AND POL'Y 9 (1990); Michael Creel and Montserrat Farell, "Economies of Scale in the US Airline Industry After Deregulation: a Fourier Series Approximation," 37 TRANSP. RES. PART E 321, 332 (2001); W. M. Swan, "Airline Route Developments: A Review of History," 8 J. AIR TRANSP. MGMT. 349 (2002). See also Subal C. Kumbhakar, "A Reexamination of Returns to Scale, Density and Technical Progress in U.S. Airlines," 57 S. ECON. J. 428, 439 (1990) and Leonardo J. Basso and Sergio R. Jara-Diaz, "Distinguishing Multiproduct Economies of Scale from Economies of Density on a Fixed-Size Transport Network," 6 NETWORK & SPATIAL ECON. 149 (2006). Regarding the balance of market power and efficiencies effects, see, e.g., E. Han Kim and Vijay Singal, "Mergers and Market Power: Evidence from the Airline Industry," 83 AM. ECON. REV. 549 (1993).

### III. Origin-Destination Pair Analysis of a Southwest/AirTran Merger

The effect of the proposed merger on city-pair and/or airport-pair routes where Southwest and AirTran overlap is likely to be the focus of an antitrust evaluation. Since it is fairly stock analysis, we do not offer an in-depth assessment, other than to report that the 18 airport-pairs *most* affected by the merger (i.e., where the merger will eliminate one of the merging carriers) originate either at Baltimore-Washington or Orlando.<sup>19</sup> At Baltimore-Washington, for example, AirTran and Southwest will have a post-merger share just over 60 percent. And at Orlando, that share will be almost 40 percent.<sup>20</sup>

In six of the 18 airport-pair markets, the merger would produce a monopoly, based on passenger-miles.<sup>21</sup> In six additional airport-pair markets, post-merger concentration would be in excess of 9,000 HHI and in the remaining markets, post-merger concentration is between 5,000 and 9,000 HHI. Pre- to post-merger changes in concentration in the 18 airport-pair markets are in the range of almost 1,000 to almost 5,000 HHI. These levels exceed the thresholds specified in the recently revised Department of Justice/Federal Trade Commission Horizontal Merger Guidelines.<sup>22</sup>

Airport-pairs reflect the narrowest relevant market definition in an airline merger. For example, a small but significant price increase on a route from Baltimore to Orlando could be profitable because a substantial group of consumers would *not* substitute Reagan National or Dulles airports for Baltimore-Washington. If this were the case, the market may be defined narrowly around the Baltimore-Orlando airport-pair. If consumers would switch to other airports in the Washington D.C./Baltimore area as a result of a hypothetical price increase, then the market could be defined to include those airports, i.e., a city-pair. City-pair markets containing multiple airports at either end of the pair typically include more suppliers. The share of any given supplier – and therefore market concentration – is likely to be less than in an airport-pair market.

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<sup>19</sup> The most affected non-stop routes are: Baltimore-Boston, Baltimore-Ft. Lauderdale, Baltimore-Ft. Myers, Baltimore-Indianapolis, Baltimore-Milwaukee, Baltimore-New Orleans, Baltimore-Orlando, Baltimore-Tampa, Orlando-Buffalo, Orlando-Chicago (Midway), Orlando-Columbus, Orlando-Indianapolis, Orlando-Milwaukee, Orlando-Philadelphia, Orlando-Pittsburgh, Orlando-St. Louis, Tampa-Indianapolis, and Tampa-Milwaukee.

<sup>20</sup> “Air Carriers: T-100 Domestic Market (U.S. Carriers),” Research and Innovation Technology Administration, Bureau of Transportation Statistics, [http://www.transtats.bts.gov/DL\\_SelectFields.asp?Table\\_ID=259&DB\\_Short\\_Name=Air%20Carriers](http://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=259&DB_Short_Name=Air%20Carriers) (visited Nov. 15, 2010).

<sup>21</sup> “Air Carriers: T-100 Domestic Segment (U.S. Carriers),” Research and Innovation Technology Administration, Bureau of Transportation Statistics, [http://www.transtats.bts.gov/DL\\_SelectFields.asp?Table\\_ID=259&DB\\_Short\\_Name=Air%20Carriers](http://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=259&DB_Short_Name=Air%20Carriers) (visited Nov. 20, 2010).

<sup>22</sup> U.S. Department of Justice and Federal Trade Commission, “Horizontal Merger Guidelines,” §5.3, (Aug. 19, 2010), <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf>.



For example, the merger-induced increase in concentration on the Baltimore-Orlando route is close to 5,000 HHI and post-merger concentration is 10,000 HHI. If all three airports in the Baltimore-Washington D.C. area are included in the origin market, those statistics fall to about 1,500 HHI and about 3,800 HHI, respectively. If only Baltimore-Washington and Reagan National are included in the origin market because Dulles airport is not viewed by consumers as a good substitute for Baltimore-Washington, then the merger-induced increase in concentration is about 2,500 HHI and post-merger concentration is about 5,700 HHI.

Recent experience tells us that the limited number of overlaps and lower levels of concentration associated with city-pair analysis may cause the DOJ to decline challenging a Southwest/AirTran deal. Such a conclusion would also depend on the ease of entry and whether merger-related efficiencies are deemed to outweigh potential anticompetitive price increases. However, we note that the use of city-pair analysis in this case is not a certainty.<sup>23</sup>

#### **IV. Southwest/AirTran Provides an Opportunity to Consider Novel Issues**

Should Southwest/AirTran receive similar antitrust review as previous legacy mergers, we could probably expect a swift close to the investigation. Overlaps are relatively limited, and there are claimed efficiencies. However, given the novel nature of this LCC merger, the AAI believes that a number of additional factors are important to consider in a merger inquiry. These include the potential for merger-related effects resulting from: (1) the merged airline's transition from a point-to-point system/hybrid to a hub-and-spoke network model; (2) changes in discounting behavior; (3) changes in entry or expansion behavior; and (4) changes in output and/or capacity.

##### **A. Southwest/AirTran – A Bigger Point-to-Point/Hybrid or a Fledgling Hub-and-Spoke System?**

###### **1. Analysis**

There are two major types of airline systems in the U.S. – the hub-and-spoke and point-to-point systems. In the first case, an airline concentrates its operations at a number of key airport locations. The major legacy airline networks (e.g., United/Continental, Delta/Northwest, and American) operate hub-and-spoke systems. Maintaining a hub typically requires a substantial presence at the airport in terms of gates, landing slots, ticketing facilities, and baggage handling facilities. The purpose of the hub is to concentrate traffic and route it to the ultimate destination. Some airports are what are termed “fortress” hubs, where an incumbent airline has a significant market share. While

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<sup>23</sup> Travelers in Baltimore, for example, may find it difficult to travel to Washington D.C. to use Reagan National or Dulles airports. Likewise, travelers in western Virginia may find it more difficult to use Baltimore-Washington. Average airport ticket prices show the highest correlations between (1) Baltimore-Washington and Reagan Nation and (2) Dulles and Reagan National. The correlation between prices at Dulles and Baltimore-Washington is very low – one indication that the airports may not in the same market.

hubbing creates distinct benefits, some studies indicate that bunching of flights at hubs occurs at the cost of additional delays to a carrier’s own flights and is the largest contributor to air traffic congestion.<sup>24</sup>

The point-to-point system favored by LCCs is organized differently. Flights are scheduled from a point of origin directly to a destination. This typically works best for short-haul routes, but increasingly medium and long-haul routes are part of point-to-point systems. Point-to-point systems can utilize one or two airports as a base of operations without taking on the broader characteristics of a hub-and-spoke system. For example, Southwest uses Houston Hobby as a base, Frontier uses Denver, AirTran uses Atlanta, and JetBlue uses New York John F. Kennedy.

LCCs have tended to avoid major airports and the hub-and-spoke model in large part because of the strategies of legacy carriers to keep LCCs out of their hubs. Instead, they fly point-to-point routes between secondary airports and smaller cities, and build their strategy around reducing costs and delays. In this way, LCCs have competed effectively while avoiding direct head-to-head combat with the legacy carriers, particularly in cities where there are multiple airports that are viewed by consumers as acceptable substitutes.

There is clear evidence of LCC success in the U.S. airline industry. We examine changes in market shares for LCCs and legacy carriers at five airports over the period 2006 to 2010: San Francisco, St. Louis, New York LaGuardia, Minneapolis, and Boston Logan. Results are summarized in Table 1, where LCCs are in the shaded rows and decreases in shares are shown in parentheses.

**Table 1**  
**Changes in Shares of Legacies and LCCs at Selected Airports (2006-2010)**

Carrier	Airport				
	San Francisco (SFO)	St. Louis	Minneapolis	New York (LGA)	Boston
<b>Southwest</b>	> 6%	3-6%	3-6%	1-3%	3-6%
<b>AirTran</b>	< 1%	1-3%	< 1%	< 1%	(> 1%)
<b>Republic</b>	-	1-3%	-	3-6%	-
<b>JetBlue</b>	1-3%	-	-	-	-
<b>Virgin America</b>	> 6%	-	-	-	1-3%
<b>United</b>	(> 6%)	(> 1%)	(> 1%)	(1-3%)	(1-3%)
<b>American</b>	(1-3%)	(3-6%)	(> 1%)	(3-6%)	(1-3%)
<b>Delta/Northwest</b>	(1-3%)	(> 1%)	(3-6%)	< 1%	(> 1%)
<b>U.S. Airways</b>	(1-3%)	1-3%	< 1%	1-3%	(1-3%)
<b>Continental</b>	(> 1%)	-	(> 1%)	(> 1%)	(> 1%)

We generally see the legacy carriers losing share across a part of, or the entire, period surveyed. In contrast, the LCCs gain share across the board. Much of this shift – given

<sup>24</sup> See *supra* note 18.

that demand was fairly stable during this period – is attributable to the LCCs taking share from the legacies. This result holds generally for markets such as Boston and New York LaGuardia, where shares more evenly distributed across a number of carriers. But it also holds in Minneapolis, which is a fortress hub for Delta/Northwest.

Growth of an LCC at existing airports, or adding multiple bases of operations through organic growth or merger can stretch the limits of the point-to-point system. For example, offering a larger volume of flights from an origin point to multiple destination points could put pressure on a point-to-point carrier to further concentrate operations at the origin airport, thus taking on hub-like qualities. Such systems are called “hybrids,” with characteristics of both point-to-point and hub-and-spoke networks.

It is clear that Southwest currently operates a “hybrid” system. As one source notes, for example,

“In the past decade the point-to-point business model has been eroded significantly, as Southwest entered high-volume airports such as New York LaGuardia and Baltimore-Washington seeking traffic growth. It started flying much longer routes as well.”<sup>25</sup>

Some evidence that Southwest is operating as a hybrid (or even budding hub-and-spoke) system may be that the noted “Southwest effect” – i.e., downward pressure on air fares – does not always appear where Southwest is present. Some of the airports at which Southwest operates have experienced significant growth in air fares over time. The increase in fares (in real terms) for the U.S. was about 17 percent from 1995 through 2009.<sup>26</sup> At Baltimore, where Southwest has about a 50 percent market share, price increases have been less than the national average (12 percent). But in Oakland, where Southwest has more than a 70 percent market share, increases were far higher than the national average (57 percent). At Houston, where Southwest enplanes 90 percent of passengers, price increases have been 52 percent over the period 1995 to 2009.<sup>27</sup>

The dynamics of fare changes at various airports in the U.S. are a function of numerous variables that could be explored by more sophisticated economic modeling. However, in light of the foregoing discussion, it is probably worth asking if combining with AirTran may push Southwest further along in the transition to a hub-and-spoke network. For example, the merger will concentrate the presence of the two LCCs at Baltimore-Washington, Chicago Midway, and Boston, and provide important access at LaGuardia

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<sup>25</sup> David Markiewicz, “Southwest: There’s Nothing Stopping Them,” *Atlanta Journal Constitution* (Sep. 27, 2010), <http://www.ajc.com/business/southwest-theres-nothing-stopping-641890.html>.

<sup>26</sup> “Table 11: Top 85 Markets Ranked by Percent Change from 1995,” Research and Innovative Technology Administration, Bureau of Transportation Statistics, [http://www.bts.gov/programs/economics\\_and\\_finance/air\\_travel\\_price\\_index/html/table\\_11.html](http://www.bts.gov/programs/economics_and_finance/air_travel_price_index/html/table_11.html) (visited Dec. 4, 2010).

<sup>27</sup> For price changes, see *id.* For market shares, see *supra* note 20.

and Reagan National. The merger will also add Atlanta as the third largest city in the Southwest system, behind Las Vegas and Chicago Midway. Indeed, Atlanta is viewed as ideal for connections to other destinations and is likely a key part of the merger strategy.<sup>28</sup>

## 2. Observations

The post-merger structure of the Southwest/AirTran system is important for merger review for two major reasons. First, if a combined Southwest/AirTran's costs increase as a result of moving toward a hub-and-spoke model, then the combined company may be less able to inject the competitive discipline through lower fares, more choice, and entry and expansion than each LCC alone has brought to the industry. This could potentially increase incentives to attract more business passengers with a higher willingness to pay, resulting in fewer or less aggressive discounts.<sup>29</sup> Weakened incentives to discount because of a shift away from the LCC model is a merger-related effect that cannot readily be captured by standard city-pair and/or airport-pair analysis.

Second, if Southwest/AirTran transitions to a hub-and-spoke model, there could be a significant impact on the future role of the LCC in the industry as a whole. As the low-cost leader for so many years, Southwest has provided not only a business model, but pricing, capacity, and quality benchmarks for the other LCCs. Collectively, the LCCs have brought significant gains to competition and consumers.<sup>30</sup> But with the ranks of the LCCs reduced through the merger of Southwest and AirTran, how effective will the remaining LCCs be at injecting price discipline in the industry? This is also a question that also may not be adequately answered with standard city-pair and/or airport-pair analysis.

### B. How Could Price Discounting Be Affected by the Proposed Merger?

The role of the LCC as a price discounter provides some insight into the competitive dynamics in the industry generally, and about Southwest and AirTran, in particular. To examine this issue, we look at discounting patterns on the top 1,000 city-pair routes for the second quarter of 2010.<sup>31</sup> These data include the high-fare and low-fare carrier, their respective fares and market shares, average fare, distance flown, and passenger volume.

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<sup>28</sup> *Supra* note 25.

<sup>29</sup> "Legacy Carriers in Dark Cloud with Latest M&A," *Wall Street Journal* (Marketwatch Blog) (Sep. 27, 2010), <http://www.marketwatch.com/story/legacy-carriers-fly-into-dark-cloud-with-southwest-2010-09-27>.

<sup>30</sup> See, e.g., Martin Dresner, Juin-Sheng Chris Lin, and Robert Windle, "The Impact of Low Cost Carriers on Airport and Route Competition," 30 *J. TRANSP. ECON. & POLICY* 309 (1996).

<sup>31</sup> "Domestic Airline Fares Consumer Report," Table 1 (2nd Qtr 2010), Office of Aviation Analysis, U.S. Department of Transportation, [http://ostpxweb.dot.gov/aviation/X-50%20Role\\_files/consumerairfarereport.htm](http://ostpxweb.dot.gov/aviation/X-50%20Role_files/consumerairfarereport.htm) (visited Dec. 4, 2010). The results reported here are generally consistent with those obtained for airport-pairs on the most heavily-traveled routes. Those data are found at the website listed herein, Table 1A.

To the extent that we only have information on the high and low-fares carriers on the top 1,000 city-pairs, we cannot make comparisons or draw conclusions regarding discounting involving other carriers. However, even high-fare/low-fare comparisons provide valuable insight into rivalry involving LCCs and legacies.

## 1. LCCs and Legacies

### a. Analysis

We divided the top 1,000 city-pair data into four categories: (1) a legacy is the high-fare and low-fare carrier; (2) a legacy is the high-fare carrier and an LCC is low-fare; (3) an LCC is the high-fare carrier and a legacy is low-fare; and (4) an LCC is both the high-fare and low-fare carrier.<sup>32</sup> A look at the low-fare portion of the 1,000 top routes shows that LCCs are the largest low-fare carrier. They account for about 60 percent of total routes and passenger-miles on those routes. Based on the high-fare portion of the routes, LCCs are high-fare on close to 50 percent of the routes and 35 percent of passenger-miles. If we consider the routes where the *same* carrier is both the high-fare and low-fare airline, we see that LCCs are both high-fare and low-fare on the majority of those routes.

The first analysis examines routes where legacy carriers are the high-fare airlines and other legacies or LCCs are the low-fare carrier. Where legacies compete against other legacies on a city-pair, the average low-fare carrier discount is 17 percent (off the high fare). The average fare on these routes is the highest among the groups analyzed, at \$237. When LCCs are the low-fare provider, the average discount on the high-fare price is higher, at 19 percent, and the average fare is lower, at \$203. The variation in discounting among LCCs when they are the low-fare carrier is interesting. For example, when Southwest is low fare, the discount is the smallest at 13 percent, followed by AirTran at 24 percent. Spirit, JetBlue, and Frontier are the “deepest” discounters, ranging from 26 to 28 percent.

In the second group of routes analyzed, LCCs are the high-fare carriers and other LCCs or legacies are the low-fare carrier. Where the low-fare carrier is a legacy, the discount is only 9 percent and the average fare is \$180. When an LCC is also the low fare carrier, the average discount off the high fare is 13 percent and the average fare is the least of the four comparisons, at \$155. In these cases, there is also notable variation in discounting across the LCCs. Southwest discounted fares by only 5 percent, while AirTran, Frontier, or JetBlue discounted between 12 to 14 percent, and Spirit was as high as 27 percent. The results of discounting comparisons between legacies and LCCs summarized in Table 2.

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<sup>32</sup> No adjustments are made for the length of haul (distance) in calculating low fare discounts off the high fare.

**Table 2**  
**Average Discounts and Fares on Top 1,000 City-Pair Routes**  
**for Legacies and LCCs**

<b>High Fare Carrier</b>	<b>Low Fare Carrier</b>	<b>Average Percent Discount Off High Fare by Low Fare Carrier</b>	<b>Average Fare</b>
Legacy	Legacy	17%	\$ 237
Legacy	LCC	19%	\$ 203
LCC	Legacy	9%	\$ 180
LCC	LCC	13%	\$ 155

**b. Observations**

We can make a number of observations regarding the discounting analysis involving legacies and LCCs. First, we see the most aggressive price discounting on the top 1,000 city-pairs when LCCs are the low-fare competitor and legacies are high fare. This conforms to the expected role of the LCC in the industry.

Second, it is clear that the least aggressive discount occurs when a legacy prices against an LCC. This might reflect the more limited ability of the legacies to compete given their different network types and cost structures. We do see legacies discounting more aggressively against each other when they are both high-fare and low-fare, but still producing the highest average fares on the top 1,000 routes.

Third, the highest level of variation in discounting by the low-fare carrier occurs in cases when legacies are the high-fare airline. And the lowest level of variation in discounting occurs when LCCs are the high-fare carrier. This also makes sense because LCCs are generally harder to compete against – even when they are high-fare – and therefore the variation across the low-fare discounts is lower.

Fourth, that LCCs discount less when another LCC is the high-fare competitor also makes sense because LCCs fares are, on average, lower than legacy fares. This competition produces the lowest average fares on the routes surveyed. Also notable is the fact that collectively, LCCs compete more aggressively *against themselves* than do the legacies. In other words, more LCCs than legacies are both the high-fare and low-fare carrier. This may be a function of a more dynamic LCC pricing model which sets the high fare and discounts so as to capture the low end of the market.

**2. Southwest and AirTran**

**a. Analysis**

Southwest and AirTran have a large presence as low-fare carriers on the top 1,000 city-pair routes.<sup>33</sup> Based on the low-fare carrier designations for the city-pair routes,

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<sup>33</sup> On airport-pairs, however, LCCs do not have as large a presence. The airport-pairs at which the most heavily traveled routes originate and terminate are typically dominated by the legacies, which offer service

Southwest is the low-fare competitor on about 30 percent of the routes and close to 25 percent of passenger miles. AirTran is low-fare on about 15 percent of both routes and passengers-miles. Post-merger, assuming their pricing strategies would not be altered by changed incentives, the two LCCs would be the two largest low-fare carriers, accounting for close to one-half of the top 1,000 city-pairs and 40 percent of passenger-miles. Moreover, a merged Southwest/AirTran would account for about 60 percent of routes and about 50 percent of passenger-miles where a single carrier is *both* the high-fare and low-fare airline.

We perform two analyses of the top 1,000 city-pair data, with a focus on Southwest and AirTran. In the first, we look at the roughly 30 city-pair routes where AirTran and Southwest are the high fare/low fare carriers.<sup>34</sup> The two carriers overlap the most at Baltimore, Ft. Lauderdale, and Orlando, and AirTran is the low fare carrier on the majority of the overlap routes. The analysis shows an average discount for Southwest of 4 percent (off the high fare) when it is low fare and 14 percent for AirTran when it is low fare.

In the second analysis, we examine discounting behavior for the two airlines when they both serve the same city of origin, such as Baltimore or Chicago (at Midway). This analysis might provide some insight into how the merging LCCs discount when they originate service in the same city. Where both LCCs serve the same city, Southwest’s average discount off the high fare is 13 percent and AirTran’s is 19 percent. The results for these comparisons are summarized in Table 3.

**Table 3**  
**Discounts on Top 1,000 City-Pair Routes**  
**Where Southwest and AirTran are Low-Fare Carriers**

Scenario	Southwest (discount off high fare)	AirTran (discount off high fare)
<b>Southwest and AirTran compete head-to-head on a city-pair route</b>	4%	14%
<b>Southwest and AirTran both offer service at origin city</b>	13%	19%

**b. Observations**

The discounting comparisons highlight two key points. First, the analysis clearly shows that relative to Southwest, AirTran is the more aggressive discounter, with discounts off

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from major airports. When city-pairs are considered instead, the secondary airports at which LCCs typically operate are included at the origin and destination points, thus increasing the appearance of the LCCs on the top city-pair routes.

<sup>34</sup> Southwest and AirTran could be competitors on more routes than what is indicated by the top 1,000 city-pair data. For example, they could compete on other routes where they are not the high-fare and low-fare carrier.

the high fare of two to three times more than Southwest's discount. These results confirm what we observed in the previous section, namely that (1) there are generally lower discounts off the high fare when LCCs are both high fare and low fare carriers (2) Southwest it is the least "deep" of the LCC discounters.

Second, discounts are higher when Southwest and AirTran both originate service in the same city relative to when they compete head-to-head on a route. This result is also confirmed by the analysis in the previous section. This is likely a function of a broader range of rivals at airports (including legacies), against which LCCs can discount more aggressively.<sup>35</sup>

### **3. Implications of the Discounting Results**

The discounting comparisons give us some valuable insight into how LCCs and legacies, and Southwest and AirTran, price. This has a number of important implications for analyzing the merger of Southwest and AirTran. First, the effects of eliminating an LCC should be a central focus of a merger inquiry. Taking AirTran out of the mix means removing the second largest LCC (based on its presence as a low fare carrier on top routes) and the source of some of the most aggressive price discipline from the market. This analysis supports the notion that while Southwest was the low cost "maverick" in the domestic airline industry for some time, AirTran has distinctly maverick-like qualities, perhaps more so than Southwest.<sup>36</sup> In addition to potentially changing the dynamics of competition between LCCs and the legacies, the merger could affect competition on routes served by Southwest and AirTran, and in cities where they both offer service or are planning entry or expansion.

Second, pairing up the least aggressive of the LCC discounters (Southwest) with one of the most aggressive discounters (AirTran) warrants some scrutiny. Why Southwest stands somewhat apart from the rest of the LCC pack in its discounting behavior is not completely clear. It could mean that Southwest is unable or unwilling to undercut its legacy rivals by as much as its smaller, more nimble LCC rivals. A merger inquiry should carefully consider how combining Southwest and AirTran could change incentives for the merged company and those rivals around them. This concern is perhaps best expressed in the following statement by an industry analyst:

"[T]aking AirTran, a particularly aggressive discounter, out of the mix will make matters worse, permitting Southwest to raise its prices and

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<sup>35</sup> In origin cities where Southwest and AirTran *do not* face each other, the discounts are not substantially different from cities where they both offer service.

<sup>36</sup> Merger policy has typically been concerned about the loss of a maverick where enhanced post-merger coordination is the competitive concern. Mavericks make it more difficult for market participants to reach and maintain an agreement.



eroding whatever pricing discipline the low-cost carriers still exert over the legacy airlines.”<sup>37</sup>

Third, a Southwest/AirTran merger is a good example of a merger that requires the kind of analysis contemplated by the recently revised DOJ/FTC Horizontal Merger Guidelines section on unilateral effects involving differentiated products.<sup>38</sup> The discounting analysis demonstrates that LCCs are generally speaking closer competitors to one another than any of them tends to be against other legacy airlines. A merger involving such differentiated products can reduce competition by allowing the merged firm to raise prices above pre-merger levels. Some of the sales loss resulting from that price increase will be diverted to the merging party which, depending on the relative margins of the merging parties, could make the price increase profitable. It is therefore plausible that there is a high "diversion ratio" between Southwest and AirTran and thus the potential for what the DOJ/FTC Horizontal Merger Guidelines term "upward pricing pressure" from their merger. The extent of direct competition between Southwest and AirTran would be a key factor in this analysis, since the probability of a price increase is greater if consumers view their products as close substitutes. In this case, there can be unilateral price effects from such a merger without regard to HHIs for air carriers generally on any given city-pair or airport-pair markets.

### **C. Does Entry and Expansion Behavior Confirm AirTran’s Role as an Aggressive Competitor?**

Much like the discounting analysis presented in the previous section, how Southwest and AirTran have entered and expanded in markets can give us additional insight into how the LCCs compete against each other. This section provides a brief assessment of entry patterns by Southwest and AirTran over the last five years in markets where they do and do not compete.

#### **1. Analysis**

Southwest and AirTran enplaned passengers at slightly over 100 airports in the U.S from 2006 and 2010.<sup>39</sup> At over one-half of those airports, either or both LCCs have an established presence, whereby they have offered service for at least four of the five years. Southwest provided service but AirTran did not at 45 percent of those airports. At 25 percent of airports, AirTran provided service while Southwest did not. And at about 30 percent of airports, AirTran and Southwest both offered service. We examine the remaining airports over the period 2006 to 2010 to evaluate entry patterns for Southwest and AirTran. In the first case, we look at airports where each airline entered a market

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<sup>37</sup> “Opposing View on Airline Mergers: A Bad Deal for Fliers,” *USA Today* (Sep. 29, 2010), [http://www.usatoday.com/news/opinion/editorials/2010-09-29-editorial29\\_ST1\\_N.htm](http://www.usatoday.com/news/opinion/editorials/2010-09-29-editorial29_ST1_N.htm).

<sup>38</sup> *Supra* note 22, §6.1. A unilateral price increase (by the merged firm alone) is distinct from a coordinated price increase (by the merged firm acting together with other firms in the market).

<sup>39</sup> *Supra* note 25.

where the rival LCC did not currently offer service. The second case examines entry by each LCC in markets where the other does offer service. In each scenario, we considered “successful” entry (i.e., a carrier entered and stayed), “unsuccessful” entry (i.e., a carrier entered and exited), and “recent” entry in 2009-2010.

The first case looks at airports where Southwest and AirTran *do not* face each other, AirTran entered and continued to offer service at two airports while Southwest entered none. In eight markets, AirTran initiated service and then discontinued it shortly thereafter, while Southwest did the same in only two markets. Finally, AirTran recently entered seven additional markets in 2009-2010 while Southwest entered none.

The second scenario looks at airports where either Southwest or AirTran entered where the rival already offered service. Here, it is worth noting that entry attempts when the other rival was present occurred at much larger airports than when the rival was not present. AirTran entered and remained in seven airports, while Southwest did the same in only five cases. In ten cases AirTran entered, then exited. Southwest entered then exited at only three airports. Airports where either LCC entered and remained include St. Louis, Phoenix, Reagan National, Minneapolis, and San Francisco. In an additional three cases, AirTran recently entered a market where Southwest offered service, whereas Southwest entered only one AirTran market.

The results of the entry analysis are summarized in Table 4. We find that AirTran accounted for more entry attempts than Southwest—close to 80 percent of all airports—with slightly more attempts in markets where it faces Southwest than where it does not. AirTran, however, has the higher failure rate. For example, AirTran has entered and exited markets in close to 40 percent of all entry attempts. This stands in stark contrast to Southwest’s failure rate, which is almost four times *lower* than AirTran’s. Unsuccessful entry attempts by both LCCs is higher in airports where each faces the other than where they do not. Finally, AirTran also has attempted significantly more recent entry than Southwest.

**Table 4**  
**Entry at Airports Where Southwest and AirTran**  
***Do and Do Not Compete (2006-2010)***

Market	Southwest (markets entered)	AirTran (markets entered)
<b>Airports with no competition from each other</b>		
Successful entry	0	2
Unsuccessful entry	2	8
Recent entry (too early to tell)	0	7
<b>Totals</b>	<b>2</b>	<b>17</b>
<b>Airports with competition from each other</b>		
Successful entry	5	7
Unsuccessful entry	3	10
Recent entry (too early to tell)	1	3
<b>Totals</b>	<b>9</b>	<b>20</b>

## 2. Observations

Even a brief analysis of Southwest and AirTran entry reveals a number of key observations. First, Southwest's entry patterns are markedly different from AirTran's. AirTran has pursued a far more active and risky expansion strategy than Southwest. The reason for AirTran's maverick-like behavior on the entry front may be obvious, namely that Southwest – with a larger market presence – may be reaching saturation levels in terms of the airports it can serve using its hybrid system. This likely reflects that Southwest, which is far more mature than AirTran, has experienced nearly as much organic growth as possible. Merger may be the only way to extend this growth platform. The smaller airline, AirTran, may still be in expansion mode, choosing strategically whether to enter markets in which Southwest does or does not compete.

Second, the foregoing analysis may demonstrate that if competitive concerns arise in a Southwest/AirTran merger, entry might play an important role. It demonstrates that – at least for Southwest and AirTran – entry may be relatively easy in some cases (i.e., at airports that are not constrained in terms of slots, gates, and other facilities). This appears to have been a factor in the DOJ's reasoning in deciding not to challenge the Delta/Northwest merger. Whether entry meets the DOJ/FTC Horizontal Merger Guidelines of “timely, likely, and sufficient” should therefore be a key question.<sup>40</sup> With an aggressive AirTran out of the mix, entry that is effective enough to discipline post-merger competition must be accomplished by a much diminished set of players. Those players are likely to be the remaining LCCs. Here, the DOJ might look to the merger of Whirlpool and Maytag for guidance. In that case, entry by Asian producers of white goods was projected to impose discipline in the post-merger market, despite the fact that such producers had a very small market share.<sup>41</sup> But there is some evidence that post-merger, prices for some white goods increased, calling into question the effectiveness of such entry.<sup>42</sup> Southwest/AirTran may raise similar questions.

### D. How Will Potential Output and Capacity Reductions Play Out in the LCC Context?

#### 1. Analysis

The state of Ohio's successful efforts to secure a commitment from United/Continental to keep Cleveland open post-merger reveals an underlying concern regarding airline consolidation. That is, the risk of cutbacks at smaller hubs. Hub cutbacks and closures raise local economic concerns such as job loss and weakening of the service sector that

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<sup>40</sup> *Supra* note 22, §9.

<sup>41</sup> U.S. Department of Justice, “Department of Justice Antitrust Division Statement on the Closing of its Investigation of Whirlpool's Acquisition of Maytag,” (Mar. 29, 2006), [http://www.justice.gov/atr/public/press\\_releases/2006/215326.htm](http://www.justice.gov/atr/public/press_releases/2006/215326.htm).

<sup>42</sup> See, e.g., Orley C. Ashenfelter, Daniel S. Hosken, and Matthew C. Weinberg, “The Price Effects of a Large Merger of Manufacturers: A Case Study of Maytag-Whirlpool,” (Nov. 19, 2009), cited with permission from the authors.

surrounds an airport and may undermine the economic viability of a city. The competition policy focus, however, is not on urban welfare generally but on the loss of choice for consumers in smaller communities who rely on hubs such as Cincinnati, Memphis, Cleveland, and Detroit to connect to larger destinations. Less flight frequency, higher fares, and discontinuation of nonstop service that forces consumers to use less convenient connecting service or travel longer distances to other airports represent legally cognizable adverse effects of a merger.

Hub closures are evident in a number of post-merger cases. For example, after American merged with TWA in 2001, it reduced the number of flights at Lambert-St. Louis airport. The reduction of almost 85 percent occurred between 2001 and 2009, while flights at St. Louis as a whole declined by only 50 percent.<sup>43</sup> According to some sources, these cutbacks were accomplished by increasing the number of regional flights and shifting service to Chicago and Dallas.<sup>44</sup> A similar effect was seen after the 2005 merger of U.S. Airways and America West. While total flights at Las Vegas – one of the airlines’ hubs – fell by 12 percent from 2005 to 2009, total flights offered by the merged airlines fell 50 percent. Cincinnati also experienced cutbacks after the Delta/Northwest deal. Despite promises to keep hubs open, the airline reduced flights by close to 60 percent between 2008 and mid 2010. And as of early 2010, Delta/Northwest had discontinued international nonstop service from Cincinnati to London, Frankfurt, Rome, and Amsterdam.<sup>45</sup>

Output and capacity reductions are a way to maintain, or boost, airline fares. In the short run, restricting output to drive up prices can be implemented by reducing flight frequency or substituting smaller for larger aircraft, both of which would increase load factors. In the longer term prices can be affected by airlines opting *not to expand* when demand is growing.<sup>46</sup> The revised DOJ/FTC Horizontal Merger Guidelines emphasize both output restrictions and capacity reductions as possible post-merger effects.<sup>47</sup>

Rivals are vocal about the merits of output and capacity reductions. For example, following the Southwest/AirTran announcement, JetBlue stated that it supported capacity reductions that would accompany consolidation.<sup>48</sup> To be sure, Southwest noted that at

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<sup>43</sup> *Supra* note 21.

<sup>44</sup> Bill McGee, “When Airlines Merge, Consumers Usually Loose,” *USA Today*, (Apr. 29, 2010), [http://www.usatoday.com/travel/columnist/mcgee/2010-04-28-airline-mergers\\_N.htm](http://www.usatoday.com/travel/columnist/mcgee/2010-04-28-airline-mergers_N.htm).

<sup>45</sup> *Id.*

<sup>46</sup> Airlines also manage capacity at times of falling demand so as to maintain fares.

<sup>47</sup> *Supra* note 22, at §2.2.1.

<sup>48</sup> Johnny Diaz, “Merger Could Lift Airfares in Boston,” *Boston Globe* (Sep. 28, 2010), [http://www.boston.com/business/articles/2010/09/28/southwest\\_airtran\\_merger\\_means\\_less\\_price\\_competition/](http://www.boston.com/business/articles/2010/09/28/southwest_airtran_merger_means_less_price_competition/). (“Alison Croyle, a JetBlue spokeswoman, said the carrier is in favor of consolidation and the resulting reduction in capacity. ‘It results in an improvement in the financial health of the industry,’ she said in an e-mail yesterday.”)

airports like Baltimore, where there are significant overlaps between the two LCCs, there are no plans to reduce capacity.<sup>49</sup> But Southwest reported that the airline has no plans to increase capacity in the next few years either.<sup>50</sup> Observers have noted that LCC discount pricing is viewed as “destructive,” and consolidation, if accomplished without increasing capacity, sets the stage for tighter supply and fare increases.<sup>51</sup> If the merging parties are both viewed as being relatively disciplined in managing capacity – as Southwest and AirTran reportedly are – then the possibility of post-merger capacity adjustments may be more likely.<sup>52</sup>

## 2. Observations

A focus on capacity reductions is important for the Southwest/AirTran merger for several reasons. First, hub cutbacks and closures frequently occur where there are overlaps in the networks of the merging airlines (e.g., redundancy on routes and at airports). The fact that these post-merger effects occurred after Delta/Northwest (and potentially in United/Continental, per the state of Ohio’s concerns) casts some doubt on the DOJ’s conclusion that those mergers were largely “complementary.” These developments might inform the analysis conducted in Southwest/AirTran, given that the two LCCs operate on a number of overlapping routes and both have a presence at multiple airports.

Second, capacity reductions in network industries such as airlines reflect not one, but two adverse merger-related effects. In non-network industries, output restrictions or longer term capacity reductions are a mechanism for raising price.<sup>53</sup> In a transportation network where consumers enter the network through a particular hub(s), eliminating capacity through hub closures or cutbacks not only can raise price, it reduces consumer convenience and choice. This should be considered a significant factor in merger analysis.<sup>54</sup>

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<sup>49</sup> Darren Shannon, “AirTran Deal Solves SWA Growth Plans,” *Aviation Week* (Sep. 17, 2010), [http://www.aviationweek.com/aw/generic/story\\_channel.jsp?channel=comm&id=news/awx/2010/09/27/awx\\_09\\_27\\_2010\\_p0-257442.xml&headline=AirTran%20Deal%20Solves%20SWA%20Growth%20Plans](http://www.aviationweek.com/aw/generic/story_channel.jsp?channel=comm&id=news/awx/2010/09/27/awx_09_27_2010_p0-257442.xml&headline=AirTran%20Deal%20Solves%20SWA%20Growth%20Plans).

<sup>50</sup> Terry Maxon, “Southwest Airlines and AirTran: What the Smart People Are Saying,” *Dallas Morning News* (Airline Biz Blog) (Sep. 27, 2010), <http://aviationblog.dallasnews.com/archives/2010/09/southwest-airlines-and-airtran.html>.

<sup>51</sup> Mary Schlangenstein “Southwest’s AirTran Acquisition May Bring Higher Ticket Prices,” *Bloomberg* (Sep. 29, 2010), <http://www.bloomberg.com/news/2010-09-29/southwest-s-airtran-purchase-may-bring-higher-fares-as-rival-is-eliminated.html>.

<sup>52</sup> *Supra* note 49.

<sup>53</sup> Tacit or explicit collusion is another way to raise price. See, e.g., Several Borenstein, “Rapid Price Communication and Coordination: The Airline Tariff Publishing Case (1994),” in *THE ANTITRUST REVOLUTION* 233 (John E. Kwoka Jr. and Lawrence J. White, eds., 2004).

<sup>54</sup> For further discussion, see, e.g., Robert H. Lande and Neil W. Averitt, “Using the ‘Consumer Choice’ Approach to Antitrust Law,” 74 *ANTITRUST L. J.* 175 (2007).

## **V. Conclusions**

In this White Paper, we have attempted to highlight some of the issues that are unique to mergers of LCCs and thus prompt further inquiry in an antitrust investigation. These issues include the potential migration of Southwest and AirTran from a point-to-point/hybrid to a hub-and-spoke model, and changes in discounting behavior, entry, and capacity. The AAI believes that standard city-pair or airport-pair analysis may not adequately capture all the factors that bear importantly on competition and how the proposed merger of Southwest and AirTran may change both the mode and intensity of competition, both of which could have important effects on consumers.

The analyses provided in this White Paper point to the importance of LCCs in the domestic airline industry, and specifically to AirTran as an important maverick-like competitor. This has immediate implications for an antitrust review of the proposed merger. It also cautions against excessive reliance on Southwest as the ever-present LCC to help justify larger legacy mergers. A DOJ challenge to the Southwest/AirTran deal could be viewed as punishing Southwest for having played the role of maverick so well, whereas its larger competitors were allowed to gain the benefits of merger in part because they had not done better as individual competitors. However, poor merger decisions in the past should not preclude the DOJ from making a more realistic analysis today.