The U.S. Airline Industry: Myths vs. Facts

November 17, 2021
To What Extent Does the Data Corroborate Certain Commonly-Held Views about the U.S. Airline Industry?

1. **Introduction and the State of the U.S. Airline Industry**

2. **Assertion**: Airline Mergers and a Lack of New Entry Have Led to Fewer Choices For Consumers and a Lack of Competition

3. **Assertion**: Airfares Have Increased Sharply, Made Worse by Tens of Billions of Dollars in New Ancillary Fees

4. **Assertion**: A Lack of Competition Has Resulted in Service Levels Deteriorating and Reduced Airline Employees’ Ability to Bargain for Higher Wages and Benefits
Executive Summary

Assertion: Airline Mergers and a Lack of New Entry Have Led to Fewer Choices for Consumers and a Lack of Competition

➢ Today’s airline industry offers consumers **more choices** among and between carriers competing with different business models than ever before.

➢ The lack of entry barriers and more comprehensive networks made possible by mergers has resulted in the average number of competitors per city-pair **increasing** from 3.3 to 3.5 over the past two decades.

➢ Lower cost carriers have entered hundreds of new routes and now carry **nearly half** of all domestic passengers; nearly **nine-of-ten** domestic passengers have lower cost carrier options for their travel.

➢ Lower cost carriers (including new entrants) are growing several times faster than the U.S. global network carriers and have **hundreds of additional aircraft on order** to support future growth.

➢ Mergers between the large network carriers have enabled them to regain their financial footing and restore their growth, including to **small communities** that depend on their large hub-and-spoke networks.
Assertion: Airfares Have Increased Sharply, Made Worse by Tens of Billions of Dollars in New Ancillary Fees

- Southwest’s fare-reducing impact (i.e., the "Southwest Effect"), an impact that extends to other lower-cost network carriers such as Alaska and JetBlue, is not only alive and well, but has expanded to cover thousands of additional city-pairs due to the growth of these carriers.

- ULCCs such as Spirit, Allegiant, and Frontier are increasing their penetration faster than Southwest did in the 1990s, putting additional downward pressure on fares and making commercial air travel accessible to more consumers than ever before.

- Robust competition and growth by lower cost carriers has resulted in inflation-adjusted airfares reaching their lowest point in history in 2019 even after including ancillary fees, only to sink further due to the pandemic in 2020 and 2021.

- In contrast to prices for many other goods and services identified in the President’s Executive Order Promoting Competition In The American Economy, airfares have risen much slower than overall inflation.

- U.S. global network carriers have responded to increased competition from lower cost competitors by increasing product differentiation to better cater to different customer preferences and needs on the same flight.
Key metrics of airlines operational performance (e.g., mishandled bags, denied boardings) have improved to their best levels in history over the past 15 years.

Since 2015 alone, U.S. passenger airlines have invested over $100 billion in capital expenditures to improve passengers’ travel experience onboard flights and at U.S. airports.

The combination of low fares, better networks, strong operating performance, and service enhancements has resulted in the highest rates of airline customer satisfaction in at least 15 years and air travel increasing three times as fast as population growth since 2007.

Consolidation has put airlines on firmer financial footings, allowing them to re-invest in their employees: labor’s share of passenger airlines’ revenue rose from 23.9% in 2007 to 30.7% in 2019.

As of 2019, the U.S. passenger airline industry directly employed over 450,000 U.S. workers with high-quality, long-term career opportunities and average wages that grew more than four times as fast as overall private sector wages from 2007 to 2019.
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Even with the CARES Act and subsequent Payroll Support Program ("PSP") support,* U.S. airlines suffered net losses of **$35 billion** in 2020.

But for the grants, hundreds of thousands of jobs would have been lost, and service to small communities would have been suspended or worse (as was the case in Canada).

By stabilizing U.S. airlines’ workforces when demand had evaporated, airlines were in a position to help lead the economic recovery as the vaccine rollout was accelerated and travel restrictions started to lift.

*https://home.treasury.gov/policy-issues/coronavirus/assisting-american-industry/payroll-support-program-payments
In April 2020, Airlines for America (A4A) members were burning through over $300 million of cash per day, with some carriers losing $100 million per day.*

By the second quarter of 2021, a rebound in leisure demand helped A4A member carriers stop bleeding cash at the same rates, with carriers reporting much smaller cash burns or slightly positive cash builds.**

The falloff in bookings as new daily COVID cases spiked in August is a reminder of the fragility of the industry’s recovery.

Absence of PSP grants, U.S. passenger carriers lost $4.8 billion pre-tax in 2021 Q2.***

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* AA Q1 2020 Earnings Press Release; DL 2020 Q1 Earnings Press Release; UA 2020 Q1 Earnings Call; WN Q1 2020 Earnings Press Release; B6 Q1 2020 Earnings Call; AS Q1 2020 Earnings Call; HA Q1 2020 Earnings Call
*** U.S. DOT Form 41 Schedule P-12; Carrier 2021 Q2 10-Q filings.

Note: **Estimate without grants includes Alaska, American, Allegiant, Delta, Frontier, Hawaiian, JetBlue, Southwest, Spirit, Sun Country, and United.
As Designed, the CARES Act/PSP Funding Enabled the U.S. Airline Industry to Retain More Service Throughout the Pandemic than Airlines in Other Countries

Percentage Change in Average Daily Domestic Departures from 2019
U.S. Carriers vs. Carriers Based in Other Regions*

Source: OAG schedule published October 7, 2021.
Notes: Consolidated, domestic operations. *Other regions include the Americas ex. United States, Europe, Australia and New Zealand.
As such, U.S. carriers were able to quickly restore capacity in advance of demand rebounding, helping to lead the economic recovery.

Average Summer 2021 load factors were 82%, six percentage points below the average load factor during the same period in 2019 (88%).

Source: Airlines for America.
Notes: Includes A4A members. Revenue passengers only. Seven day moving average. *Summer includes June, July, and August. Data through October 31, 2021.
The State of the Industry

In Addition to Ensuring That All Communities Maintained Their Service, Airlines Added New Service to Many Small Communities Throughout the Pandemic

Small Community Service Added During COVID-19 Pandemic (August 2020 - November 2021)

Source: OAG schedule published October 7, 2021.
Notes: Includes newly added destinations classified as nonprimary, non-hub, and small size FAA classification in 2019 by carriers that did not serve the endpoint between March 2019 and February 2020 but added service to the destination between August 2020 and November 2021. Excludes destinations known to have been subsequently cancelled. A city is served by a carrier if that carrier had had least one month with at least five departures in the period.

On net, 26 small communities gained additional service over this period.

Source: OAG schedule published October 7, 2021.
Notes: Includes newly added destinations classified as nonprimary, non-hub, and small size FAA classification in 2019 by carriers that did not serve the endpoint between March 2019 and February 2020 but added service to the destination between August 2020 and November 2021. Excludes destinations known to have been subsequently cancelled. A city is served by a carrier if that carrier had had least one month with at least five departures in the period.
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It's time to re-regulate airlines

Imagine life with just one major airline, but it actually worked and was consistent. But forget airfares for a moment. Something much more fundamental happened: The service got worse. Today, after 40 years of The Alliances and U.S. Consumers: Domestic Consolidation, High Concentration, and Limited Market Entry risk of aggressive responses to new entry by the dominant incumbent carrier. In addition, entry is highly unlikely on routes where the origin or destination airport is another airline’s hub, because the new entrant would face substantial challenges attracting sufficient local passengers to support service.

Myth or Fact?

Recent Media Reports Have Continued to Shine a Spotlight on the Airline Industry in the Wake of the President’s Executive Order Promoting Competition in the American Economy

FACT SHEET: Executive Order on Promoting Competition in the American Economy

The economy is booming under President Biden’s leadership, with over three million jobs since the President took office only six months ago. The economy is growing at a rate not seen in years. Today, the economy can grow even faster, and the year-to-year growth and job creation are now well-established.

For decades, corporate consolidation has been a problem for consumers. The number of large companies that control many aspects of our lives has grown, and the result is higher prices and poorer quality for consumers. The lack of competition drives up prices for consumers in many sectors, including healthcare, financial services, and consumer goods.

Barriers to competition are also driving down wages for workers in many sectors. In fact, research shows that workers in the airline industry have seen a decline in wages over the past few years. This is true across the board, as workers in many industries are struggling to make ends meet.

Transportation

In the transportation sector, multiple industries are now dominated by large corporations—air travel, rail, and shipping.

America’s monopoly problem stretches far beyond Big Tech

Feeling squeezed by corporate America? Monopolies have something to do with it.

There are plenty of reasons flying sucks. But one major and constant issue is competition, or rather, the lack of it. Last week, President Joe Biden signed an executive order intended to increase competition. The headlines have largely been about how this affects big tech companies, but the truth is there are monopolies and oligopolies in all kinds of industries.

The “big four” airlines—Delta, American, United, and Southwest—control a large majority of domestic passenger travel in the US. They set the rules of the air, whether that means increased baggage fees (sometimes happening in tandem) or higher ticket prices or an end of service to smaller airports altogether. And because there aren’t enough smaller players that can really compete with them—or stricter rules that, at the very least, make them be modestly less terrible—there’s not much ordinary people can do about it. A shitty flight experience is the only game in town.

What has made this possible?

1. Lack of entry barriers has made it possible for lower cost carriers to rapidly expand throughout the country.

2. Mergers of complementary networks have enabled large network carriers to offer competitive connecting service on more city-pairs and add new non-stop service into markets they previously did not serve.

Moreover and notably,

- The pandemic did not decrease competitors per route.
- Increasing the “competitor” threshold from 5% to 10% share also shows an increase from 2.5 competitors per city-pair in 2000 to 2.8 in 2020.

What the Data Show: Competition & Choice

In Fact, the Average Number of Competitors on Domestic City-Pairs Has Actually Increased Over the Past Two Decades

Average Number of Competitors on Domestic City-Pairs

- In 2019, the average market share of the smallest competitor (i.e., with at least a 5% share) on a domestic city-pair was 13.4%.

*Passenger-weighted average share of the smallest competitor for each city-pair with at least two competitors. The median smallest competitor by city-pairs with at least two competitors was 17.6%.

Sources: U.S. DOT DB1B Database.

Notes: A carrier is defined as a competitor on a city-pair if it has at least 5% of O&D passengers. Average number of competitors is weighted across city-pairs by passengers. Airports in the following metropolitan areas are grouped: Chicago (ORD, MDW), Cincinnati (CVG, DAY), Cleveland (CLE, CAK), Dallas (DFW, DAL), Houston (HOU, IAH), Los Angeles Basin (LAX, BUR, LGB), Miami (MIA, FLL), New York (LGA, JFK, EWR), San Francisco/Bay Area (SFO, OAK), Washington DC/Baltimore (DCA, IAD, BWI), and Tampa (TPA, PIE).
Low Entry Barriers and Consumers’ Thirst for Low Fare Service Has Enabled Lower Cost Carriers to Enter Hundreds of New City-Pairs

What the Data Show: Competition & Choice

Number of Systemwide City-Pairs Served Non-Stop By Lower Cost Competitors

Growth in Systemwide ASMs Since 2010

Source: OAG schedule published October 7, 2021.

Notes: Count of city-pairs with at least 104 nonstop annual departures (combined directions). For growth in systemwide ASMs, ULCCs include Allegiant, Frontier, Spirit, and Sun Country. Carriers include predecessor airlines.
What the Data Show: Competition & Choice

Competition Is Increasing: Since 2000, Smaller Carriers and LCCs Have Expanded Rapidly, Including at Network Carriers’ Hub Cities

Growth of Lower Cost Carriers’ O&D Passengers at Major Hub Cities

Source: U.S. DOT DB1B database.

Notes: Lower Cost Carriers include AirTran, Alaska, ATA, Hawaiian, JetBlue, Midway, National, Pro Air, Southwest, and Vanguard. ULCCs include Allegiant, Frontier, Spirit, and Sun Country. Airports in major metropolitan areas are grouped: Chicago (ORD,MDW), Washington, D.C. (IAD, DCA, BWI), Dallas (DFW, DAL), Houston (IAH,HOU), Los Angeles (LAX, LGB, BUR), Miami (MIA, FLL), New York (EWR, JFK, LGA), San Francisco (SFO, OAK).
### Growth of Spirit’s Domestic Departures at Major Hub Cities

<table>
<thead>
<tr>
<th>City</th>
<th>2019</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta</td>
<td>26</td>
<td>3</td>
</tr>
<tr>
<td>Chicago</td>
<td>28</td>
<td>5</td>
</tr>
<tr>
<td>Dallas/Ft.Worth</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Denver</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>Detroit</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Houston</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>51</td>
<td>2</td>
</tr>
<tr>
<td>Miami</td>
<td>74</td>
<td>0</td>
</tr>
<tr>
<td>Minneapolis/St. Paul</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>New York</td>
<td>23</td>
<td>11</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>San Francisco</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Washington</td>
<td>29</td>
<td>3</td>
</tr>
</tbody>
</table>

In 2019, Spirit had an average of 563 domestic daily departures (up from 128 in 2010), of which almost 75% were to or from a major hub city.

Source: OAG.

Notes: Airports in major metropolitan areas are grouped: Chicago (ORD,MDW), Dallas (DFW, DAL), Houston (IAH,HOU), Los Angeles (LAX, LGB, BUR), Miami (MIA, FLL), New York (EWR, JFK, LGA), San Francisco (SFO, OAK).

**What the Data Show:**

**Competition & Choice**

Even Before the Pandemic, ULCCs Such as Spirit Have Had No Trouble Obtaining Gates at the Global Network Carriers’ Hub Cities to Grow Their Service.
What the Data Show: Competition & Choice

Simply Put, Lower Cost Carriers Have Grown Enormously and Taken Share From the U.S. Global Network Carriers

Growth of Domestic O&D Passengers by Carrier Type (2019 vs. 2000)

Source: U.S. DOT DB1B Database.
Notes: LCCs/Lower cost network carriers include AirTran, Alaska, ATA, Hawaiian, JetBlue, Midway, National, Pro Air, Southwest, and Vanguard. ULCCs include Allegiant, Frontier, Spirit, and Sun Country. Global network carriers include American, Delta, and United (and all predecessor airlines).
Lower Cost Carriers Now Serve 90% of the Routes That Were Once Commonly Believed to Be Impenetrable (i.e., Legacy Carrier “Hub-to-Hub” Routes)

Number and Percentage of Legacy Network Carrier Hub-to-Hub Routes Served Non-Stop By Lower Cost Carriers

What the Data Show: Competition & Choice

Sources: OAG.

Notes: A hub-to-hub route is between two hubs of a single carrier. Includes domestic hub-to-hub routes for American, US Airways (combined with American beginning 2014), America West (combined with US Airways beginning 2006), TWA (combined with American beginning 2002), United, Continental (combined with United beginning in 2011), Delta, and Northwest (combined with Delta beginning 2009). Lower cost carriers include JetBlue, Independence Air, Frontier, Kiwi, Vanguard, Spirit, Reno, Sun Country, ATA, Western Pacific, Eastwind, Alaska, Virgin America (combined with Alaska beginning 2017), Southwest, and AirTran (combined with Southwest beginning 2011). The following metropolitan areas are grouped: Chicago (ORD, MDW), Cincinnati (CVG, DAY), Cleveland (CLE, CAK), Dallas (DFW, DAL), Houston (HOU, IAH), Los Angeles Basin (LAX, BUR, LGB), Miami (MIA, FLL), New York (LGA, JFK, EWR), Phoenix (PHX, AZA), San Francisco/Bay Area (SFO, OAK), Washington DC/Baltimore (DCA, IAD, BWI), and Tampa (TPA, PIE).

Examples of Lower Cost Entry on New Hub-to-Hub Routes

• Southwest on Atlanta-Minneapolis in 2014 (DL/NW hubs)
• Spirit on Chicago-Houston in 2012 (UA/CO hubs)
• Southwest on Denver-Newark in 2011 (UA/CO hubs)
• Southwest on Dallas-Phoenix in 2014 (AA/US hubs)
LCCs/ULCCs Are Seizing on the Rebound in Leisure Demand to Rapidly Expand as the United States Emerges From the Pandemic

Southwest
- Launched service from 17 new domestic airports (IAH, ORD, VPS, SRQ, SBA, SAV, PSP, MYR, MTJ, MIA, JAN, ITO, HDN, FAT, EUG, COS, BZN), plus one international airport (CZM) since Aug 2019.
- Increased number of domestic city-pairs served non-stop by more than 100 since Aug 2019.
- At 93% of pre-pandemic capacity (seats).

Spirit
- Launched service from five new domestic airports (MKE, PNS, SDF, SNA, STL) plus three international airports (PVR, BGA, BAQ) since Aug. 2019.
- Increased number of international city-pairs served non-stop by five since Aug 2019.
- At 105% of pre-pandemic capacity (seats).

Frontier
- Launched service from nine new domestic airports since Aug 2019 (ILG, GJT, DRO, OAK, ANC, STT, BUR, ROC, FCA) and eight international airports (PVR, SXM, SJO, SDQ, SAL, NAS, GUA, CZM) since Aug 2019.
- Increased number of international city-pairs served non-stop by 17 since Aug 2019.
- At 112% of pre-pandemic capacity (seats).

Allegiant
- Launched service from 12 new domestic airports since Aug 2019 (MDW, HOU, EYW, PDX, BOS, SNA, GEG, JAC, TVC, SCE, RDM, PBI).
- Increased number of domestic city-pairs served non-stop by more than 120 since summer 2019.
- Announced 23 new nonstop routes to be launched in Oct-Dec 2021
- At 115% of pre-pandemic capacity (seats).

For comparison, the Global Network Carriers were at 82% of pre-pandemic capacity (seats) as of August 2021.

The Lower Cost Network Carriers (i.e., Alaska, JetBlue and Hawaiian) Are Also Continuing to Dramatically Expand Their Networks Throughout the Pandemic

Alaska, JetBlue, and Hawaiian Airlines Route Additions Since 2019

On net, Alaska added 27 routes since 2019 and started service at five domestic airports (CVG, IDA, JAC, RDD, RSW) and one international airport (BZE).

On net, Hawaiian added four routes since 2019 and started service at three domestic airports (AUS, MCO, ONT) and one international airport (FUK).

On net, JetBlue added 83 routes since 2019 and started service at eight domestic airports (ALV, BOI, EYW, FCA, MCI, MIA, MKE, SAT) and eight (LGW, LHR, GEO, GUA, PTP, PVR, SAP, SJD). Has also announced new service Vancouver, Canada starting next summer.

What the Data Show: Competition & Choice

The Proliferation of LCCs/ULCCs/Smaller Carriers Over the Past Two Decades Has Reached All Regions of the Country

Percentage of Domestic O&D Passengers with Lower Cost Options, 2000 vs. 2021H1

Sources: U.S. DOT DB1B 2021 and DB1A.

Notes: Domestic Passengers with Lower Cost Carrier Options defined as passengers traveling in city-pairs where at least one lower cost airline has at least a 5% O&D share. New York and New Jersey are grouped. District of Columbia, Virginia, and Maryland are grouped. Lower Cost Carriers include AirTran, Alaska, Allegiant, ATA, Frontier, Hawaiian, JetBlue, Midway, National, Pro Air, Southwest, Spirit, Sun Country, and Vanguard.
What the Data Show: Competition & Choice

2021 Has Seen the Launch of Two Well-Funded ULCCs: Breeze Airways (Founded by Former JetBlue CEO David Neeleman) And Avelo (Founded by Former Allegiant CEO Andrew Levy)

New Aircraft Orders/Options by Lower Cost Carriers Portend Years of Continued Expansion By Lower Cost Carriers

What the Data Show: Competition & Choice

Current Fleet vs. New Aircraft Orders/Options

<table>
<thead>
<tr>
<th>Aircraft Carrier</th>
<th>Orders/Options</th>
<th>Current Fleet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breeze</td>
<td>13</td>
<td>80</td>
</tr>
<tr>
<td>Hawaiian Airlines</td>
<td>29</td>
<td>61</td>
</tr>
<tr>
<td>Frontier Airlines</td>
<td>144</td>
<td>111</td>
</tr>
<tr>
<td>Spirit</td>
<td>134</td>
<td>168</td>
</tr>
<tr>
<td>Alaska Airlines</td>
<td>134</td>
<td>234</td>
</tr>
<tr>
<td>JetBlue</td>
<td>128</td>
<td>280</td>
</tr>
<tr>
<td>Southwest</td>
<td>603</td>
<td>737</td>
</tr>
</tbody>
</table>

Number of Aircraft

- Orders/Options
- Current Fleet

Source: Cirium, as of Sept 30, 2021.
Notes: Current fleet includes fleet in storage. Firm orders and options.
Other ULCCs Are Taking Advantage of Inexpensive Used Aircraft Because of the Pandemic to Expand (Sun Country) Or Launch Service (Avelo)

Sun Country Looks to Buy Used Planes at Pandemic Discount

The budget airline’s CFO says the price of used planes has declined because of a glut of aircraft for sale.

Sun Country only buys used planes, a strategy that allows the company to expand at a low cost, said Dave Davis, the company’s chief financial officer. The airline currently owns 31 passenger planes and wants to increase that figure to about 50 by 2023. Sun Country has agreements in place to purchase three additional planes, according to the company.

Sale prices for used aircraft have declined over the past year as airlines sold planes due to Covid-19, Mr. Davis said. “It’s a good time for us to grow, because we can get a lot of aircraft at really, really attractive prices,” he said.

New airline Avelo thinks it’s the perfect time to start flying as travel picks up

For now, Levy’s focus is on a clean launch with no hiccups that often hinder start-up companies. Avelo takes off with a fleet of three Boeing 737s and plans to add three more this summer.

Fitting of a CEO focused on low costs, Levy is enjoying the fact that he bought two of the airplanes at a discount from others in the industry looking to unload aircraft to save millions of dollars.

“The two we purchased were probably about a third lower (in price) than they would have been ahead of Covid, so that represented, between the two planes, in the range of a $15 million discount,” said Levy.

Overall, Nearly 90% Of Domestic Passengers Now Have Lower Cost Carrier Options When They Fly

Percentage of Domestic O&D Passengers with Lower Cost Carrier Options

Notes: 2021 is for 2021 Q1 and Q2. Percent of passengers traveling on city-pairs where at least one low-fare carrier has a 5% share of O&D passengers. Lower cost carriers include Southwest, AirTran, JetBlue, Frontier, Allegiant, Spirit, Sun Country, Alaska, Virgin America, Independence Air, National, Morris Air, Accessair, Pro Air, Reno Air, Valujet, ATA, Eastwind, Vanguard, Skybus, Western Pacific, Air South, Kiwi, Midway and Hawaiian. Includes merged carriers in all years.
Most of the Consumers Who Do Not Have Lower Cost Carrier Options Are Traveling To/From Small Communities That Require the Diversified Fleets of Large Hub-and-Spoke Network Carriers to Be Economically Viable

Small Communities Served Exclusively by Global Network Carriers and Their Regional Partners (2019)

The mean and median number of passengers per day in 2019 traveling between these communities and all destinations worldwide were only 486 and 238, respectively.

Sources: OAG and U.S. DOT T100 data.
Simply Put, Because Small Communities Generate Few Passengers, They Can Only Be Economically Served With Frequent Service by One or Two Carriers, Typically Hub and Spoke Carriers That Can Aggregate Traffic Flow at Hubs

**What the Data Show:**

**Competition & Choice**

**Average Daily Domestic O&D Passengers at Cities By Number of Carriers Serving U.S. Cities**

<table>
<thead>
<tr>
<th># of Carriers Serving City</th>
<th>Domestic Passengers per Day Each Way, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>84</td>
</tr>
<tr>
<td>2</td>
<td>113</td>
</tr>
<tr>
<td>3</td>
<td>396</td>
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<td>4</td>
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<tr>
<td>5</td>
<td>1,322</td>
</tr>
<tr>
<td>6</td>
<td>4,065</td>
</tr>
<tr>
<td>7 or more</td>
<td>19,527</td>
</tr>
</tbody>
</table>

Source: OAG; U.S. DOT DB1B Database

Note: Includes domestic passengers only. Airports in the following metropolitan areas are grouped: Chicago (ORD, MDW), Cincinnati (CVG, DAY), Cleveland (CLE, CAK), Dallas (DFW, DAL), Houston (HOU, IAH), Los Angeles Basin (LAX, BUR, LGB), Miami (MIA, FLL), New York (LGA, JFK, EWR), San Francisco/Bay Area (SFO, OAK), Washington DC/Baltimore (DCA, IAD, BWI), and Tampa (TPA, PIE).
By Combining Complementary (Rather Than Overlapping) Networks, Merged Carriers Became Better Able to Compete Across the Entire Country...

States Where Carriers Carried At Least 10% of Domestic O&D Passengers


Sources: U.S. DOT DB18; U.S. DOT T100.
Notes: New York and New Jersey are grouped. Maryland, Virginia, and the District of Columbia are grouped. Maps show the states in which at least 10% of domestic O&D passengers travel on the respective carrier.
What the Data Show: Mergers

...Enabling the Network Carriers to Reverse Over a Decade of Declining Growth Without Inhibiting the Growth of Lower Cost Carriers...

U.S. Domestic ASMs (billions)
(1998-2019)

Source: OAG.

Notes: Lines show year of merger. US Network Carriers include American, Delta, and United. Lower Cost Carriers include Accessair, AirTran, Alaska, Allegiant, ATA, Eastwind, Frontier, Hawaiian, Independence, JetBlue, Kiwi, Midway, National, Pro Air, Southwest, Spirit, Sun Country, and Vanguard. Includes merged carriers in all years.
Expanding the Number of Competitors on a Multitude of City-Pairs (e.g., Colorado Springs, CO (COS) — Melbourne, FL (MLB)), Thereby Enhancing Competition

U.S. Airports Served By Only One of American or US Airways Prior to Merging

The American-US Airways merger connected 65 domestic cities not served by US Airways to 47 domestic cities not served by American, enabling the merged carrier to offer new online service to 3,055 city-pairs.

2012 O&D Shares
1. Delta (100.0%)
2. American (13.7%)

2019 O&D Shares
1. Delta (86.3%)
2. American (13.7%)

Sources: OAG, U.S. DOT DB1B
Notes: Pre-merger period defined as 2012. Domestic U.S. airports only. Endpoint position determined by origin city and labeled by airport code.
Much of This Growth Has Been Targeted at Each Others’ Hubs, or the Formation of New Hubs (i.e., Seattle/Boston for Delta)

% Capacity Growth By the Network Carriers at Other Carriers’ Hubs/Focus Cities or New Hubs, 2010 to 2019*

Source: OAG, World Bank.
Notes: *Capacity measured by domestic ASMs. Airports in the following metropolitan areas are grouped: Chicago (ORD, MDW), Dallas (DFW, DAL), Houston (HOU, IAH, EFD), Los Angeles Basin (LAX, BUR, LGB), Miami (MIA, FLL), New York (LGA, JFK, EWR), San Francisco Bay Area (SFO, OAK), and Washington DC (DCA, IAD, BWI). Growth in real U.S. GDP from 2010 to 2019 using World Bank.
What the Data Show: Mergers

A Portion of the Nonstop Service From Cities That Were “De-hubbed” as a Result of Mergers Has Been Backfilled by Lower Cost Carriers, Allowing Traffic Levels to Remain Stable or Grow Notwithstanding the Overall Reduction in Flights.

Memphis, TN (former Northwest hub)

- Nonstop Destinations: 87 in 2007, 82 in 2019
- O&D Passengers: 4.5 million in 2007, 4.1 million in 2019

St. Louis, MO (former TWA Hub)

- Nonstop Destinations: 112 in 2000, 10.9 million in 2019
- O&D Passengers: 10.9 million in 2000, 10.8 million in 2019

Cincinnati, OH (former Delta hub)

- Nonstop Destinations: 123 in 2009, 73 in 2019
- O&D Passengers: 7.6 million in 2009, 4.0 million in 2019

Cleveland, OH (former Continental hub)

- Nonstop Destinations: 7 in 2009, 73 in 2019
- O&D Passengers: 7.5 million in 2009, 8.7 million in 2019

Source: OAG; U.S. DOT DB1B Database.
Note: Includes destinations with at least 52 departures. Nonstop destinations with lower cost options include at least one lower cost carrier with at least 26 annual departures to that destination. Cincinnati includes CVG and DAY. Cleveland includes CLE and CAK.
AirTran served 30 domestic cities not served by Southwest (primarily smaller destinations in the eastern half the country) while Southwest served 32 cities not served by AirTran, creating 960 new city-pairs that neither carrier could serve on its own.

In 2015—i.e., just four years after its merger closed—Southwest served over one million passengers in the new domestic city-pairs, resulting in 31% growth in overall passenger traffic between these cities compared to 2010.

AirTran also brought international service to Southwest for the first time and accelerated its international expansion going forward.

Sources: OAG.
Notes: Destinations are cities served by Southwest and AirTran in 2010. Circles sized by total seats served by both carriers.
### Rank of Domestic O&D Passengers To/From Largest Ten West Coast Cities By Traffic

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1. Los Angeles</td>
<td>7</td>
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<tr>
<td>2. San Francisco</td>
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<td>3</td>
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<td>10. Spokane</td>
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</tbody>
</table>

### What the Data Show: Mergers

The Alaska/Virgin America Merger Helped Alaska Become a Top Three Competitor in Four More of the Top Ten Largest West Coast Cities, Enhancing Competition

---

Note: Numbers in brown show top three post merger, while boxed numbers show those that became top three. For rankings, Los Angeles includes LAX, BUR, LGB, and San Francisco includes SFO and OAK. Map shows routes are served by Alaska or Virgin America in 2015. Includes flights from California, Oregon, and Washington. Excludes routes to/from Alaska and Hawaii. And within California, Oregon, and Washington.

Sources: OAG. U.S. DOT DB1B domestic.
Today’s Airline Industry Offers Consumers More Choices Among and Between Carriers Competing With Different Business Models Than Ever Before

**Airline Business Models**

- **Global Network Carriers**
- **Lower-Cost Network Carriers**
- **ULCCs**
- **LCCs**

**Operational Complexity, Product Differentiation and Associated Costs**

Ubiquitous networks create complexity but result in higher costs.

As the number of destinations served by an airline increases, the range of “network benefits” the carrier can provide to consumers (i.e., the ability to fly where and when passengers want to travel) also increases.

What the Data Show: Mergers

Today’s Airline Industry Offers Consumers More Choices Among and Between Carriers Competing With Different Business Models Than Ever Before

Network Scope and Associated Benefits

- **United Airlines**
- **Delta Airlines**
- **JetBlue**
- **Southwest**
- **Alaska Airlines**
- **Hawaiian Airlines**

Lower-Cost Network Carriers

- **Frontier Airlines**
- **Sun Country Airlines**
- **Breeze Airlines**
- **Spirit Airlines**
- **JetBlue**
- **Southwest**

ULCCs

- **Avelo**
- **Allegiant**

LCCs

- **American Airlines**
- **United Airlines**
- **Delta Airlines**

Global Network Carriers

- **United Airlines**
- **Delta Airlines**
Airfares and Fees

To What Extent Does the Data Corroborate Certain Commonly-Held Views About the U.S. Airline Industry?

1. Introduction and the State of the U.S. Airline Industry

2. Assertion: Airline Mergers and a Lack of New Entry Have Led to Fewer Choices for Consumers and a Lack of Competition

3. Assertion: Airfares Have Increased Sharply, Made Worse by Tens of Billions of Dollars in New Ancillary Fees

4. Assertion: A Lack of Competition Has Resulted in Service Levels Deteriorating and Reduced Airline Employees’ Ability to Bargain for Higher Wages and Benefits
Myth or Fact? It Has Been Claimed That the ‘Southwest Effect’ Is No Longer Valid and Airfares Are on the Rise

**The death of the Southwest Effect** is a direct result of the airline’s slow strategic evolution over the past decade. From its inception until roughly 2000, Southwest Airlines pursued a unique business model focused on ultra-low cost, high-frequency flight schedules, and minimal operational overhead. This model allowed the airline to offer flights at considerably lower prices than its competitors.

But it is our view that the **Southwest Effect no longer holds water**. Recent empirical studies suggest that the “Southwest effect” has significantly petered out.¹⁶ And while the Department points to the 60 connecting routes service in Newark, it has been claimed that the ‘Southwest Effect’ is no longer valid and airfares are on the rise.

Consolidation and a Lack of New Entry Has Driven up Prices for Consumers in Throughout the U.S. Economy

Myth or Fact?

It's time to re-regulate airlines

The Dallas Morning News

Imagine life with just one major airline, but it actually worked the way you want. They can also create higher fares, however. Ironically, the airline that invented the low-cost carrier, Southwest Airlines, charges among the highest economy fares in the U.S. today. What deregulators didn’t anticipate was a growing population and number of travelers boosting demand, putting airlines in a position of sovereignty. That is, airlines have the ability to charge higher fares at peak periods, to dominate key routes or airports, and to gradually raise fares overall by highly sophisticated seat inventory management. (And as a recent meeting U.S. airline chief executive with President Donald Trump underscored, by keeping foreign airlines out of domestic markets.)

can produce lower fares, if you book way in advance. They can also create higher fares, however. Ironically, the airline that invented the low-cost carrier, Southwest Airlines, charges among the highest economy fares in the U.S. today. What deregulators didn’t anticipate was a growing population and number of travelers boosting demand, putting airlines in a position of sovereignty. That is, airlines have the ability to charge higher fares at peak periods, to dominate key routes or airports, and to gradually raise fares overall by highly sophisticated seat inventory management. (And as a recent meeting U.S. airline chief executive with President Donald Trump underscored, by keeping foreign airlines out of domestic markets.)

Airlines

AAI's research and analysis highlights the importance of competition for consumer choice, competitive fares and fees, and quality of service.

With only four major carriers and a dwindling set of low cost airlines, questions over anticompetitive coordination in the U.S. airline industry are on the rise. Concerns have focused on whether airlines have coordinated to keep capacity tight and fares high, to impose fees for baggage and other services, or to set rules on how airline tickets are marketed to consumers. AAI advocates for vigorous antitrust enforcement and regulatory transparency policies to promote a level and fair playing field.

For decades, corporate consolidation has been accelerating. In over 75% of U.S. industries, a smaller number of large companies now control more of the business than they did twenty years ago. This is true across healthcare, financial services, agriculture and more.

That lack of competition drives up prices for consumers. As fewer large players have controlled more of the market, mark-ups (charges over cost) have tripled. Families are

Source: *J. Brueckner, D. Lee, and E. Singer, Economics of Transportation, Vol. 2 (1), 2013, pp. 1-17*

**p<0.01, *p<0.05.** Carrier fixed effects, quarterly dummies and additional competition variables (connecting competition, potential competition, Virgin America presence and Allegiant nonstop) suppressed. Standard errors clustered by market in parentheses.

Dependent variable: FYE 2016-Q2 natural log of fares.

A regression on 2016 data updating the 2013 Brueckner, Lee, and Singer study* shows that Southwest’s non-stop presence on a route lowers average fares by 21.7% and network carrier fares by 21.2%.

**The Assertion That “The ‘Southwest Effect’ Is Long Gone” Has Been Proven to Be Untrue**

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**What the Data Show: The Southwest Effect**

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Through Its Merger and Organic Growth Over the Past Decade, Southwest Increased by Three-Quarters the Number of Destinations Served, Greatly Expanding the Breadth of Its Low Fares

What the Data Show: The Southwest Effect

Source: OAG schedule published October 7, 2021.

Southwest Destinations (2010 vs 2021)

On July 26, 2021, Southwest expanded its partnership with Sabre to allow corporate travel managers and agencies to more easily make and modify bookings on Southwest, further expanding its competitive presence.
Moreover, ULCCs’ Rapid Growth, Extreme Unbundling and Simpler Networks and Operations Has Enabled Them to Achieve a Cost Structure Far Lower Than Even Southwest’s (With New Start-Ups Enjoying Even Lower Costs Than Established ULCCs Such as Allegiant)

2019 Stage-Length Adjusted Mainline Costs (Ex-Fuel) per Available Seat Mile

“"We think we have a 20-25% cost advantage over Allegiant, which means low fares."”
- David Neeleman, Breeze Founder and CEO

“"Being everything to everybody—having a first-class cabin, and flying here, there and everywhere and lots of flights, and clubs, and loyalty, and all of that kind of stuff—that all costs a lot of money."”
- Andrew Levy, Avelo CEO

Notes: Mainline operations. Seat stage length adjusted CASM calculated as the product of the carrier’s ex-fuel CASM (from Form 41) and the square root of the ratio of its seat stage length to the average of American Airlines, Delta Air Lines, and United Airlines mainline seat stage length (1,500 miles).
What the Data Show: Airfares

As a Result, ULCCs Such as Spirit, Allegiant, Sun Country and Frontier Are Increasing Their Penetration of the U.S. Market at a Faster Rate Than Southwest Did in the 1990s

Percentage of Domestic O&D Passengers with Southwest and ULCC Options, 1990 - 2021 (H1)

Source: U.S. DOT DB1B.
Notes: Percent of passengers traveling on city-pairs where at least one ULCC or Southwest had at least a 5% share of O&D passengers. ULCCs include Frontier, Spirit, Sun Country and Allegiant. Southwest includes AirTran in all years.
Unbundling the Price of Optional Products and Services That Many Passengers Do Not Want or Need Has Driven Down Low-End Fares (i.e., ULCC and Basic Economy) to Levels That Have Opened Up Air Travel to More Consumers Than Ever Before

In 2019, 45% of American adults surveyed traveled by air in the past 12 months, compared to just 29% in 1988 and 39% in 1997.

Similarly, in 2019, 86% of American adults had traveled by air in their lifetime, compared to only 73% in 1988 and 81% in 1997.*

Notes: Excludes fares less than $6. Excludes interline passengers. Stage length adjusted and CPI adjusted (2020 dollars) to 1,000-mile trip fares. The lowest 10th percentile stage-length adjusted domestic fare in each year.
Global Network Carriers Have Responded to Increased Competition From Lower Cost Carriers by Increasing Product Differentiation to Cater to Different Customer Preferences and Needs on the Same Flight.
Robust Competition and Growth by Lower Cost Carriers Has Resulted in Inflation-Adjusted Airfares Reaching Their Lowest Point in History in 2019, Only To Sink Further Due to the Pandemic in 2020 and 2021

Inflation-Adjusted Domestic Prices Per Mile vs. Lower Cost Carrier Domestic O&D Share, 1993-2021(H1)

As of 2019, real domestic price per mile has declined by 38% since 1993 (41% if you exclude bag and change fees) and by more than 50% since 1979 when Congress deregulated the industry.


Notes: Lower Cost Carriers include Acessair, Air South, Alaska, Allegiant, ATA, AirTran, Eastwind, Frontier, Hawaiian, Independence, JetBlue, Kiwi, Midway, Morris Air, National, Pro Air, Southwest, Spirit, Sun Country, Valujet, Vanguard, Virgin America, and Western Pacific. Includes merged carriers in all years.
Over the past decade, domestic airfares including bag fees and change fees rose at approximately half the rate of inflation.


Notes: Bars reflect the change in price for Disney World Magic Kingdom 1-day/adult/regular season tickets. Nonpremium National Football League game tickets. Nonpremium Major League Baseball game tickets. Rail is ticket revenue divided by ridership. BLS U.S. Consumer Price Index (CPI-U). One adult movie ticket. Round-trip domestic fares plus ancillary (excludes taxes; includes revenue from reservation changes and baggages).
In Contrast to Airfares, Prices for Many Other Goods and Services Identified in the President’s Executive Order Promoting Competition in the American Economy Have Risen Much Faster Than Overall Inflation

Change in Prices For Select Consumer Goods/Services vs. Price Index (CPI), 2010 vs. 2019


Notes: U.S. City averages for all urban consumers. Air travel includes round trip domestic fares plus ancillary (excludes taxes; includes revenue from reservation changes and baggage). Hospitals includes CPI for hospital services; repair markets includes CPI for repair of household items; financial services includes the CPI for financial services; prescription drugs includes CPI for prescription drugs, telecommunications includes the CPI for cable and satellite television service; container shipping includes the PPI for deep sea freight transportation; freight railroads includes PPI for transportation services: rail transportation of freight and mail; livestock, meat, and poultry includes the CPI for meats, poultry, fish, and eggs; agricultural equipment includes the PPI for agricultural machinery; health insurance includes CPI for health insurance; fertilizer includes the PPI for pesticide, fertilizer, and other agricultural chemical manufacturing; internet broadband includes the CPI for internet services and electronic information providers.
Some Have Claimed That With the Vaccine-Enabled Rebound in Leisure Travel, Record High Inflation for Airfares Has Made Air Travel Unaffordable

**Myth or Fact?**

**THE WALL STREET JOURNAL.**

Inflation Accelerates Again in June as Economic Recovery Continues

Higher used auto prices continue to push consumer-price index up, along with increases for new autos, airline fares, and apparel

**Chicago Tribune**

Airfare bargains vanishing as airlines seize on surging summer demand

By Justin Bachman and Mary Schlangenstein, Bloomberg News

Planes are filling up and tickets are very expensive


Surging prices for used cars, gasoline, food and airfares are driving the jump in inflation

Published Tue, Jul 13 2021 3:30 PM EDT | Updated Tue, Jul 13 2021 9:03 PM EDT

Notwithstanding the Fact That the Overall Inflation Rate in October Reached a 31-Year High, Airfares in October were Down 4.6% Year-Over-Year and 24.1% Below 2019 Levels

**Airfare CPI versus Overall CPI**

*October of Each Year*

+6.2% (largest increase in 31 years)

-4.6%

Source: U.S. BLS.

Notes: October of each year. Indexed to the year 2000 (=100). Airfare CPI is “Airline fares in U.S. city average, all urban consumers, seasonally adjusted.” Overall CPI is “All items in U.S. city average, all urban consumers, seasonally adjusted.”
Myth or Fact? It Has Been Claimed That Reduced Competition Among Airlines Has Contributed to Them Collecting $35.2 Billion in Ancillary Fees in 2018, up from Just $1.2 Billion in 2007

FACT SHEET: Executive Order on Promoting Competition in the American Economy

The economy is booming under President Biden's leadership. The economy has gained more than three million jobs since the President took office—the most jobs created in the first six months of any presidency in modern history. Today, the President is building on this economic momentum by signing an Executive Order to promote competition in the American economy, which will lower prices for families, increase wages for workers, and promote innovation and faster economic growth.

For decades, corporate consolidation has been accelerating. In over 75% of U.S. industrial sectors, the number of large companies has shrunk dramatically over the past decades. This is true across healthcare, financial services, agriculture, and more.

That lack of competition drives up prices for consumers. As fewer, larger players have consolidated, many of the market mergers (changes over time) have tripled. Families are paying higher prices for necessities—things like prescription drugs, hearing aids, and internet service.

Barriers to competition are also driving down wages for workers. When there are fewer employers in town, workers have less opportunity to bargain for a higher wage and to demand dignity and respect in the workplace. In fact, research shows that industry consolidation is decreasing advertised wages by as much as 17%. Ten of millions of Americans—including those working in construction and retail—are required to sign non-compete agreements as a condition of getting a job, which makes it harder for them to switch to better-paying opportunities.

In the Order, the President:  
- Directs the DOT to consider issuing clear rules requiring the refund of fees when baggage is delayed or when service isn’t actually provided—like when the plane’s WiFi or in-flight entertainment system is broken.

Transportation

In the transportation sector, multiple industries are now dominated by large corporations—air travel, rail, and shipping.

Airlines: The top four commercial airlines control nearly two-thirds of the domestic market. Reduced competition contributes to increasing fees like baggage and cancellation fees. These fees are often raised in lockstep, demonstrating a lack of meaningful competitive pressure, and are often hidden from consumers at the point of purchase. The top ten airlines collected $35.2 billion in ancillary fees in 2018, up from just $1.2 billion in 2007. Inadequate competition also reduces incentives to provide good service. For example, the Department of Transportation (DOT) estimates that airlines were late delivering at least 2.3 million checked bags in 2019.
What the Data Show: Ancillary Fees

In fact, half of the “Top 10” Airlines in the Study referenced by the Executive Order are foreign carriers and the vast majority of the “Ancillary Fees” for U.S. carriers were not even fees but rather the sale of frequent flyer miles to credit card issuers.

The industry trend of “à la carte” pricing is—in large part—a competitive response to Spirit and other ULCCs’ business models, which are predicated on extreme unbundling (i.e., charging separately for previously bundled services such as carry-on bags, bottled water, printed boarding passes) to lower their base fares.

The 2019 CarTrawler Yearbook of Ancillary Revenue

Table 1: Top 10 Airlines – Total Ancillary Revenue (US dollars)

<table>
<thead>
<tr>
<th>Annual Results – 2018</th>
<th>Approximate Sources of Revenue</th>
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<tr>
<td></td>
<td>Frequent Flyer Program</td>
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<td>Air Canada</td>
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</tbody>
</table>

2018 carrier results were based upon recent 12-month financial period disclosures.
* IdeaWorksCompany estimate based upon updated past disclosure and other sources.
Local currencies converted to US dollars at July 2018 rates of exchange.

Source: The 2019 CarTrawler Yearbook of Ancillary Revenue; Executive Order on Promoting Competition in the American Economy.
Based on U.S. DOT data, in 2018, U.S. airlines generated $7.7 billion more in ancillary fee revenue (i.e., bag fees and change fees) than they did in 2007.*

Over the same period, however, U.S airlines’ inflation-adjusted yields fell by 6.8% for domestic tickets and by 17.3% for international tickets.

The reduction in ticket prices between 2007 and 2018 saved consumers $19.5 billion in 2018, resulting in a net savings (i.e., even after paying ancillary fees) that year of $13.6 billion (rising to $17.9 billion in 2019).

### Comparison of Ancillary Fee Revenue vs. Base Fare Savings 2018 versus 2007 ($Billions)

| Source: U.S. DOT Form 41, U.S. DOT T100, and DB1B data (from U.S. DOT and DIIO), U.S. BLS.

Notes: All revenue in 2019 dollars. *In 2018, U.S. carriers’ bag and change fee revenue was $7.93 billion, while in 2007 the fee revenue was $1.67 billion in 2007 (in 2018 dollars) which at 2018 passenger levels would equal roughly $2 billion.

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What the Data Show: Ancillary Fees

Fare Declines Since 2007—Much of Which Can Be Attributed to the “Unbundling” of Ancillary Services from Base Fares—Have More Than Offset the Increase in Ancillary Fee Revenue for U.S. Airlines

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Additional Spending on Ancillary Fees
Savings from Yield Decrease
Net Savings

Domestic
International
Total
To What Extent Does the Data Corroborate Certain Commonly-Held Views About the U.S. Airline Industry?

1. Introduction and the State of the U.S. Airline Industry

2. **Assertion**: Airline Mergers and a Lack of New Entry Have Led to Fewer Choices for Consumers And A Lack of Competition

3. **Assertion**: Airfares Have Increased Sharply, Made Worse by Tens of Billions of Dollars in New Ancillary Fees

4. **Assertion**: A Lack of Competition Has Resulted in Service Levels Deteriorating and Reduced Airline Employees’ Ability to Bargain for Higher Wages and Benefits
Myth or Fact?

It has been claimed that a lack of competition has caused airline service quality to deteriorate in recent years to the detriment of customers. The same competitive forces (or lack thereof) that are driving airline margins higher are likely to blame for the deterioration of services and amenities. Indeed, it is much easier for an airline to exercise power in some.

What’s to stop airlines from stacking passengers vertically (https://www.cnbc.com/2019/04/25/avioninteriors-designed-standing-seats-for-airplanes.html), like beef sides hanging in a meat locker?
What the Data Show: Service Quality

In Fact, Mishandled Bags and Denied Boarding Rates Have Fallen to Their Lowest Rates in History

Source: U.S. DOT Air Travel Consumer Reports.

Notes: Includes all carriers in the Air Travel Consumer Reports. Passengers are denied boarding if they are involuntarily bumped from their reserved seat due to oversale. Note that Mishandled Baggage per 1,000 passengers for 2018 includes data through November.

In 2019, DOT changed its measure of mishandled bags from per 1,000 passengers to per 1,000 enplaned bags, which stood at 5.82 in 2019 and fell to 4.11 in 2020.
During the Pandemic, Airlines Have Taken Additional Steps to Enhance the Safety and Flexibility of Traveling

- **Hospital-grade air filtration**
  - HEPA filters remove 99.9% of airborne particles, including viruses like COVID-19 and other variants.

- **Clean air exchange**
  - Outside and filtered air in the cabin is exchanged every 2-3 minutes, giving better ventilation than grocery stores and office buildings.

- **Top down air flow**
  - Air flows from the ceiling to the bottom of your seat, instead of front to back, minimizing particle movement throughout the cabin and reducing contact other guests.

- **Delta eliminates fee to allow free standby for same-day trip changes**
  - Designed to allow flexibility in case of last-minute changes.

- **Delta eliminates change fees, building on commitment to flexibility for customers**
  - A commitment to flexibility to accommodate customers.

- **United Airlines Permanently Eliminates Change Fees**
  - Offers increased flexibility for travelers.

- **United Launches United CleanPlus: A New Standard of Cleanliness and Safety in Partnership with Clorox and Cleveland Clinic**
  - A new standard of cleanliness and safety.

- **United Launches Industry-Exclusive Technology to Ease the Burden of COVID-19 Travel Restrictions**
  - Technology to make travel easier.

- **United and Abbott Partner to Make Return to U.S. “Worry Free” for International Travelers with Home-Testing Kits**
  - Home-testing kits for travelers.

- **No change fees.**
  - Book now, change if you need to.

- **Changes and cancellations**
  - As of June 8, 2021, we have eliminated change and cancel fees for most fares, except Blue Basic.
In the Years Leading Up to the Pandemic, Carriers Dramatically Increased Investments in New Aircraft, Product Enhancements, and Airport Construction

Airline Capital Expenditures ($Billions)

- May 2015 - United announces $781 million in airport improvements at LAX and IAH
- May 2014 - United unveils Polaris front-cabin service
- April 2015 - Delta announces LGA redevelopment project
- Jun. 2014 - JetBlue debuts “Mint” Premium cabin
- Apr. 2013 - Southwest opens new terminals at Love Field
- Oct. 2012 - Alaska places $5 billion Boeing order
- Jun. 2011 - American places order for 460 new narrowbodies
- Dec. 2016 - United unveils Polaris front-cabin service
- Dec. 2014 - American Airlines announces more than $2 Billion in planned customer improvements
- Jun. 2019 - American completes installation of satellite Wi-Fi on entire mainline fleet
- Feb 2018 - American and United announced $8.5 billion Chicago O’Hare expansion
- Apr. 2021 - MWAA and American replace DCA gate 35X with a new 14-gate concourse

Notes: Includes merged carriers in all years. Includes payments made for aircraft and other flight equipment, ground and other property and equipment (e.g., vans, air stairs, lavatory trucks, de-icing vehicles), airport and other facility construction and information technology.

Over $1 billion in 2019 CapEx deferred due to MAX and other delayed aircraft deliveries.
Relative to Many Other Large U.S. Industries, Airlines Reinvested More Cash Into Their Businesses (via Capital Expenditures) Than They Returned to Shareholders via Dividends and Share Repurchases

What the Data Show:
Investment

<table>
<thead>
<tr>
<th>Industry</th>
<th>Capital Expenditures Relative to Operating Cash Flow</th>
<th>Dividends and Stock Repurchases Relative to Operating Cash Flow</th>
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</thead>
<tbody>
<tr>
<td>Airlines</td>
<td>69.4%</td>
<td>26.8%</td>
</tr>
<tr>
<td>Cruise</td>
<td>78.0%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Hotels</td>
<td>54.5%</td>
<td>78.3%</td>
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<tr>
<td>Industrials</td>
<td>22.9%</td>
<td>95.7%</td>
</tr>
<tr>
<td>Rails</td>
<td>58.6%</td>
<td>67.0%</td>
</tr>
<tr>
<td>Restaurants</td>
<td>23.9%</td>
<td>107.9%</td>
</tr>
<tr>
<td>Retail</td>
<td>42.8%</td>
<td>31.9%</td>
</tr>
<tr>
<td>Tech</td>
<td>71.4%</td>
<td>25.4%</td>
</tr>
</tbody>
</table>

Airlines Have and Are Continuing to Invest Billions to Upgrade the Airport Experience for Passengers
Prior to the Pandemic, U.S. Airlines Were Taking Delivery of More New Aircraft Than At Any Time Since 2001 and Are Scheduled To Upgrade and Expand Their Fleets at Even a Faster Rate Over the Next Several Years

What the Data Show: Fleet Investment

Deliveries of New Mainline Aircraft to U.S. Carriers

2012-2019: Stability enabled by mergers enabled global network carriers to renew their fleets, averaging 114 new mainline deliveries per year in the eight years leading up to the pandemic.

2021-2028: Global network carriers are scheduled to take delivery of 127 new mainline aircraft/year to continue to renew fleets and support future growth.

In the decade after 9/11, global network carriers averaged only 54 new mainline aircraft deliveries per year.

Sources: Cirium Fleets Analyzer, as of August 30, 2021; Deliveries from August 31, 2021 forward based on scheduled delivery dates of firm orders as of August 30, 2021.
Notes: Mainline aircraft. Includes historical and scheduled deliveries of firm orders. Global network carriers include American, Delta and United; low fare regional network carriers include Alaska, Hawaiian, and JetBlue; LCC includes Southwest; ULCC includes Spirit, Allegiant, Frontier, Sun Country, and Breeze. Includes predecessor carriers.

Change in Aircraft Fuel per RPM on U.S. Flights Since 1991

Source: T-2 Database.
Notes: All U.S. passenger carriers with positive RPMs and fuel data in T-2 database.
### A4A Carriers Are Committed to a Near-Term Carbon-Neutral Growth Goal, Medium-Term Sustainable Aviation Fuel Goal and Reaching Net Zero by 2050*

<table>
<thead>
<tr>
<th>Airline</th>
<th>Innovations and Commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alaska</strong></td>
<td>• Roadmap includes five focus areas to reach net-zero emissions: fleet renewal, operational efficiency, Sustainable Aviation Fuel (SAF), novel propulsion, and carbon offsetting technology.</td>
</tr>
<tr>
<td></td>
<td>• Planning to work with Carbon Direct to identify and vet credible, high-quality carbon-offsetting technologies.</td>
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<tr>
<td><strong>American Airlines</strong></td>
<td>• Emissions reduction strategy including fleet renewal, SAF and operational improvements.</td>
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<tr>
<td></td>
<td>• In 2020, implemented flight optimization software on 85% of mainline aircraft using real-time weather conditions, which has already saved nearly three million gallons of fuel and reduced emissions by nearly 26,000 metric tons.</td>
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<tr>
<td></td>
<td>• In 2021, announced investment in electric aircraft business Vertical Aerospace and agreed to pre-order up to 250 aircraft at $1 billion, with an option to order an additional 100 aircraft.</td>
</tr>
<tr>
<td><strong>Delta</strong></td>
<td>• Focusing efforts on carbon reduction and carbon removal, stakeholder engagement and coalition building.</td>
</tr>
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<td></td>
<td>• Entered ten-year deal to buy over $1 billion of SAF.</td>
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<td></td>
<td>• Goal of replacing 10% of fuel with SAF by the end of 2030.</td>
</tr>
<tr>
<td><strong>Hawaiian Airlines</strong></td>
<td>• Plan includes ongoing fleet investments, more efficient flying, carbon offsets, and industry advocacy for air traffic control reform and SAF development and proliferation.</td>
</tr>
<tr>
<td></td>
<td>• Decreased reliance on jet fuel to power aircraft at gate has potential to save 620,000 gallons of fuel annually, cutting CO₂ emissions by 5,933 metric tons.</td>
</tr>
<tr>
<td><strong>JetBlue</strong></td>
<td>• Announced plans to speed up its transition to sustainable aviation fuel (SAF) putting them well ahead of pace on its target to convert 10 percent of its total fuel usage to SAF on a blended basis by 2030.</td>
</tr>
<tr>
<td></td>
<td>• In 2021, became first major U.S. airline to achieve carbon neutrality on all domestic flying, primarily through carbon offsets and lower-carbon technologies, and has since announced its commitment to net-zero carbon emissions by 2040.</td>
</tr>
<tr>
<td></td>
<td>• NextGen technology allowing increased flexibility for flight routes will save over 500,000 gallons of fuel burn per year, equating to 10,000,000 CO₂ savings.</td>
</tr>
<tr>
<td><strong>Southwest</strong></td>
<td>• Since 2002, invested more than $630 million in fuel efficiency improvements (excluding new aircraft purchases), including routinely performing engine washes, utilizing ground electric power while aircraft are parked at airport gates, and reducing ground idle speeds for aircraft.</td>
</tr>
<tr>
<td><strong>United</strong></td>
<td>• In 2016, first airline to use Sustainable Aviation Fuel in regularly scheduled flights.</td>
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<td></td>
<td>• Key investor in multiple alternative fuels projects, including the largest SAF commitment.</td>
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<tr>
<td></td>
<td>• Commitment to 100% green by 2050, including investments in SAF, the largest new aircraft order of any carrier in a decade, short-haul electric aircraft and carbon capture and sequestration technology to reduce overall carbon in the atmosphere.</td>
</tr>
</tbody>
</table>

What the Data Show: Commitment to Small Communities

After a Decade and a Half of Declining/Flat Capacity Due to External Shocks (i.e., 9/11, Higher Fuel Prices) That Severely Impeded the Economics of Serving Small Communities, Capacity at Small Cities Has Been Growing and Reached New Highs in 2021

Daily Seats from Small (Non-Hub and Non-Primary) U.S. Airports
July of Each Year

Notes: July of each year. Scheduled seats. All U.S. carriers. Lower Cost Carriers include Alaska, Allegiant, AirTran, ATA, Frontier, JetBlue, Hawaiian, Midway, Midwest, National, Pro Air, Southwest, Spirit, Sun Country Virgin America, Vanguard. Global Network Carriers (“GNCs”) include American, Delta, and United (and all predecessor airlines). Includes non-hub and non-primary airports (less than 0.05% of annual enplaned passengers in 2007) and airports that did not have commercial traffic in 2007.
The Combination of Low Fares, Better Networks, Strong Operating Performance, and Service Enhancements Has Resulted in the Highest Rates of Airline Customer Satisfaction in at Least 15 Years

What the Data Show: Customer Satisfaction

Attentive Flight Crews, Flexible Fares and Charges during Pandemic Drive Record High Customer Satisfaction with North America Airlines, J.D. Power Finds

TROY, Mich.: 12 May 2021 — Despite the North America airline industry losing more than $40 billion in revenue as passenger volume dropped 60% in 2020, airline passengers say their level of satisfaction is higher. According to the J.D. Power 2021 North America Airline Satisfaction Study, released today, the elimination of many charges and fees, increased attentiveness of flight crews and ticket flexibility help the industry achieve new heights as passenger satisfaction climbs 27 points to 819 (on a 1,000-point scale) year over year.

“This is probably the best time in modern history in which to fly,” said Michael Taylor, head of travel intelligence at the research and consulting firm.

But ACSI data show that higher satisfaction levels are not solely related to the dramatically different experience of flying during a pandemic. For three years in a row, airlines have made their customers happier. Small but steady gains have pushed the industry’s satisfaction score to its new high in 2021—a net increase of 4.1% since 2018. Over that time period, customer perceptions of value have risen steadily for the airline industry.

Notes: “Average of pre-merger carriers used for 2007. All U.S. carriers ranked in 2007 listed, except Frontier, which had no 2021 rating. Average rating includes all U.S. carriers in respective years.
What the Data Show: Customer Satisfaction

Airlines’ Convenience and Value Proposition to Consumers Has Resulted in the Demand for Domestic Passenger Air Transportation Growing Faster Than Other Modes of Transportation and Three Times the Rate of Population Growth


<table>
<thead>
<tr>
<th>Mode</th>
<th>Percentage Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline Passenger Miles</td>
<td>28.6%</td>
</tr>
<tr>
<td>Highway Bus Miles</td>
<td>23.9%</td>
</tr>
<tr>
<td>Amtrak Passenger Miles</td>
<td>11.0%</td>
</tr>
<tr>
<td>U.S. Population</td>
<td>8.8%</td>
</tr>
<tr>
<td>Light Duty Vehicle Miles</td>
<td>8.5%</td>
</tr>
</tbody>
</table>

Source: DOT DB1B; St. Louis Fred Census Data; DOT Federal Railroad Administration; DOT Federal Highway Administration

Notes: Bus and vehicle miles are based on reports from the State Highway Agencies that encompass both rural and urban highways. Vehicle miles include passenger cars, light trucks, vans, pickup trucks and sport utility vehicles.
It Has Also Been Claimed That Consolidation Has Reduced the Ability of Airline Employees to Bargain for Higher Wages and Better Benefits

Yet over the last several decades, as industries have consolidated, competition has weakened in too many markets, denying Americans the benefits of an open economy and widening racial, income, and wealth inequality. Federal Government inaction has contributed to these problems, with workers, farmers, small businesses, and consumers paying the price.

Consolidation has increased the power of corporate employers, making it harder for workers to bargain for higher wages and better work conditions. Powerful companies require workers to sign non-compete agreements that restrict their ability to change jobs. And, while many occupational licenses are critical to increasing wages for workers and especially workers of color,

In Fact, Consolidation Has Put Airlines on a Firmer Financial Footing, Allowing Them to Re-Invest in Their Employees After Years of Decline

**Labor’s Share of Revenue at U.S. Passenger Airlines**

American Airlines gave its workers a raise. Wall Street freaked out.

“This is frustrating. Labor is being paid first again,” wrote Citi analyst Kevin Crissey in a widely circulated note. “Shareholders get leftovers.”


Notes: Lines show the year of each merger. Passenger carriers. Labor share includes salaries and benefits expenses. Revenue is operating revenue.
The Airline Industry’s Proportion of Employees That Are Unionized Is 11 Times the U.S. Economy’s Private Sector Average

Source: Carrier 10-Ks (2020); Unionstats.com Union Membership and Coverage Database (2020).
Notes: “Public Administration” and “Educational Services” industries not shown. Private sector union membership rate is 6.3% (2020). The Economy Average (10.8%) includes the public and private sector. Airline average includes Alaska, Allegiant, American, Delta, Frontier, Hawaiian, JetBlue, Southwest, Spirit, Sun Country, and United.
Before COVID-19, the U.S. Airline Industry Was Adding Well-Paying, Family-Supporting Jobs, and with Demand Rebounding, U.S. Airlines Have Resumed Hiring

Number of Airline Employees and Average Salaries and Benefits Per Employee (000’s)

By helping stabilize the industry after suffering $66 billion in net losses between 2001-2009, consolidation put airlines in a position to rebuild their workforces and pay higher wages.

Since 2007, the average compensation per airline employee as increased by 37%, compared to only 8% for private-sector employees economywide.


Notes: Average salaries and benefits in 2019 dollars. Excludes personnel costs. Includes American, Delta, United, JetBlue, Southwest, Spirit, Allegiant, Frontier, Hawaiian, Alaska, Sun Country, their predecessor carriers, and their regional affiliates. Private sector real salaries and benefits is the average cost, including salaries and benefits, to employers for 2,080 hours worked by employees. Private sector excludes the self-employed, agricultural workers, and private household workers.

Percent Change in Wage Rate from 2007 to 2019 for Illustrative U.S. Airlines’ Employees Hired in 2007 vs. Economy-Wide Benchmarks


Notes: Illustrative U.S. airline employees hired in 2007 in the same job function in 2019. Pilots are promoted from a First Officer on the smallest aircraft to a Captain of a Boeing 737. U.S. Census Age-Adjusted earnings from the U.S. Census Quarterly Workforce Indicators includes the average annual earnings for 25-34 age cohort for 2007 and 35-44 age cohort for 2019. GS Scale is the simple average of all percent increases between step 1 and step 10 across all GS levels. *Bureau of Labor Statistics NLSY education-level earnings includes 10 years of growth for the 25-34 age cohort and 2 years of growth for the 35-44 age cohort.

What the Data Show: High Quality Jobs
Superior Compensation and Advancement at Airlines Result in Employee Turnover Rates That Are Roughly One Quarter of Those in the Broader U.S. Economy

Annual Attrition and Turnover at American Airlines Relative to the U.S. Economy Benchmarks


- Some College: 25%
- High School Graduates: 24%
- Bachelor’s Degree and Higher: 22%
- U.S. Economy (Mercer, 2019): 20%
- JetBlue (2019): 10%
- American Airlines (2019): 6%
- Delta (2018): 5%


Note: NLSY attrition rates calculated based on the number of jobs held by 1979 cohort between the ages 25-52.
Because they provide high-quality, long-term career opportunities, airline jobs are among the most highly coveted in the U.S. economy.

Conclusion

Competition in the U.S. Airline Industry Remains Dynamic and Robust, to the Benefit of Consumers, Communities, the U.S. Economy and Airline Employees

**Myth: Consolidation Has Led To Fewer Choices For Consumers and Less Competition**

**Facts:**
- Number of competitors per city-pair level has **increased** post-consolidation
- Lack of entry barriers has enabled expansion and new entry by lower cost carriers
- Mergers of complementary route networks has increased competition and served as a springboard for renewed growth

**Myth: Airfares Have Increased Sharply and Passengers Are Being Gouged With Extra Fees**

**Facts:**
- Southwest effect is alive and well and extends to several other lower cost carriers
- Domestic airfares are at **historic lows**, with lower fares more than offsetting changes in ancillary fees by $13.6 billion in 2018 and $17.9 billion in 2019
- Network carriers have responded with expanded domestic and international networks and greater product differentiation

**Myth: Consolidation Has Harmed Service Quality and Employees’ Bargaining Power**

**Facts:**
- Passenger satisfaction with airlines has increased to its **highest level** in at least 15 years while traffic growth has outpaced population growth by a factor of three
- Profitability prior to the pandemic enabled carriers to re-invest in their products, service reliability and create tens of thousands of high-quality, typically unionized jobs with superior pay, benefits, and long-term career opportunities
Follow-up questions can be emailed to Darin.Lee@compasslexecon.com and Eamel@compasslexecon.com