

Growth Airline Economic Analysis

Oliver Wyman – January 2009

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Introduction

In the current economic environment, there is little growth even among growth airlines. However, those airlines still have different costs and other characteristics than traditional network carriers. In this report, we cover the following topics:

A) Domestic unit cost comparisons for value (low cost) versus network carriers. The two groups are compared in terms of average CASM (and RASM), and these same comparisons are provided for the individual carriers within each group. Also, value and network carrier cost trends are shown over time, providing insight on the question – are network carriers reducing their cost gap with value carriers, or is the gap widening?

B) Cost comparisons for similar aircraft operated by different carriers, including stage-length adjustments.

C) A closer look at fuel costs and potential impacts on airline profitability: Latest developments in system-wide and spot prices for fuel, including competitive airline cost comparisons based on equal fuel cost assumptions.

D) Discussion of cost differences between the smaller and larger narrowbodies operated by selected value carriers.

E) A ranking of regional aircraft in terms of unit cost.

F) Strategic outlook: A brief look at changes in industry capacity to help answer the question – where is the growth?

1. Carriers Included and Methodology

The four largest value carriers, along with Allegiant, are included in this analysis as are the six largest U.S. network carriers.¹

Our data sample – Value carriers (low cost):

1. AirTran
2. Allegiant
3. Frontier
4. jetBlue
5. Southwest

Our data sample – Network carriers:

1. American
2. Continental
3. Delta
4. Northwest
5. United
6. US Airways²

Most of the analysis is based on 3rd quarter 2008 data, which is the most recent US DOT (Form 41) data available. DOT data was used instead of SEC to permit comparisons of specific equipment types and ensure that non-airline related costs did not dilute the specific focus on airline costs. Allegiant does not report using Form 41 and therefore more limited analysis is included for that airline. Because unit costs are rapidly changing, we have used data from a single quarter, rather than a twelve month period. Additional historical perspective is also provided.

¹ Hybrid carrier Alaska is not included because the company has requested filing immunity for the third quarter of 2008 and no comparative data is available.

² The US Airways numbers presented for 2007 and 2008 are both based on the consolidated entity of US Airways and America West.

Unless indicated otherwise, the costs provided are for mainline domestic operations only. We have taken care to remove the costs associated with the carriers' regional affiliates by correcting for their transport-related costs, although it is impossible to do so with absolute precision.

2. Value versus network carrier RASM/CASM comparison

The following figure shows the RASM and CASM comparison for network versus value carriers for the third quarter 2008.

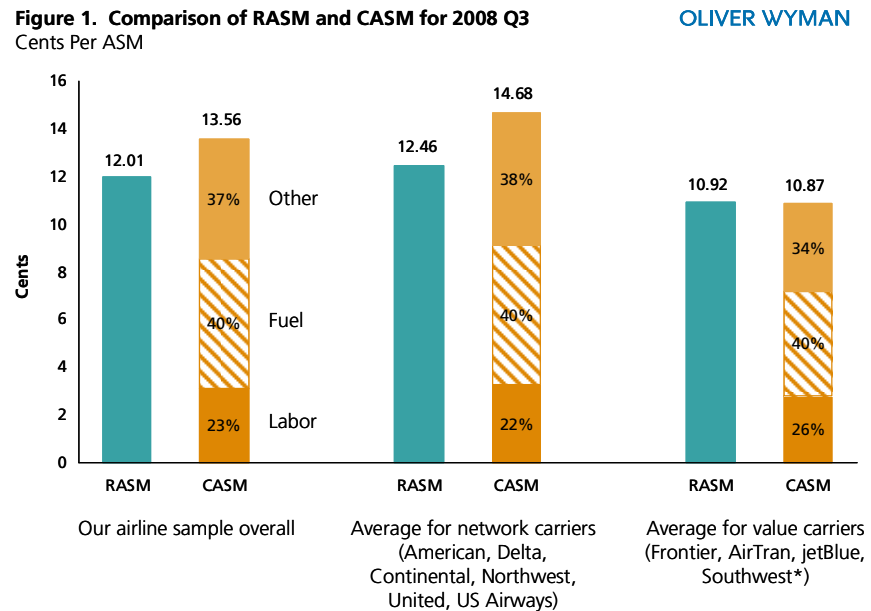


Figure 1. RASM, CASM in US\$ per ASM for airline sample, network carriers and value carriers across fleet 2008 Q3
* Inclusion of Allegiant, which does not report using Form 41, would not materially change results

In the third quarter of 2008, the average CASM of our sample airlines was higher than the RASM, with the value carriers being at about the break-even level. The network carrier CASM of 14.68¢ per ASM is 35% higher than that of the value carriers. Bringing down CASM will be an important task, especially with a softer economy and revenues per ASM potentially decreasing.

The largest component of CASM is fuel, which made up 40% of total CASM in both airline segments in 2008 Q3. Fuel costs will be examined in more detail later.

The following figure shows the CASM for each individual airline in our sample for the third quarter of 2008. Not surprisingly, the five value carriers have the lowest total CASM. Southwest ranks first with a CASM of 10.6¢, followed by jetBlue with a CASM of 10.8¢ per ASM (+2% versus Southwest), Allegiant with a CASM of 11.5¢ per ASM (+8% over Southwest), AirTran with a CASM of 11.6¢ per ASM (+9% over Southwest), and Frontier with a CASM of 11.9¢ per ASM (+12% over Southwest). These are not stage-length adjusted CASMs, and that adjustment will change the rankings. During the 3rd quarter, Northwest has the highest CASM of 16.9¢, which is 59% higher than Southwest.

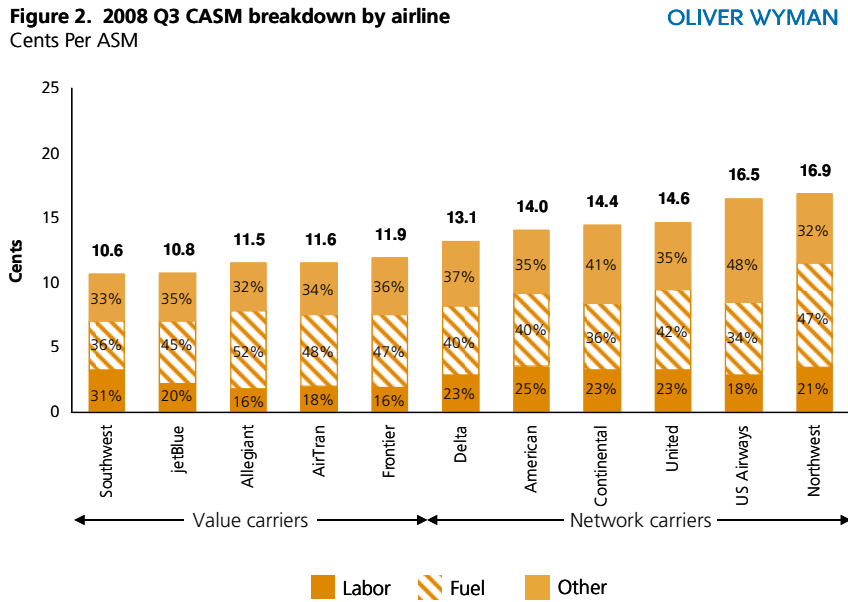


Figure 2. Overall airline costs per ASM (across aircraft fleet), 2008 Q3
Note: Allegiant Form 41 Data not available. Cost data derived from SEC 10Q report.

Figure 2 also emphasizes the importance of labor and fuel as significant components of an airline's CASM. Frontier has the smallest percentage of CASM made up of labor of all carriers (only 16%), while Southwest has the largest (31%). It is important to look not just at the percentages, however, but also at the absolute CASM amounts. For example, Northwest's 21% labor component far exceeds JetBlue's 20% in terms of absolute cents per ASM.

Additional CASMs are provided for selected European carriers in the Appendix. Because of differences in time period and other factors, the European CASM information is not directly comparable to that provided for US carriers. However, the cost comparison (expressed in Euros for calendar year 2007) is useful in showing the relative differences in CASM between European carriers.

The following figure addresses the question whether network carriers are making progress towards value carrier cost levels or whether the value carrier cost advantage is further increasing. *Figure 3* shows the average network and value carrier CASM for the 3rd quarter of each year from 2003 through 2008.

Figure 3. Comparison of CASM between Network and Value carriers over time
Cents Per ASM

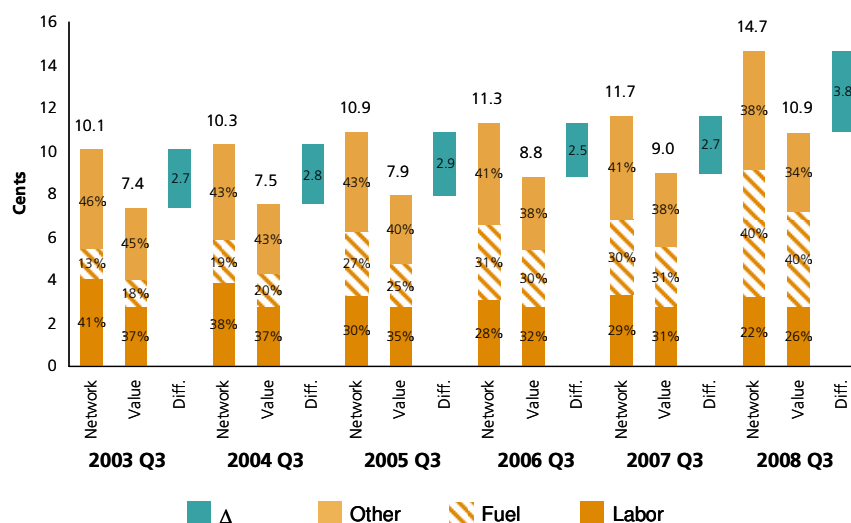


Figure 3. CASM in US cents and percent by airline category (network versus value carriers) for Q3 2003 to Q3 2008

Over the six-year period, the value carrier CASM has averaged approx. 25% lower than that of network carriers. In absolute terms, the gap increased significantly during the most recent period from 2.7¢ to 3.8¢ per ASM (up 41% over 2007). However, as a percentage, the cost gap has remained within a range of 23-27% during the full period. The fuel cost share of CASM has grown continually from between 13 and 18% in 2003 to 40% in 2008, while airlines have managed to reduce labor costs from 37-to-41% in 2003 down to 22-to-26% in 2008.

3. Comparing CASM for similar aircraft operated by different airlines

As the focus of this report is value carriers, we selected an aircraft roughly comparable to Southwest’s most efficient aircraft, the 737-700, for CASM analysis among different carriers. For carriers that operate several aircraft types that are similar to the 737-700, we chose the one closest in capacity to, but larger than, Southwest’s. For example, United brackets Southwest’s 137-seat 737-700s with 120-seat A319s and 147-seat A320s. We chose the A320.

In Figure 4 we set out the average stage length for each of our airline/aircraft combinations and their CASM at that stage length.³ Remember, these are costs for specific aircraft types and not for the carriers' total operations. A glance at the table shows that AirTran, Southwest and jetBlue have the lowest unit costs (AirTran at 9.66¢/ASM, Southwest at 9.74¢/ASM, and jetBlue at 10.06¢/ASM). Unlike Figure 2, one network carrier, Delta, has a lower CASM than one value carrier, Frontier, in this comparison.

Figure 4. CASM per airline for selected aircraft type at actual average stage length OLIVER WYMAN
2008 Q3
(Cents per ASM; Excluding regional affiliates)

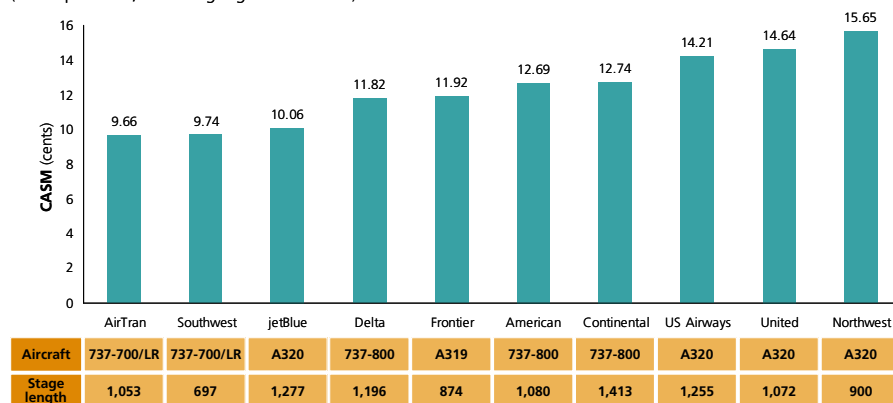


Figure 4. Average stage length in US Miles for Airline/Aircraft Combinations (Domestic Entity excluding regional affiliates)

These results are not adjusted for stage length and reflect each carrier's actual fuel expense.

4. Adjusting for Stage Length

As Figure 4 shows, different carriers operate their aircraft at different average stage lengths. Since length of flight strongly affects unit costs – the longer the flight, the lower the unit costs – it makes little sense to compare unit costs without relating them to average stage length.

AirTran, Southwest, and JetBlue have very similar CASMs when operating comparable aircraft, with AirTran the lowest, but separated by only 1 percent from Southwest and 4 percent from JetBlue. However, Southwest achieved its very low CASM with a

³ The SEC data available for Allegiant does not break out CASM differences between the airline's two separate fleet types. However, Allegiant's unadjusted consolidated CASM of 11.49¢ ranks 4th lowest after JetBlue.

significantly shorter average stage length (697 miles) than either AirTran or JetBlue. AirTran’s average stage length is 60% longer than Southwest’s, while JetBlue’s is 83% longer. Thus Southwest’s mileage-adjusted costs are the lowest of the three and in fact the lowest of all airlines in the sample analyzed.

To help visualize the cost and stage length differences among the carriers, we have plotted unit costs (Y axis) on a chart against average stage length (X axis). This we do for our group of carrier/aircraft combinations in Figure 5. To facilitate comparisons we show a distance-related cost curve for Southwest. From the curve, Southwest’s cost advantage is obvious. By visualizing additional curves drawn above the Southwest curve, it is apparent that AirTran has the next lowest costs, followed by Allegiant, JetBlue, Frontier, and then the network carriers. It is also apparent that the value carriers operate systems with markedly different average stage lengths, except for Allegiant and Frontier, which have similar stage lengths, but different route networks and business models.

Figure 5. CASM plotted against average stage length 2008 Q3

OLIVER WYMAN

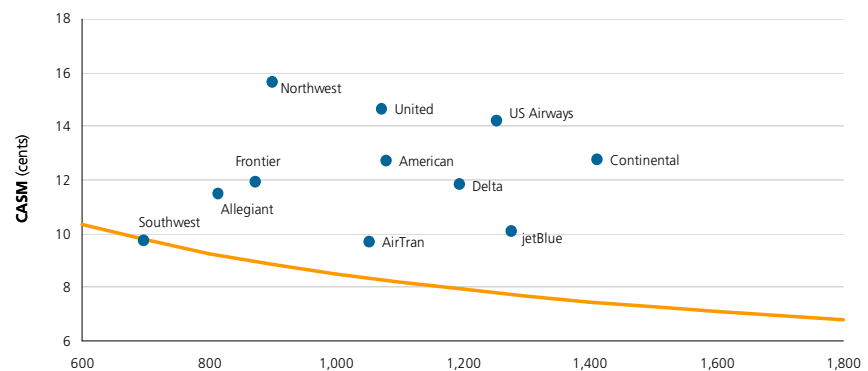


Figure 5. Average CASM Plotted Against Average stage length for selected aircraft type
 Note: Allegiant CASM based on combined MD80 (MD 83 and MD 87) data from SEC 10Q report.

Using an accepted stage-length adjustment method, we recomputed the 2008 Q3 CASM for each carrier operating the comparable aircraft identified in Figure 4 based on a standardized stage length of 1,000 miles. The table below, useful in understanding which carrier runs a more efficient operation, shows the results.

Figure 6. 2008 Q3 CASM at 1,000 mile stage length 2008 Q3

OLIVER WYMAN

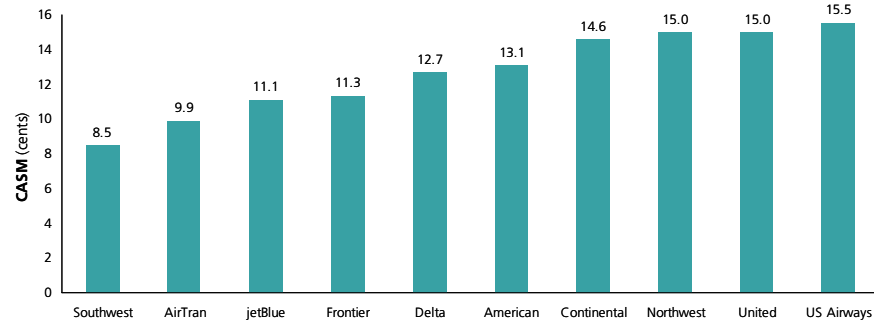


Figure 6. Actual CASM at 1,000-Mile stage length for selected Airline/Aircraft-type Combinations

As you can see in Figure 6, Southwest (8.5¢/ASM) is the low-cost champ at stage lengths of 1,000 miles. AirTran is second, but still has costs 16% higher than Southwest (9.9¢). JetBlue moves into third place, but jetBlue’s CASM of 11.1¢ is 31% higher than Southwest’s.⁴ The carrier with the highest CASM is US Airways at 15.5¢, which is 83% higher than Southwest. However, other network carriers United and Northwest have costs nearly as high as US Airways (only 3 percent lower), while Continental’s CASM is only 6 percent lower than US Airways’ and still 72% higher than Southwest.

⁴ Comparable data is not available for Allegiant, although the airline would have equipment/stage-length adjusted CASM similar to that of JetBlue.

5. A closer look at Fuel Prices and Costs

It is scarcely news that fuel prices have risen significantly through much of 2008, peaking at an all-time high in July at approximately \$3.80 per gallon, and then declining through the fall.

In Figure 7, we show average fuel prices for each of our carrier/aircraft combinations for 2008 Q3 compared with the same quarter in the previous year. On average, fuel prices across the airlines in the sample grew by 73%, with Northwest experiencing the largest percentage increase of 123% to the highest actual fuel price of \$4.69 per gallon. Southwest incurred an increase of 54% over 2007, and managed to maintain the lowest fuel price of \$2.61 per gallon. Other carriers saw fuel prices increase by between 55% (Delta) and 91% (United).

Figure 7. Average fuel price per gallon
2008 Q3 vs. 2007 Q3

OLIVER WYMAN

Airline	Aircraft	2007	2008	Increase 2008 over 2007	Difference from Southwest	Percent Higher than Southwest
Southwest	737-700/LR	\$1.70	\$2.61	54%	\$ --	0%
jetBlue	A320	\$2.13	\$3.42	61%	\$0.81	31%
Allegiant	MD83/87	\$2.32	\$3.44	48%	\$0.83	32%
American	737-800	\$2.12	\$3.46	63%	\$0.85	33%
Delta	737-800	\$2.26	\$3.50	55%	\$0.89	34%
US Airways	A320	\$2.17	\$3.63	67%	\$1.02	39%
AirTran	737-700/LR	\$2.14	\$3.65	71%	\$1.04	40%
Continental	737-800	\$2.13	\$3.67	72%	\$1.06	41%
Frontier	A319	\$2.25	\$3.92	74%	\$1.31	50%
United	A320	\$2.19	\$4.19	91%	\$1.58	61%
Northwest	A320	\$2.10	\$4.69	123%	\$2.08	80%

Figure 7. Average Fuel Price per Gallon for Airline/Aircraft Combinations (Domestic Entity) including Comparison with Southwest, 2008 Q3 vs. 2007 Q3.

It is no secret that Southwest has been significantly more successful than any of its competitors in keeping fuel costs in check through a successful hedging program. In the above figure, we compare Southwest's average price for 2008 Q3 with the other airlines. As noted, Southwest paid the lowest average fuel price, \$2.61 per gallon. At \$4.69 per gallon Northwest paid the highest average price (80% higher than Southwest), followed by United at \$4.19 (61% higher than Southwest). The second lowest price among our study airline/aircraft combinations was \$3.42 per gallon paid by jetBlue, still 31% above Southwest's price.

It is unlikely that Southwest or any other carrier can sustain a substantial advantage in fuel cost over the long term. For that reason and to provide another perspective on each of the carrier's operating efficiency, we have made a further adjustment to CASM. We have recalculated the 2008 Q3 aircraft-specific CASM for each carrier assuming that it had purchased fuel at Southwest's fuel prices. In the following figure, we show individual carrier CASMs at Southwest's average fuel price for an adjusted standardized stage length of 1,000 miles. When we adjust the other carriers' fuel prices to Southwest's, AirTran's CASM edges out Southwest by a margin of 0.2¢ (8.3¢/ASM vs. Southwest's 8.5¢/ASM).

Figure 8. 2008 Q3 CASM at 1,000 mile stage length, at Southwest fuel price of \$2.61/gal

OLIVER WYMAN

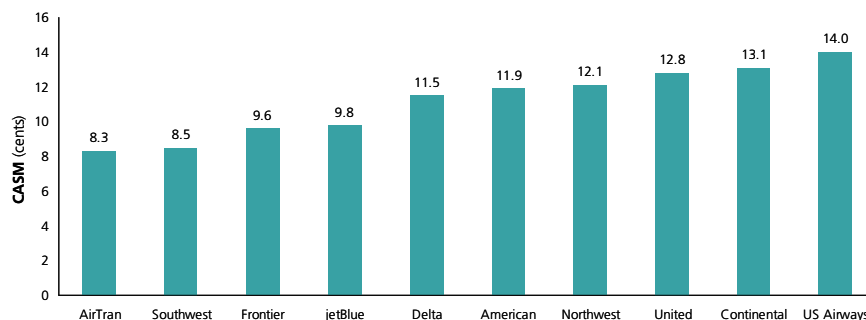


Figure 8. CASM at Southwest Fuel Prices, 1,000-Mile stage length, Airline/Aircraft Combinations.

6. Fuel Prices Changes

As depicted in the following figure, the price of fuel has increased since 2003 with the all-time peak occurring in July 2008 at approx. \$3.80 per gallon. Since then fuel prices have plummeted to levels around \$1.60 per gallon, a decrease of almost 60% in less than six months.

Figure 9. System Average Fuel Prices (US Carriers) and Fuel Spot Price January 2001 through January 2009 OLIVER WYMAN

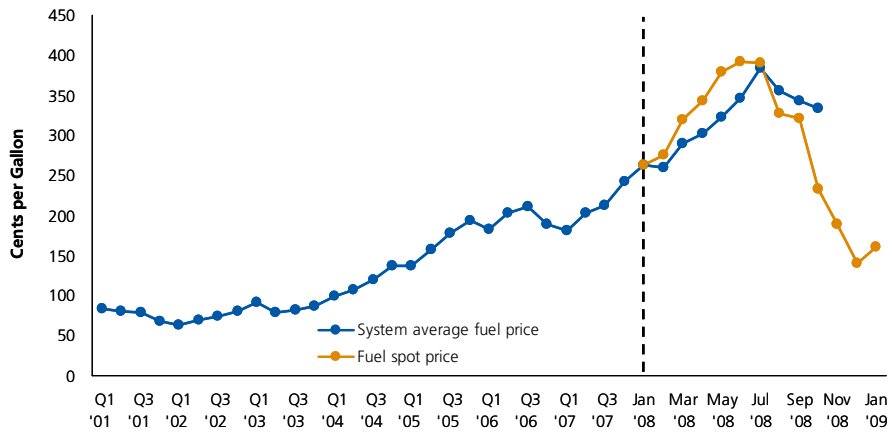


Figure 9. System average fuel price in US\$ per gallon, US Airlines, January 2001 through October 2008 and fuel spot price per gallon Fuel by month in US\$ per gallon (Source: Air Transport Association)

Especially in times of reduced demand levels and potentially declining yields, this sharp drop in fuel prices represents welcomed cost relief to airlines. But how does this drop in fuel prices help to compensate for the effects of the economic downswing? The following Figure 10 depicts the effects of different fuel prices on US airline profits, on the assumption that all other variables remain constant.

Figure 10. Effects of Fuel Cost Decline on Airline Profitability OLIVER WYMAN

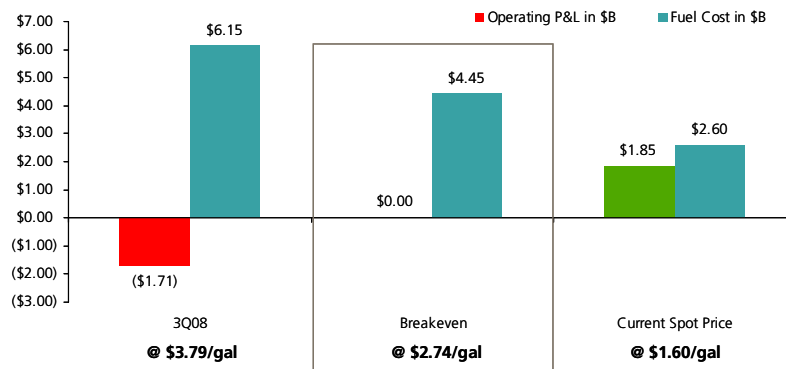


Figure 10. Effects of changes in fuel costs on airline profitability all else being equal (Source: DOT and Air Transport Association)

As shown in Figure 10, during the third quarter of 2008, US airlines incurred an operating loss of \$1.7b while paying an average fuel price of approx. \$3.80 per gallon (with total fuel costs of approximately \$6.1b). Applying the current fuel spot price of \$1.60 per gallon, while maintaining everything else as is, would have turned the financial loss of the third quarter into a significant operating profit of \$1.85b. Under these circumstances, US airlines would have achieved breakeven operating results during the third quarter at a spot price of \$2.74 per gallon, a price higher than the current level. In practice, of course, it is never possible to maintain everything else as is.

7. CASMs for smaller aircraft

In our airline sample, numerous carriers operate smaller aircraft. In this section, we look first at the three value carriers in our sample that operate two different sized narrowbody aircraft, AirTran, JetBlue, and Frontier, to see how the smaller aircraft

compare in efficiency to the larger aircraft. We compare them in Figure 11 at their own average fuel prices as well as ‘excluding fuel’ to ensure fuel costs do not dilute the comparability between the airlines.

Figure 11. CASM plotted against average stage length, actual fuel prices OLIVER WYMAN
2008 Q3

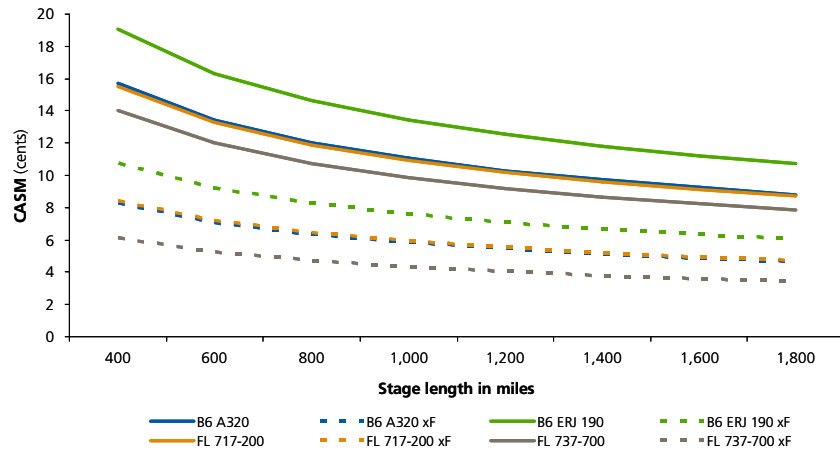


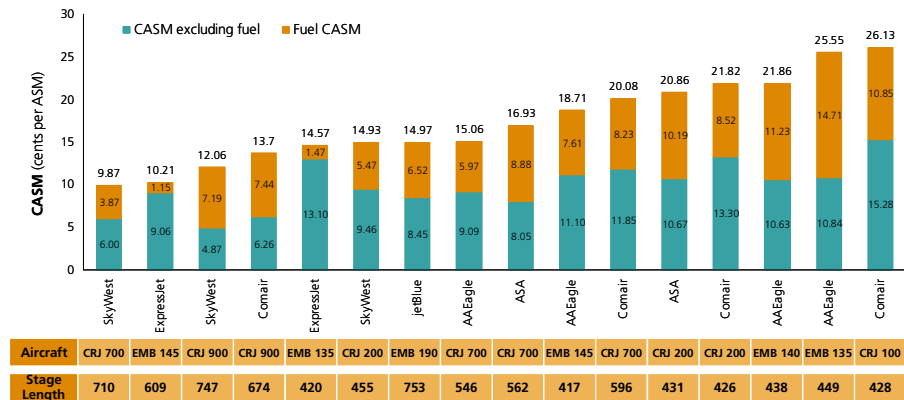
Figure 11. Distance-based Cost Curves for two Carriers Operating New Jet Aircraft in the 100 – 120 seat Category for various aircraft types including and excluding fuel costs: B6: jetBlue; FL: AirTran; xF: excluding Fuel

AirTran’s 737 is the champion of this multi-aircraft operating group with the lowest unit costs across all stage lengths, and its smaller 717 has the second lowest costs. JetBlue’s A320 just about matches AirTran’s 717, although not AirTan’s 737. However, JetBlue’s E190 operation is still experiencing break-in issues with much higher unit costs of roughly 25% above AirTran’s B737 costs. This is also driven by the lower jetBlue seating density of 100 seats compared to 117 seats at AirTran.

Regional carriers operate EMB-190 size aircraft and smaller aircraft, such as the CRJ 200 or 700 or the ERJ 145 or 170. How do those aircraft compare in terms of unit costs? The following figure depicts the CASMs for specific aircraft operated by specific airlines.

Figure 12. CASM per airline for selected aircraft type at actual average stage length 2008 Q3 OLIVER WYMAN

(In cents per ASM; Excluding regional affiliates)¹



¹ Fuel cost allocation may differ significantly between individual airlines based on contractual setup with parent company / network carrier

Figure 12. Overall airline costs per ASM for selected airline-aircraft-type combination, 2008 Q3

The low-cost champion is the Skywest CRJ 700 with an all-in CASM of 9.87¢ per ASM, while its competitors American Eagle and Delta with the same aircraft type but shorter stage lengths only reach CASMs of 15.06¢ / ASM (+53%) and 20.08¢ / ASM (+103%). Comair with its CRJ 100 is in last place with costs of 26.13¢ per ASM (+165% over Skywest’s CRJ700). Note that JetBlue’s EMB-190 has significantly higher CASM than the Skywest and Comair CRJ 900s. However, this comparison needs further adjustment to reflect the fact that JetBlue operates as part of its mainline system with other costs that the regional operators might not have.

8. Strategic outlook: Where is the growth?

During much of this decade, value carriers and regional carriers experienced strong growth. Even as network carriers reduced their mainline operations, regional carriers filled in. As illustrated in Figure 13 below, regional aircraft increased their share of mainline carrier ASMs by two points from 10% to 12% from January 2007 to January 2009.

Figure 13. Distribution of scheduled domestic U.S. mainline aircraft service including regional partners OLIVER WYMAN
Percent of ASMs

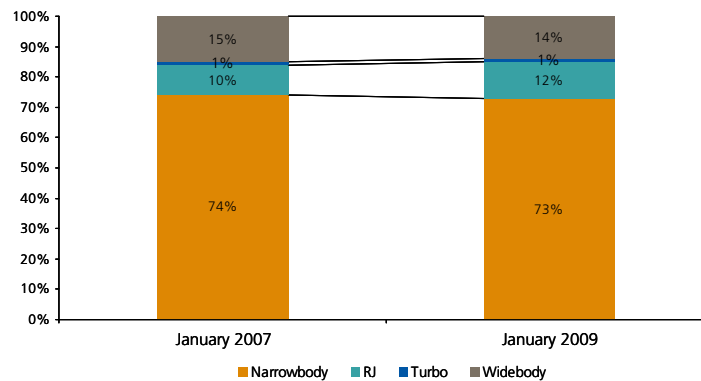


Figure 13. Distribution of scheduled US mainline aircraft service by aircraft type, January 2007 to January 2009 in %

What has happened more recently? As shown below in Figure 14, neither regional airlines nor value carriers have been spared capacity reductions since the 3rd quarter of 2008. They have, however, reduced capacity by less than the mainline carriers, meaning that they continue to gain capacity share even during these difficult times. As better times return, are these carriers poised to resume their growth?

Figure 14. Change In Scheduled Domestic U.S. ASMs OLIVER WYMAN
Billions of Seat Miles

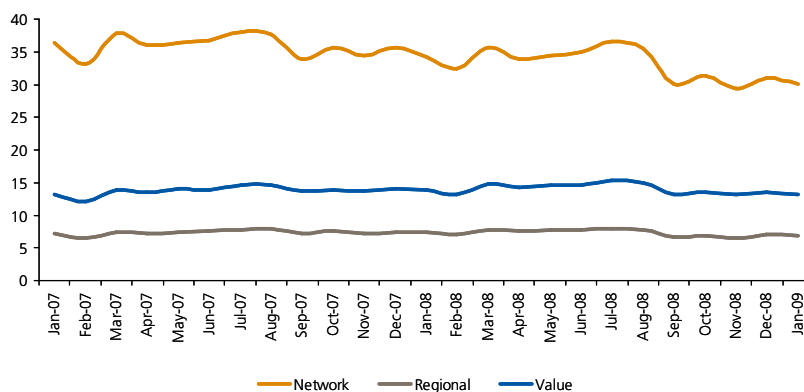


Figure 14. Change in scheduled domestic US ASMs, January 2007 to January 2009 in billion seat miles

US mainline carriers continue to look overseas, with their domestic operations contributing less and less to their system revenue. As shown in Figure 15 below, the shift towards international service is clear even over the past three years as the share of system revenue contributed by domestic operations dropped by more than 10 points, from 72% to 60% between 2003 and 2008.

Figure 15. Source of Network Carrier Revenue OLIVER WYMAN
Operating Revenue Mainline Only

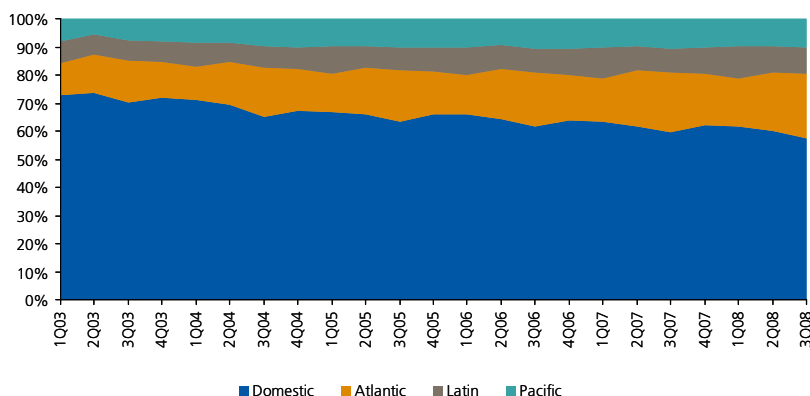


Figure 15. Source of network carrier revenue by geography, 2003 Q1 to 2008 Q3 in %

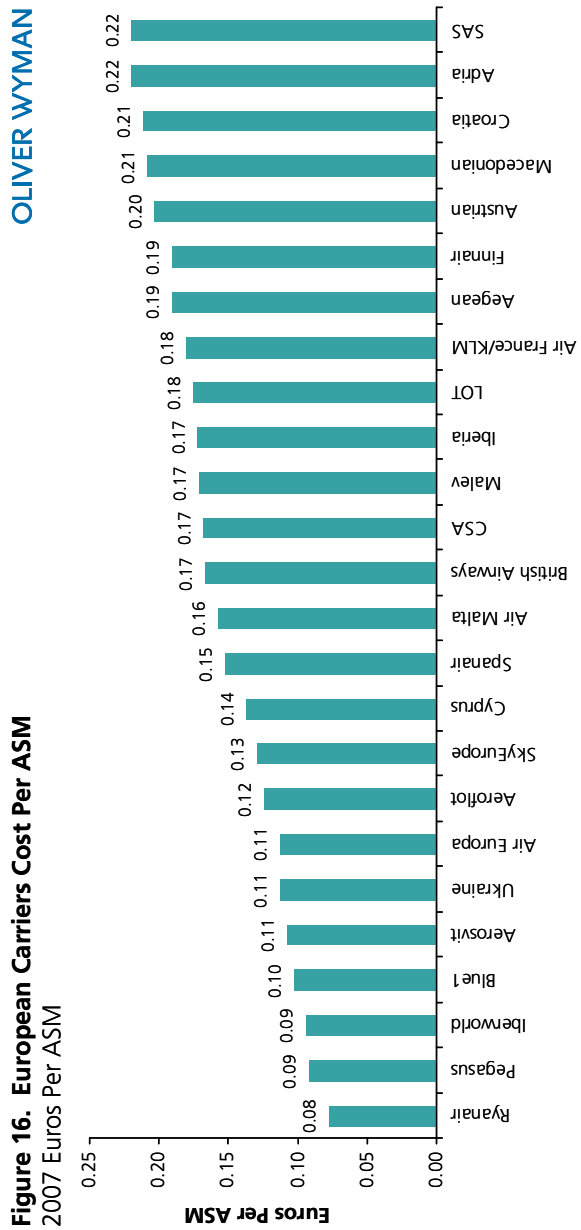


Figure 16. Comparison of European carriers CASM in Euros per available seat mile
 Note: Cost data reported on fiscal year basis, not year end 2007 in all cases.
 Source: IATA WATS 2007

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