

AIRLINE ECONOMIC ANALYSIS

FOR THE RAYMOND JAMES GLOBAL AIRLINE CONFERENCE

NOVEMBER 2013



AUTHORS

Bob Hazel
Peter Otradovec
Tom Stalnaker
Aaron Taylor

TABLE OF CONTENTS

SUMMARY	5
US CARRIERS INCLUDED AND METHODOLOGY	8
COSTS	9
1. System CASM Increase	9
2. Domestic CASM Increase	10
3. Long-Term Domestic CASM Trends	10
4. Fuel Prices	11
5. Value versus Network Carrier Domestic CASM Comparison, with and without Fuel	12
6. Age and Fuel Burn	13
7. Individual Value Carrier Domestic CASMs	14
8. Individual Network Carrier Domestic CASMs	15
9. Stage-Length Adjusted Individual Carrier Domestic CASMs	17
10. Direct CASMs for Narrowbody Aircraft	17
REVENUE	20
11. RASM Increase	20
12. Network/Value Carrier Domestic RASM Gap	21
13. Changes in US Airline Revenue over Time	22
14. RASM Adjusted for Stage-Length	23
15. Ancillary Fees	23
MARGIN	26
16. RASM/CASM Margin	26
17. Domestic RASM/CASM Margin	27
18. International RASM/CASM Margin	29
19. Breakeven Load Factors	29

CAPACITY	33
20. Changing Capacity in the US Domestic Market	33
21. International Portion of US Network Carrier Revenue	33
22. Revenue Growth Drivers	35
23. Revenue Profile	37
GLOBAL TRENDS	37
24. World Capacity and Growth by Region	37
25. Air Service Provided by Value Carriers Around the World	39
26. Global Alliances	40
27. Changing Fleet Composition	41
28. Stage-Length Adjusted Costs for International Carriers	43
CONCLUSION	45

SUMMARY

FOR US CARRIERS, THE FOLLOWING CHANGES STAND OUT SINCE LAST YEAR:

COST

1. **CASM Increase** – With relative stability in fuel prices, both network and value carriers¹ experienced smaller CASM increases than last year. Based on comparing Q1 2012 and Q1 2013 results, the average CASM of the network carrier group increased by only 2.6%, while the average for the value carrier group increased by 11.8%, driven largely by Southwest's CASM increase.
2. **Network/Value Carrier Domestic CASM Gap** – The domestic CASM gap between network and value carriers has now declined for four of the past five years and is the smallest ever.
3. **Ultra Low Cost Carrier CASM** – The value carriers with the lowest CASM, Allegiant and Spirit, have achieved a significant and growing stage-length adjusted CASM gap between them and other value carriers.
4. **Fuel Costs** – Fuel prices have been high, but volatile only within a price band of about \$.50 per gallon. In this environment, hedging has not been a substantial factor in fuel cost management.
5. **Aircraft Seat Size** – For carriers that operate multiple narrowbody types, there are substantial CASM differences between the larger and smaller aircraft. For the same equipment types operated by multiple carriers, much of the CASM difference is driven by different seating configurations and stage-lengths.

REVENUE

6. **RASM Increase** – Network carriers experienced a smaller average RASM increase than in recent years, while value carriers experienced a larger average increase in RASM, driven largely by Southwest's large RASM increase.
7. **Network/Value Carrier Domestic RASM Gap** – For the first time in mid-2012, value carriers achieved, and subsequently have sustained, higher domestic RASM than network carriers, before adjusting for stage-length. The surge in domestic RASM by the value carriers is striking.
8. **Domestic RASM** – For Q1 2013, Delta achieved a domestic RASM premium over other carriers – after adjusting for stage-length.
9. **International RASM** – On a stage-length adjusted basis, United and Delta generated the highest international RASM. For Q1 2013, United's stage-length adjusted international RASM was significantly higher than its domestic RASM. Other carriers' stage-length adjusted international RASM was either slightly higher or slightly lower than their domestic RASM.

¹ See page 8 for a list of network and value carriers included.

- 10. Revenue Growth** – Overall revenue growth, both domestic and international, has been limited. For US network carriers, nearly all domestic revenue growth this past year was the result of yield increases, while international revenue growth was the result of yield increases and higher load factors, as US network carriers slightly reduced the number of seats. For US value carriers, revenue growth was driven primarily by a small increase in the number of seats.
- 11. Ancillary Revenue** – Miscellaneous revenue – ranging from priority boarding to blankets – has become the largest source of ancillary revenue and ancillary revenue growth, displacing reservations change fees and baggage fees. The growth rate for ancillary revenue has been higher for network carriers than for value carriers.
- 12. International Revenue** – Although Latin America still ranks third behind the Atlantic and Pacific in revenue generated for US carriers, it continues to grow more rapidly.
- 13. Higher Fare Passengers** – The importance of higher fare passengers is illustrated by the revenue profile of the JFK – LAX route, where 10.8% of passengers generated 44.5% of the O&D revenue in 2012.

MARGINS AND CAPACITY

- 14. Margins** – As measured by a comparison of total RASM/CASM, network carriers did not make a profit either system-wide or on their domestic operations during Q1 2013, while value carriers did. Network carriers slightly narrowed their negative RASM/CASM gap since the last report.
- 15. Breakeven Load Factors** – Domestic load factors have flattened, with the largest network carriers having load factors in the mid 80s, and the largest value carriers having load factors in the low 80s. Breakeven load factors also have been relatively stable.
- 16. Domestic Capacity Growth** – Between September 2012 and September 2013, domestic capacity provided by mainline network and value carriers grew by only 0.3% in each case. Regional carrier capacity declined by 4.6%.
- 17. Segment revenue** – A comparison of total segment revenue by carrier shows that airlines such as Spirit collected total revenue per passenger in the same range as other value carriers with much higher revenue per segment before taking ancillary revenue into account.

GLOBALLY, THE FOLLOWING TRENDS ARE EVIDENT:

- 18. Value Carriers around the World** – Oceania has the highest percentage of ASMs provided by value carriers. South America has the lowest percentage. Value carriers are gaining market share nearly everywhere, with the greatest increases in Mexico and Australia over the past three years.
- 19. RASM/CASM** – Cross-country RASM/CASM comparisons for international carriers are limited by foreign exchange and financial reporting differences. However, our analysis shows the same trends for international carriers as among US carriers. In all regions, the value carriers have lower unit costs than their network carrier rivals. Ultra low cost carriers, such as Ryanair, have CASKs that are a step lower than even the value carriers in those regions.

- 20. Aircraft Deployment** – Aircraft type usage varies by world region. The US has a higher percentage of smaller regional jets; Canada has a higher percentage of turboprops; Asia and the Middle East have a higher percentage of widebodies. The two clear recent trends are the growth of larger regional jets in some regions, and the decline of smaller regional jets.
- 21. Capacity Growth** – Over the past four years, two of the three largest world regions in terms of ASM capacity have reversed order. Asia now ranks first, Europe second, and the US third, whereas four years ago, the positions of Asia and the US were reversed.
- 22. Air Service Distribution** – In most world regions, the largest share of capacity is devoted to flights within the same region. The exceptions are the Middle East, Africa, and the Caribbean, where the greatest share of capacity is devoted to flights to other regions.
- 23. Alliances** – The three global alliances generated 59% of the world's ASMs, with Star 39% larger than second-ranked SkyTeam. Forty one percent of global ASMs continue to be operated by carriers that are not part of an alliance and that percentage is growing slightly because of the higher growth rate of the non-aligned carriers.

US CARRIERS INCLUDED AND METHODOLOGY

The largest US value carriers, except for Virgin America², and the largest US network carriers are included in this analysis. The carriers included comprise nearly 90% of US carrier ASMs.³

OUR SET OF VALUE CARRIERS (LOW-COST):

1. Allegiant
2. Frontier
3. JetBlue
4. Southwest (including AirTran)
5. Spirit

OUR SET OF NETWORK CARRIERS:

1. Alaska
2. American
3. Delta
4. Hawaiian
5. United (including Continental)
6. US Airways

We have based most of the analysis on first quarter 2013 data, which is the most recent US DOT (Form 41) data available. DOT data was used instead of SEC filings to permit comparisons of specific equipment types and ensure that non-airline-related costs did not dilute the specific focus on airline costs. In some cases, where indicated, we have used data from the most recent four quarters to provide a longer period for comparison. For carriers outside the US, we have used the most recent reporting period available on a comparative basis.

² US DOT Form 41 information is not available for Virgin America for Q4 2012 and Q1 2013.

³ The primary category not included is regional carriers, which provide most of their capacity under Capacity Purchase Agreements (CPAs). Regional carriers have different expense payment arrangements in the CPAs with their mainline partners. The number of expense categories paid directly by mainline carriers and not appearing in the regional carriers' costs has increased over time. Fuel and aircraft ownership were among the first to be directly paid in some CPAs. More recently some mainline carriers have taken over payment for ground handling and engine maintenance. As a result, comparing total CASM across regional carriers and aircraft may be very misleading.

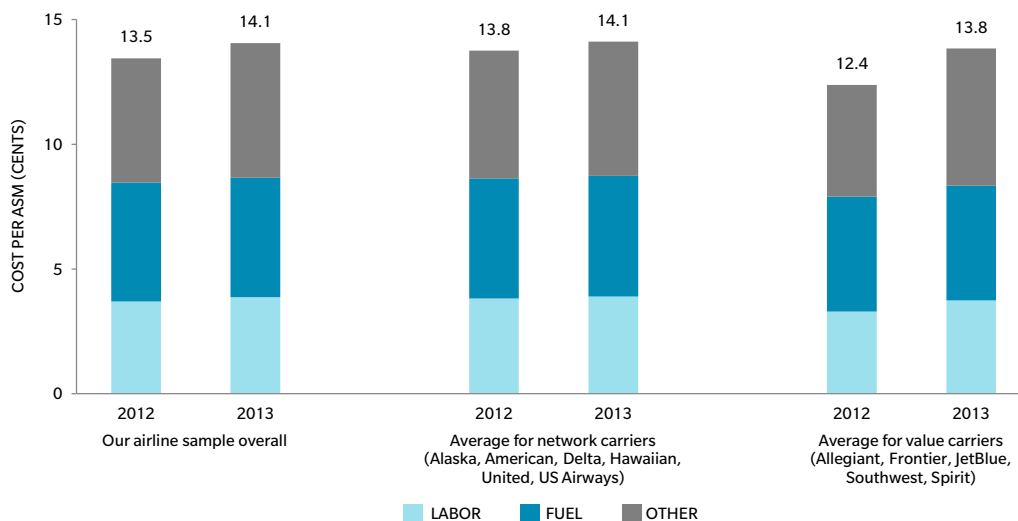
Unless indicated otherwise, the revenues and costs provided are for mainline operations only. We have removed the revenues and costs associated with the carriers' regional affiliates by correcting for their Transport-Related Revenues and costs, although, it is impossible to do so with absolute precision.

COSTS

1. SYSTEM CASM INCREASE

The average network carrier CASM increased by 2.6% from 13.8¢ to 14.1¢, while the average value carrier CASM increased much more, by 11.8% from 12.4¢ to 13.8¢. As discussed in section 7, however, value carrier CASM changes varied widely, ranging from -2.4% to 16.5%. The network carrier CASM disadvantage to the value carriers declined from 33.9% in Q1 2008 to only 3.6% in Q1 2013. This relatively small cost disadvantage is a far cry from the much larger gaps of previous years.

EXHIBIT 1: Q1 2012/2013 SYSTEM CASM BY GROUP (EXCLUDING REGIONAL AFFILIATES)



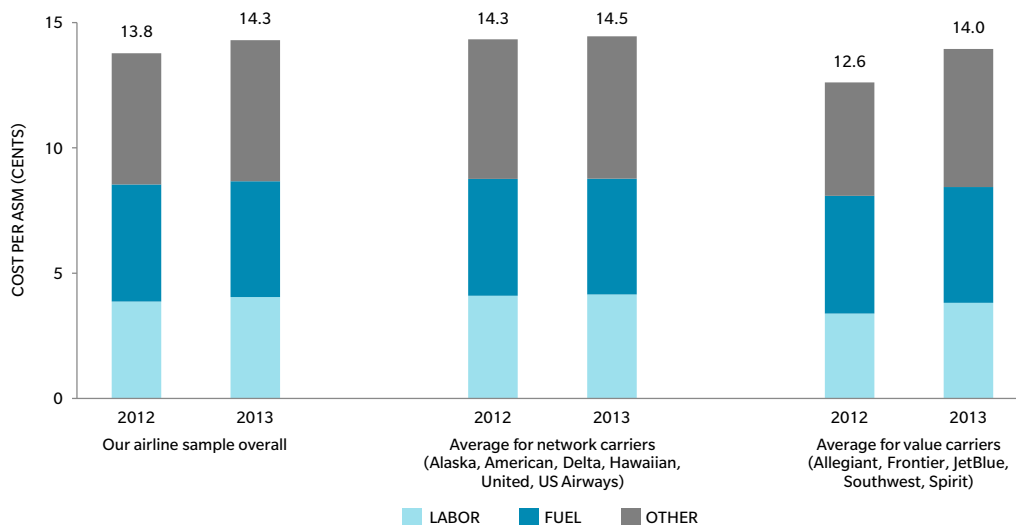
Source: PlaneStats.com for Q1 2012 and Q1 2013. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

2. DOMESTIC CASM INCREASE

Because network carriers and value carriers operate very different systems in terms of the capacity devoted to international service and the profile of their international service, it is useful to compare the CASMs of both groups for their domestic operations. From Q1 2012 to Q1 2013, the average network carrier domestic CASM increased by 0.8% from 14.3¢ to 14.5¢, while the average value carrier CASM increased more, by 10.6% from 12.6¢ to 14.0¢. (In both cases, the increases were slightly less than the system CASM increases.)

As a result, the network carrier domestic CASM disadvantage to the value carriers declined from 12.0% in Q1 2012 to 3.5% in Q1 2013. Of the three cost categories shown – *Labor*, *Fuel*, and *Other* – *Labor* increased by 13% and *Other* costs increased by 22% for the value carrier group, while increasing only 1% and 2%, respectively, for the network carriers. The value carrier results are heavily impacted by Southwest, which provided 62.9% of value carrier domestic ASMs and collected 68.8% of value carrier domestic revenue. Without Southwest, the average domestic CASM for value carriers increased by 1.1% from 11.8¢ in Q1 2012 to 11.9¢ in Q1 2013.

EXHIBIT 2: Q1 2012/2013 DOMESTIC CASM BY GROUP (EXCLUDING REGIONAL AFFILIATES)

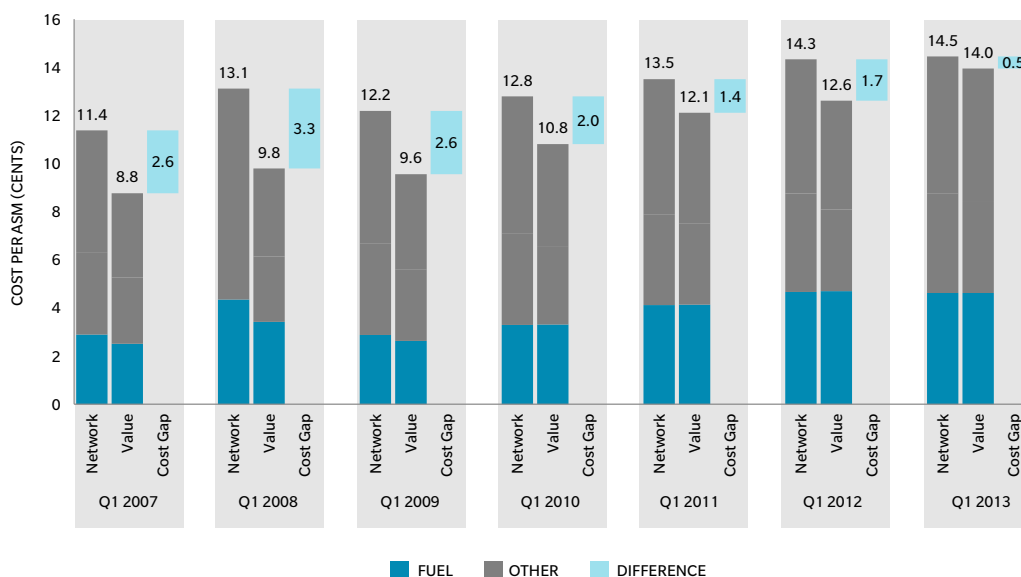


Source: PlaneStats.com for Q1 2012 and Q1 2013. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

3. LONG-TERM DOMESTIC CASM TRENDS

Exhibit 3 shows the domestic CASM differential between network and value carriers over time. For each group, CASM is divided into *Fuel* and *Other* for the 1st quarter of each year from 2007 through 2013.

EXHIBIT 3: COMPARISON OF DOMESTIC CASM BETWEEN NETWORK AND VALUE CARRIERS OVER TIME (Q1 2007 – Q1 2013)



Source: PlaneStats.com. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

The domestic CASM gap between network and value carriers has now declined for four of the five past years and is the smallest ever. The table below shows the declining gap in percentage terms:

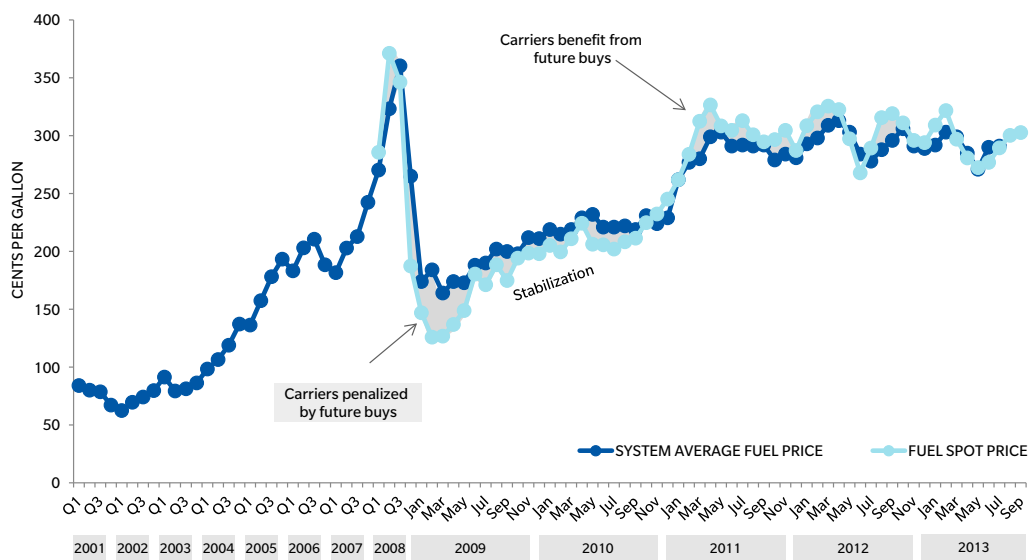
NETWORK CARRIER CASM % HIGHER THAN VALUE CARRIER CASM	
2008	33.9%
2009	27.5%
2010	18.3%
2011	11.6%
2012	13.6%
2013	3.6%

4. FUEL PRICES

Fuel costs have been high, but volatile only within a price band of about \$.50 per gallon. In this environment, hedging has not been a substantial factor in fuel cost management. From Q1 2012 to Q1 2013, the domestic fuel CASM decreased by about 1% for both network and value carriers to 4.6¢. During Q1 2013, fuel costs amounted to 33.1% of the average value carrier domestic CASM and 32.0% of the average network carrier domestic CASM.

Exhibit 4 below shows the average fuel price paid by US carriers in comparison to the average spot price. Where the system average was lower than the spot price, as was the case during several periods in 2011 and 2012, carriers benefited from effective hedging. Conversely, during much of 2009 and 2010, carriers lost money on their hedges as lower prices were available in the market on a spot basis.

EXHIBIT 4: SYSTEM AVERAGE FUEL PRICE (US CARRIERS) AND FUEL SPOT PRICE (JANUARY 2001 THROUGH SEPTEMBER 2013)



Source: Oliver Wyman research based on US DOT (Form 41) Fuel Cost and Consumption Report and US Energy Information Administration Data.

5. VALUE VERSUS NETWORK CARRIER DOMESTIC CASM COMPARISON, WITH AND WITHOUT FUEL

Exhibit 5 shows the convergence of CASM excluding fuel (ex-Fuel CASM) between network and value carriers. Putting aside quarterly swings, the network carrier ex-Fuel CASM has been nearly flat since 2008, while the value carrier ex-Fuel CASM has been trending upward. As noted previously, the value carrier results are heavily influenced by Southwest's large proportion of value carrier ASMs.

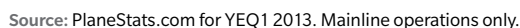
Historically, value carriers have had a fuel cost advantage because of their newer fleets and, at one time, Southwest Airlines' advantageous hedge positions. However, that is no longer the case. Network carrier and value carrier fuel costs have been tracking at approximately the same level. The main difference is that value carriers have managed to keep their fuel costs slightly more stable than network carriers on a quarter-by-quarter basis.

The chart displays the cost per ASM (cents) for Network and Value from 2007 to 2013. The Y-axis ranges from 0 to 10 cents. The X-axis shows quarters from Q1 2007 to Q1 2013. The four metrics are: Network CASM EX FUEL (solid light blue line), Network FUEL (dashed light blue line), Value CASM EX FUEL (solid dark blue line), and Value FUEL (dashed dark blue line). Network CASM EX FUEL is the highest, followed by Value CASM EX FUEL. Network FUEL and Value FUEL are the lowest, with Value FUEL showing a significant peak in 2008.

Quarter	Network CASM EX FUEL	Network FUEL	Value CASM EX FUEL	Value FUEL
Q1 2007	7.9	3.0	6.3	2.5
Q2 2007	7.8	3.2	6.2	2.7
Q3 2007	7.7	3.4	6.1	2.8
Q4 2007	8.0	3.8	6.2	3.0
Q1 2008	8.2	4.2	6.4	3.3
Q2 2008	8.7	4.8	6.3	4.0
Q3 2008	8.0	6.2	6.5	4.5
Q4 2008	8.5	3.5	6.8	3.5
Q1 2009	8.4	2.8	6.9	2.6
Q2 2009	8.1	2.8	6.7	2.6
Q3 2009	8.2	3.2	7.0	3.0
Q4 2009	9.3	3.2	7.3	3.1
Q1 2010	8.8	3.5	7.6	3.3
Q2 2010	8.3	3.6	7.1	3.3
Q3 2010	8.2	3.5	7.1	3.3
Q4 2010	8.8	3.8	7.6	3.6
Q1 2011	8.8	4.2	8.0	4.0
Q2 2011	8.5	4.8	7.6	4.7
Q3 2011	8.4	4.8	7.3	4.6
Q4 2011	9.4	4.6	7.8	4.6
Q1 2012	9.0	4.7	7.9	4.7
Q2 2012	9.2	5.3	9.1	4.6
Q3 2012	9.0	4.6	9.2	4.6
Q4 2012	9.1	4.9	9.3	4.7
Q1 2013	9.3	4.8	9.4	4.7

6. AGE AND FUEL BURN

EXHIBIT 6: FUEL BURN VERSUS AIRCRAFT AGE



Although the average age of US aircraft rose steadily from 2005 through 2012 to an average of 14 years, it is now declining, which will result in fuel cost savings.

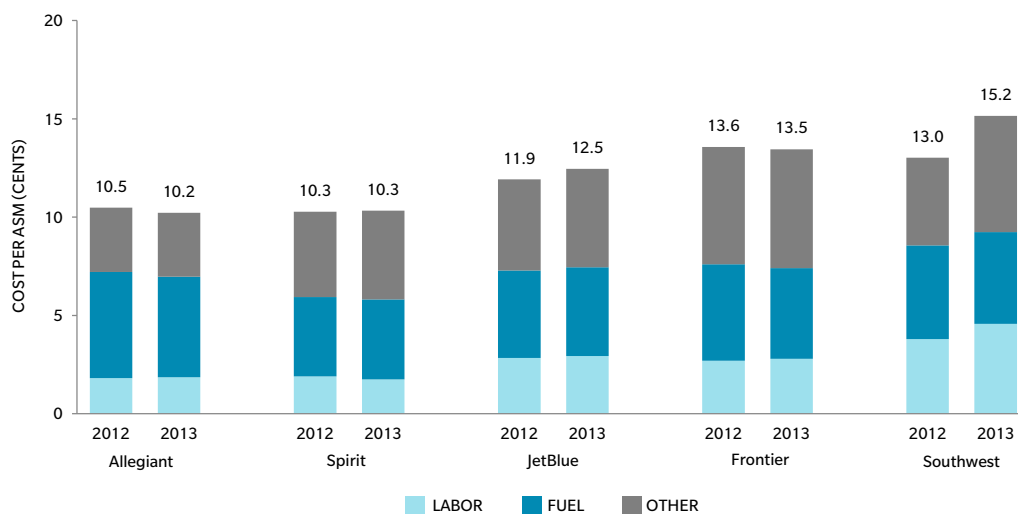
7. INDIVIDUAL VALUE CARRIER DOMESTIC CASMS

Domestic CASM changes at the five value carriers ranged from a decline of 2.3% at Allegiant, to an increase of 16.4% at Southwest over the one-year period. Frontier's domestic CASM declined by 0.9%, Spirit increased by 0.6%, and JetBlue increased by 4.4%. Except for Southwest, labor CASM changes fit within a narrow band, ranging from a decline of 0.15¢ at Spirit to an increase of 0.09¢ at Frontier. For Southwest, still in the process integrating its AirTran acquisition, labor CASM increased by 0.77¢ or 20.3% and other expenses increased by 1.45¢ or 32.5%.

Fuel price changes were not the reason for significant CASM changes at any carrier this year.

Exhibit 7 shows the domestic CASM for each of the value carriers, ranked from low to high. These rankings are not stage-length adjusted and that adjustment will change the rankings.

EXHIBIT 7: DOMESTIC CASM BREAKDOWN BY AIRLINE – VALUE CARRIERS
(Q1 2012/2013)



Source: PlaneStats.com for Q1 2012 and Q1 2013. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

Individual carrier details are shown in *Exhibit 8*.

EXHIBIT 8: CASM DETAILS FOR INDIVIDUAL CARRIERS

AIRLINE	YEAR	CASM ¢	LABOR ¢	FUEL ¢	OTHER ¢	INCREASE ¢	INCREASE %
Allegiant	2012	10.48	1.81	5.40	3.27		
	2013	10.22	1.86	5.11	3.25	-0.26¢	-2.5%
Spirit	2012	10.27	1.90	4.03	4.34		
	2013	10.33	1.75	4.06	4.52	0.06¢	0.6%
JetBlue	2012	11.92	2.84	4.45	4.63		
	2013	12.45	2.93	4.52	5.00	0.53¢	4.5%
Frontier	2012	13.57	2.70	4.90	5.97		
	2013	13.45	2.79	4.62	6.04	-0.12¢	-0.9%
Southwest	2012	13.02	3.80	4.76	4.46		
	2013	15.15	4.57	4.67	5.91	2.13¢	16.4%

Source: PlaneStats.com for Q1 2012 and Q1 2013. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

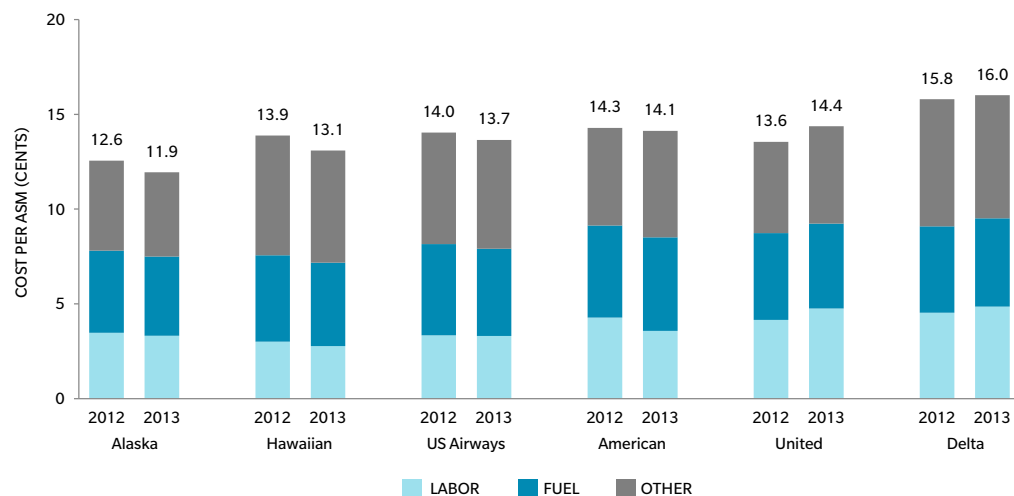
Of the value carriers, Spirit had the lowest *Labor* and *Fuel* CASM, while Allegiant had the lowest *Other* CASM. Allegiant had the highest *Fuel* CASM; Southwest had the highest *Labor* CASM; and Frontier had the highest *Other* CASM.

8. INDIVIDUAL NETWORK CARRIER DOMESTIC CASMS

Domestic CASM changes at the six network carriers ranged from a decline of 5.7% at Hawaiian to an increase of 6.1% at United over the one-year period. Alaska's domestic CASM declined by 4.9%, US Airways declined by 2.8%, American decreased by 1.1%, and Delta increased by 1.3%.

Alaska, Hawaiian, and US Airways each had modest declines in *Labor*, *Fuel*, and *Other* categories. American had a decline in *Labor* CASM which outweighed the increase in *Other*. Only Delta and United had an increase in *Labor* CASM; United also experienced an increase in *Other*. As with the value carriers, these are not stage-length adjusted CASMs.

EXHIBIT 9: DOMESTIC CASM BY BREAKDOWN BY AIRLINE – NETWORK CARRIERS (YE Q1 2012/2013)



Source: PlaneStats.com for Q1 2012 and Q1 2013. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

Individual carrier details are shown in *Exhibit 10*.

EXHIBIT 10: DOMESTIC CASM DETAILS FOR INDIVIDUAL CARRIERS

AIRLINE	YEAR	CASM ¢	LABOR ¢	FUEL ¢	OTHER ¢	INCREASE ¢	INCREASE %
Alaska	2012	12.56	3.48	4.33	4.75		
	2013	11.94	3.32	4.18	4.44	-0.62¢	-4.9%
Hawaiian	2012	13.88	3.01	4.56	6.31		
	2013	13.09	2.77	4.41	5.91	-0.79¢	-5.7%
US Airways	2012	14.04	3.34	4.82	5.88		
	2013	13.65	3.31	4.60	5.74	-0.39¢	-2.8%
American	2012	14.28	4.28	4.86	5.14		
	2013	14.13	3.58	4.93	5.62	-0.15¢	-1.1%
United	2012	13.55	4.15	4.59	4.81		
	2013	14.37	4.76	4.48	5.13	0.82¢	6.1%
Delta	2012	15.80	4.53	4.56	6.71		
	2013	16.01	4.86	4.65	6.50	0.21¢	1.3%

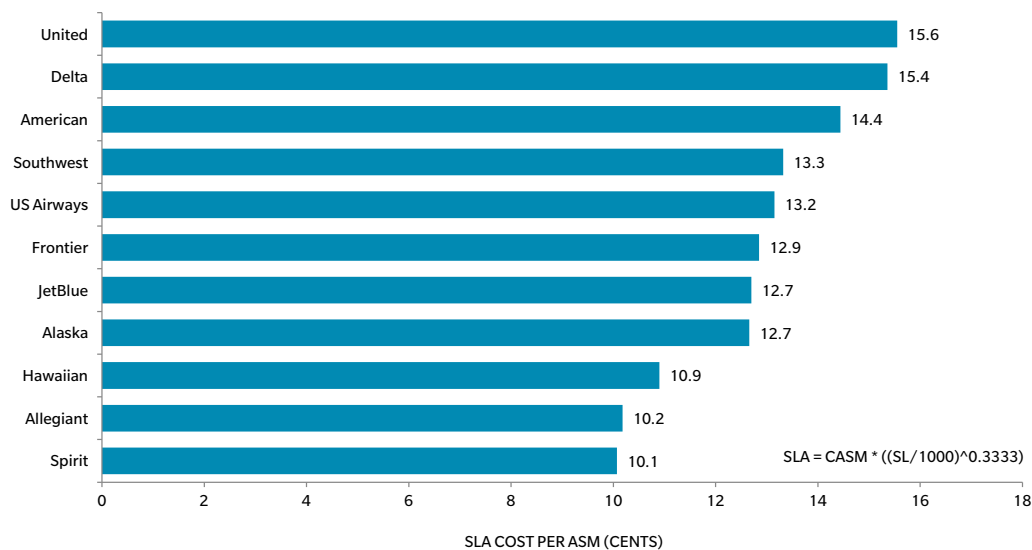
Source: PlaneStats.com for Q1 2012 and Q1 2013. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

9. STAGE-LENGTH ADJUSTED INDIVIDUAL CARRIER DOMESTIC CASMS

Using an accepted stage-length adjustment method, we recomputed the Q1 2013 domestic CASM for each carrier based on a standardized stage-length of 1,000 miles.⁴

Exhibit 11 shows the results: Spirit and Allegiant remain the lowest cost carriers, followed by Hawaiian. Then, five carriers have stage-length adjusted domestic CASMs within a narrow range, ranked from low to high: Alaska, JetBlue, Frontier, US Airways, and Southwest. Finally, of the three largest network carriers, American's stage-length adjusted CASM is lower than Delta and United.

EXHIBIT 11: DOMESTIC CASM BY AIRLINE – STAGE-LENGTH ADJUSTED TO 1,000 MILES (Q1 2013)



Source: PlaneStats.com for Q1 2013. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

Note: We briefly review international CASM and RASM for US carriers in section 18, and system CASK/RASK for carriers around the world in section 28.

10. DIRECT CASMS FOR NARROWBODY AIRCRAFT

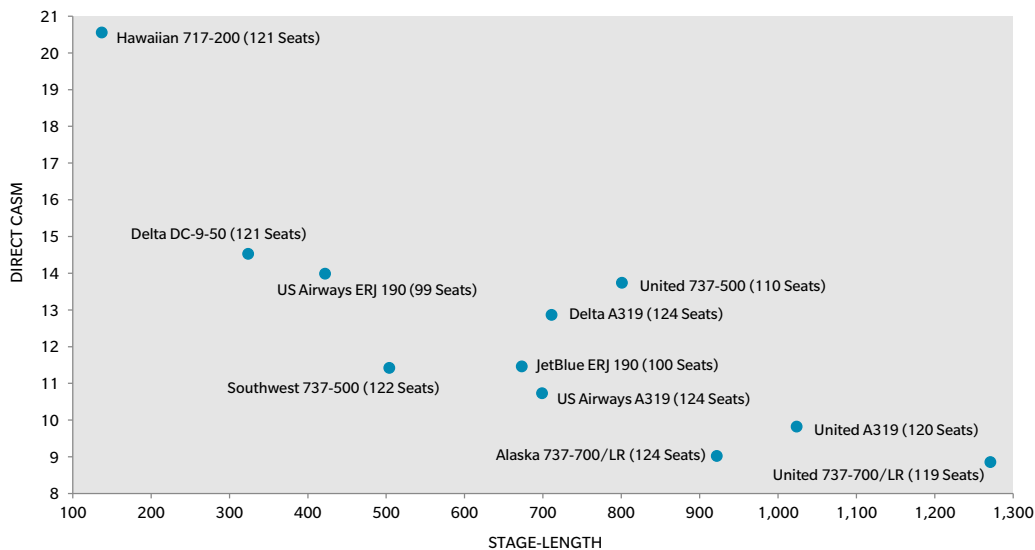
Exhibits 12, 13, and 14 make direct cost comparisons between narrowbody aircraft operated by different carriers. This type of comparison has been of interest to our readers in the past and, therefore, has been expanded in this year's report. Because of the number of aircraft-operator combinations, the exhibits are divided by seats: Less than 130 seats, 130-160 seats, and over 160 seats. To help reduce issues resulting from small sample size, a minimum fleet size of ten is set for inclusion of any aircraft-operator combination.

⁴ We used a stage-length adjustment coefficient of .33. Using a higher coefficient would change the results only slightly.

The values plotted are for direct CASM only – the direct operating costs reported by the carriers on DOT Form 41, including pilots, fuel, aircraft ownership, maintenance, and insurance. Indirect costs are not included because the carriers may allocate these in different ways. To smooth out quarterly variations caused primarily by maintenance requirements, the data is for the full year ending Q1 2013.

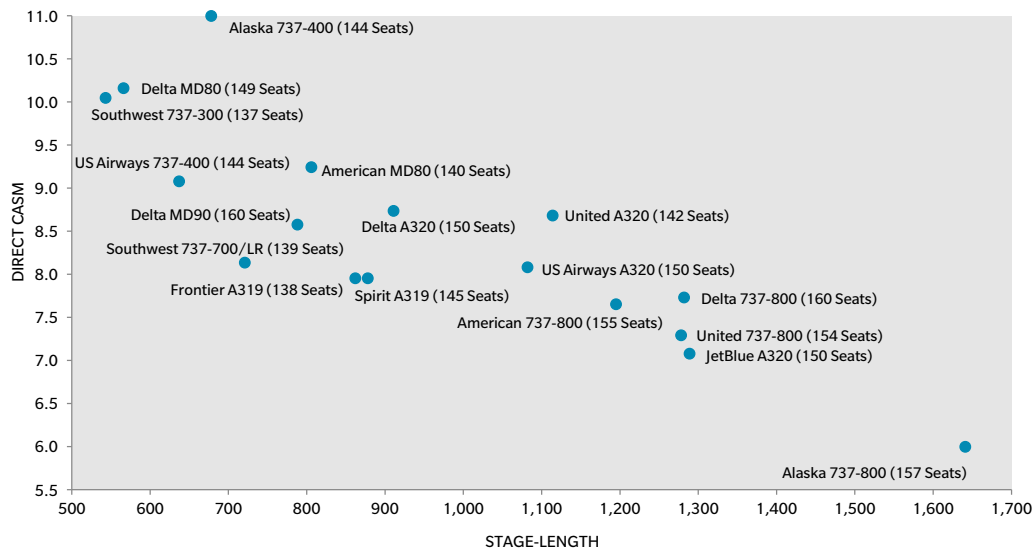
Exhibits 12 and 13 generally show the expected correlation between longer stage-length and lower CASM, and between greater number of seats and lower CASM. The graphs also show that operating costs are a function of aircraft mission. For example, both Jetblue and US Airways use the E-190 for shorter routes with fewer seats and the A320 for longer, higher density routes.

EXHIBIT 12: DIRECT CASM OF NARROWBODIES (UNDER 130 SEATS) PLOTTED AGAINST AVERAGE STAGE-LENGTH BY AIRCRAFT TYPE, ACTUAL FUEL PRICES YE Q1 2013



Source: PlaneStats.com for YE Q1 2013. Mainline operations only. Direct costs include pilots, fuel, aircraft ownership, maintenance, and insurance. Indirect expenses not included as they are not reported by aircraft type.

EXHIBIT 13: DIRECT CASM OF NARROWBODIES (130 TO 160 SEATS) PLOTTED AGAINST AVERAGE STAGE-LENGTH BY AIRCRAFT TYPE, ACTUAL FUEL PRICES YEQ1 2013

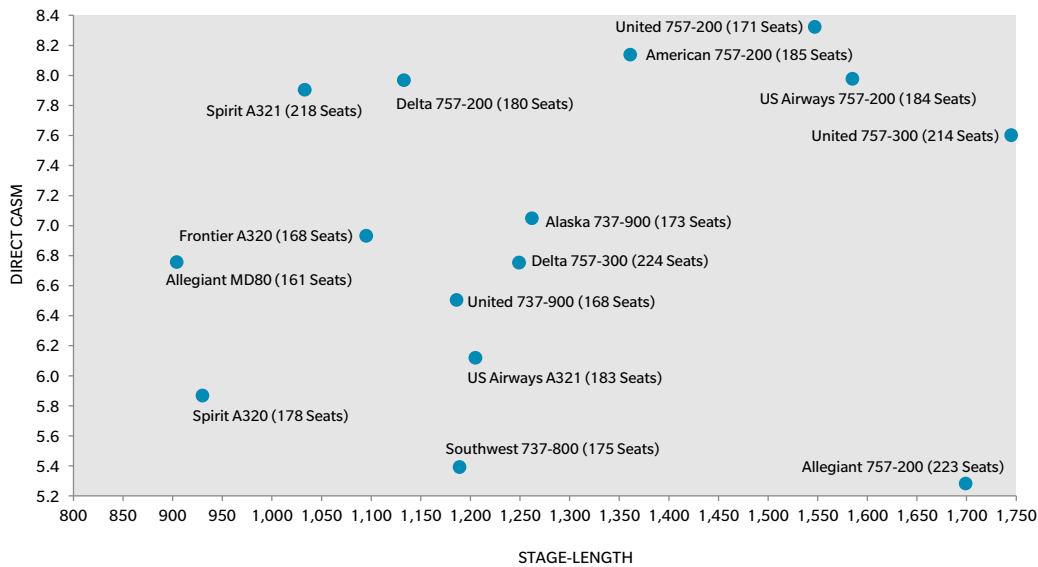


Source: PlaneStats.com for YEQ1 2013. Mainline operations only. Direct costs include pilots, fuel, aircraft ownership, maintenance, and insurance. Indirect expenses not included as they are not reported by aircraft type.

There are some large differences between the carriers in both stage-length and number of seats for the same aircraft. For example, Spirit's A320 has 178 seats compared to United's A320 with 142 seats. Delta's A320 has an average stage-length of 900 miles compared to JetBlue's at 1,280 miles. In addition, the two exhibits show that the older 737 series aircraft are being used for shorter stage-lengths as are the MD80s/90s.

The conclusions to be drawn from *Exhibit 14* are less clear, except with respect to 757-200s. Their high direct CASMs, despite long stage-lengths, make it easy to understand why they are being retired by some carriers.

EXHIBIT 14: DIRECT CASM OF NARROWBODIES (OVER 160 SEATS) PLOTTED AGAINST AVERAGE STAGE-LENGTH BY AIRCRAFT TYPE, ACTUAL FUEL PRICES (YE Q1 2013)



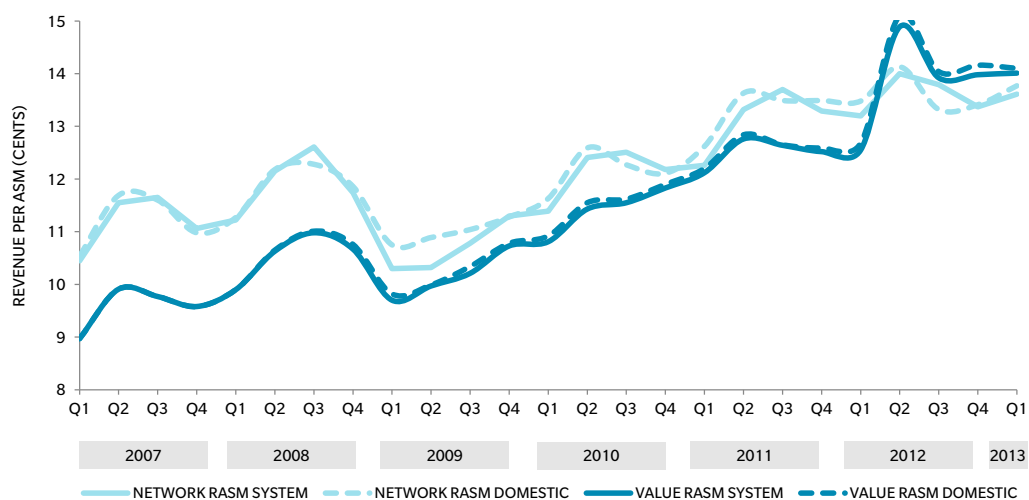
Source: PlaneStats.com for YE Q1 2013. Mainline operations only. Direct costs include pilots, fuel, aircraft ownership, maintenance and insurance. Indirect expenses not included as they are not reported by aircraft type.

REVENUE

11. RASM INCREASE

RASM has been increasing for both network and value carriers since early 2009. From Q1 2012 to Q1 2013, RASM for the average network carrier increased by 3.1%, less than the average value carrier RASM increase of 11.6%. Value carrier RASM increased sharply in the first two quarters of 2012 before settling at a lower level that is still higher than the network carrier average. System RASM closely tracks domestic RASM for both sets of carriers. See *Exhibit 15*.

EXHIBIT 15: RASM GROWTH (Q1 2007 – Q1 2013)

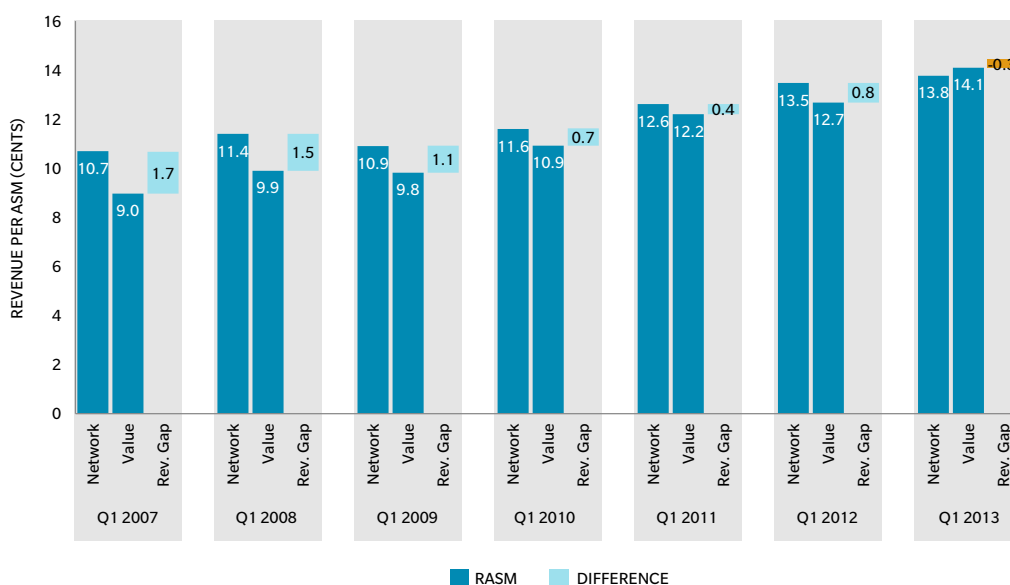


Source: PlaneStats.com. Mainline operations only, excludes Transport-Related Revenue (regionals).

12. NETWORK/VALUE CARRIER DOMESTIC RASM GAP

For the first time in mid-2012, value carriers achieved, and subsequently have sustained, higher domestic RASM than network carriers, before adjusting for stage-length. As shown in *Exhibit 16*, the RASM advantage of the network carriers has declined each year since 2007.

EXHIBIT 16: COMPARISON OF DOMESTIC RASM BETWEEN NETWORK AND VALUE CARRIERS OVER TIME (Q1 2007 – Q1 2013)

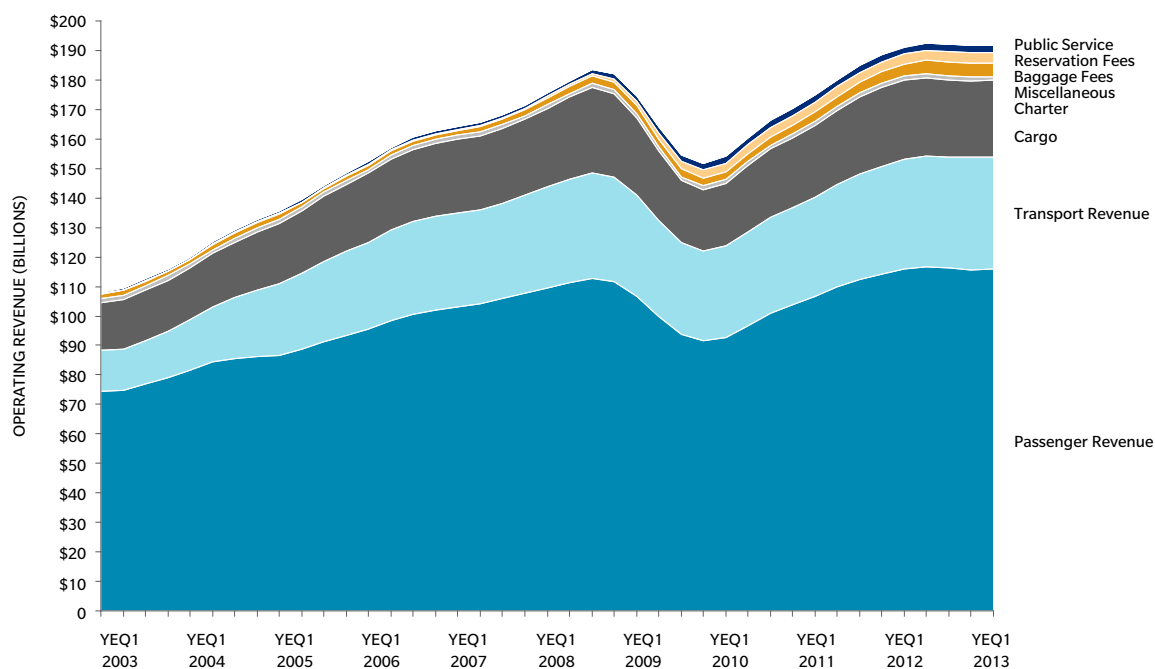


Source: PlaneStats.com. Mainline operations only, excludes Transport-Related Revenue (regionals).

13. CHANGES IN US AIRLINE REVENUE OVER TIME

Exhibit 17 shows total revenue for all US carriers over the past ten years, including revenue from cargo, regional carriers (Transport Revenue), and service fees. In 2011, total revenue for US carriers finally exceeded the previous peak of YEQ3 2008. Over the past year, total revenue has been nearly flat. Despite all the public discussion of airline fees collected beyond the ticket price, the chart shows that they remain a small percentage of airline revenue. A more detailed discussion of the sources and drivers of airline revenue follows.

EXHIBIT 17: OPERATING REVENUE, ALL REPORTING CARRIERS, INCLUDING TRANSPORT REVENUE (YEQ1 2003 – YEQ1 2013)



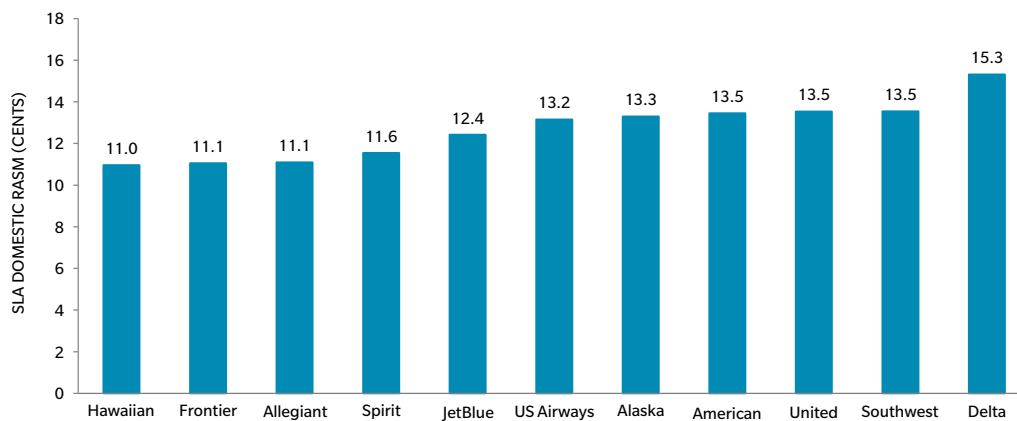
Note: Transport Revenue is primarily revenue from regional carriers.

Source: PlaneStats.com > Form 41 Financial > P1.2 Income Statement for all reporting carriers.

14. RASM ADJUSTED FOR STAGE-LENGTH

Exhibit 18 shows the stage-length adjusted domestic RASM for all carriers in the study, similar to the domestic CASM ranking in the cost section. The highest unit revenue performance, by Delta at 15.3¢, is approximately 38% greater than the three lowest unit revenue generators – Hawaiian (11.0¢), Frontier (11.1¢), and Allegiant (11.1¢). Over the past several years, this gap has been cut in half, largely the result of increased RASM by the lower RASM carriers. After first place Delta, three carriers – Southwest, United, and American (at 13.5¢) – are tied for second, with Alaska (13.3¢) and US Airways (13.2¢) at nearly the same level. JetBlue follows at 12.4¢ and Spirit at 11.6¢.

EXHIBIT 18: DOMESTIC RASM BY AIRLINE – STAGE-LENGTH ADJUSTED TO 1,000 MILES (Q1 2013)

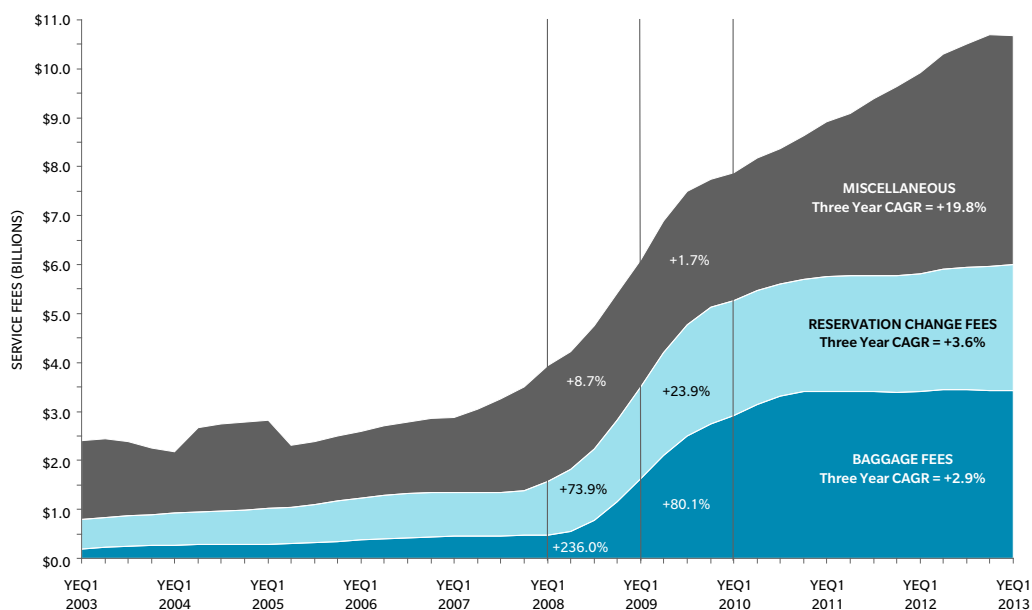


Source: PlaneStats.com for Q1 2013. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

15. ANCILLARY FEES

Over the past several years, airlines have captured increasing amounts of revenue for non-ticket charges such as baggage, reservation change fees, and other fees – most of which are not included in DOT-reported average airfares or passenger RASM. *Exhibit 19* focuses on the three major categories of fees – baggage, reservation change, and miscellaneous – to show the growth to date. Miscellaneous is a broad category including buy-on-board meals, in-flight entertainment, Wi-Fi, priority boarding, blankets and pillows, and other items.

**EXHIBIT 19: BAGGAGE, RESERVATION CHANGE AND MISCELLANEOUS FEES
(YEQ1 2003 – YEQ1 2013)**



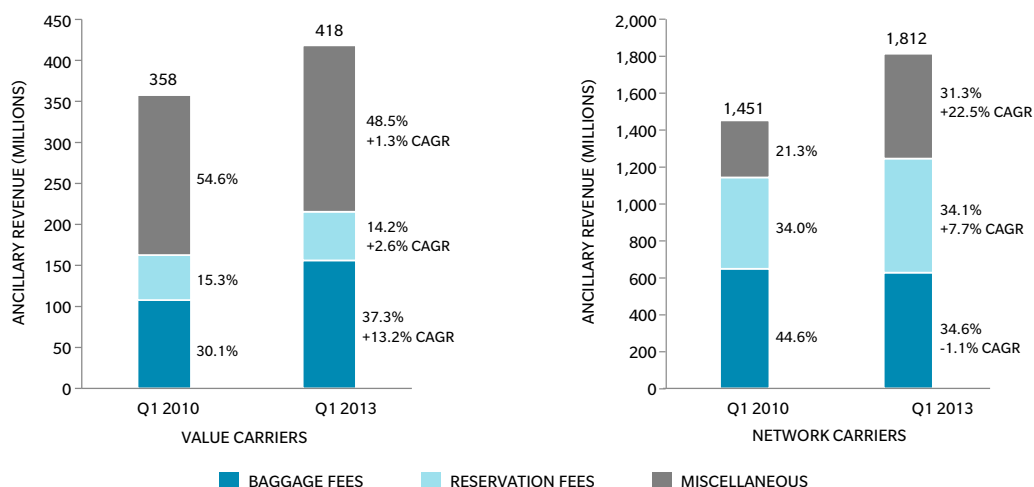
Source: PlaneStats.com > Form 41 Financials > P1.2 Income Statement for all reporting carriers.

Based on airline reports to DOT, these ancillary fees generated \$10.7 billion in YEQ1 2013. Miscellaneous fees, at \$4.7 billion, generated the largest share, followed by baggage fees at \$3.4 billion, and reservation change fees at \$2.6 billion. Over the three-year period ending Q1 2013, miscellaneous fee revenue grew at an annual rate of 19.8%, compared with reservation change fees at 3.6%, and baggage fees at 2.9%.

Recent growth in baggage fees has been virtually nonexistent, increasing only 0.3% from Q1 2012 to Q1 2013. Reservation change fees increased by 7.5% during the same period, but this was overshadowed by the increase in miscellaneous fees of 13.8% as carriers searched for new sources of revenue.

Exhibit 20 shows the different composition of fees collected by value and network carriers, with value carriers generating only 14.2% of total ancillary revenue from reservation changes (due largely to Southwest's policy of not charging for reservation changes), and 48.5% of their total ancillary revenue from miscellaneous fees. For value carriers, bag fee revenue grew most quickly over the past three years. Network carriers, on the other hand, generated approximately equal proportions of revenue from each of the three fee categories, with miscellaneous fee revenue growing most quickly. The overall growth rate of fee revenue for network carriers over the past three years was higher than for value carriers. From Q1 2010 to Q1 2013, network carrier ancillary revenue increased by \$361 million, which is almost as much as total value carrier ancillary revenue in Q1 2013 of \$418 million.

EXHIBIT 20: BAGGAGE, RESERVATION CHANGE, AND MISCELLANEOUS FEES



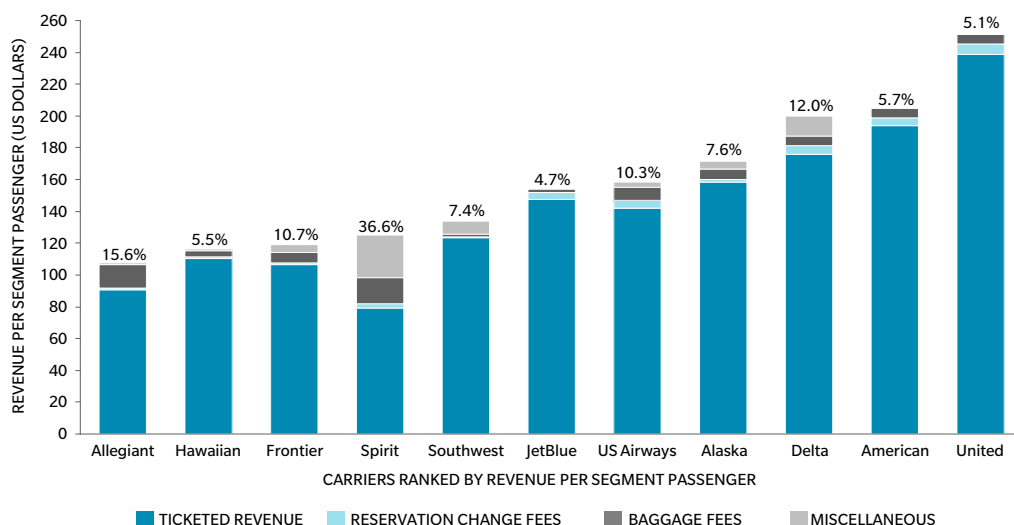
Source: PlaneStats.com > Form 41 Financials > P1.2 Income Statement.

Although the ancillary revenue contribution is important to the carriers, the revenue generated is a smaller proportion of total passenger revenue than the many passenger anecdotes would suggest. The percentage of revenue collected in fares and fees from each segment passenger is broken out for selected carriers in *Exhibit 21*. Most carriers collected 5-12% of passenger revenue from ancillary fees. The exceptions are Allegiant, which collected 15.6%, and Spirit, which collected 36.6%.

Ancillary revenue reported to the DOT may be less – and in some cases substantially less – than what some individual carriers report in their SEC filings. For example, Allegiant, a leader in the area of ancillary revenue generation, reported to the SEC that ancillary revenue was 29.9% of its operating revenue in 2012. Analysis of DOT reports shows Allegiant's ancillary revenue for the same period amounted to 15.6% of its passenger revenue. The important difference between the SEC and DOT results is that carrier reports to the DOT include only fees directly related to the provision of air transportation. For example, carrier sales of frequent flyer miles are not included in DOT results.⁵ For Allegiant, its high level of ancillary revenue reported to the SEC is also a function of hotel room sales made through the airline.

⁵ As further explanation, our definition of DOT reported ancillary revenue is limited to Baggage Fees, Reservation Change Fees and miscellaneous. We do not include Transport-Related Revenue, which is, for the most part, revenue collected by carriers operating under Capacity Purchase Agreements (CPAs) for network carriers. For example, the revenue associated with flights operated by SkyWest operating as United Express is reported by United as Transport-Related Revenue. Other revenue sources are included in the Transport-Related Revenue category, but they are insignificant in comparison to the CPA revenue and cannot be separately identified. Some value carriers do not have CPA contracts, however, and use the Transport-Related Revenue category largely to report ancillary revenue not related to air transportation. For YE Q1 2013, Allegiant reported \$90.6 million in Transport-related revenue and Southwest reported \$37.3 million, and these amounts are likely largely ancillary revenue not related to air transportation. For Allegiant, the largest component would be revenue from hotel room sales.

EXHIBIT 21: TICKETED REVENUE, RESERVATIONS, BAGGAGE, AND MISCELLANEOUS SERVICE FEES BY CARRIER (YE Q1 2013)



Source: PlaneStats.com > Form 41 Financials > P1.2 Income Statement

Looking outside the US, we find widely varying results. In general, global network carriers have the least amount of ancillary fee revenue and do not report the results. At the other end of the spectrum, carriers that have traditionally focused on ancillary revenue often report the results. For example, in 2012, Ryanair reported that ancillary revenue made up 26.6% of its operating revenue. For Tiger Air, the figure was 20.8%, and for Air Asia 19.0%.

MARGIN

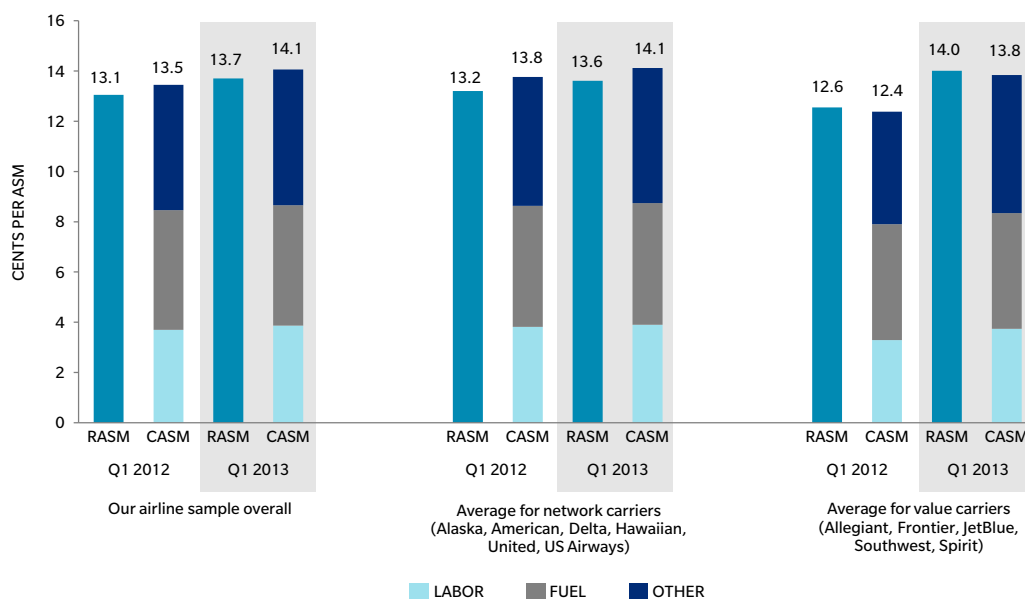
16. RASM/CASM MARGIN

Comparing RASM with CASM provides an approximate measure of operating profitability.⁶ From Q1 2012 to Q1 2013 the negative RASM/CASM margin for network carriers declined by 8.9% from -0.6¢ to -0.5¢. For value carriers, the margin remained flat at 0.2¢.

Exhibit 22 compares RASM and CASM for network versus value carriers on a system basis for Q1 2012 and Q1 2013. As the first quarter is traditionally weak, these results are not indicative of revenue or margin results for the full year. DOT data for Q1 2013 is the most recent available, however, and is useful for comparisons over time and between different carriers. Overall, the results show that the RASM increases for network and value carriers between Q1 2012 and Q1 2013 – although much larger for the value carriers – were both accompanied by roughly matching CASM increases.

⁶ As used here, RASM includes all carrier operating revenue – passenger, cargo, and ancillary; and CASM includes all operating costs. Excluded from CASM is interest expense.

EXHIBIT 22: COMPARISON OF SYSTEM RASM AND CASM (Q1 2012/2013)



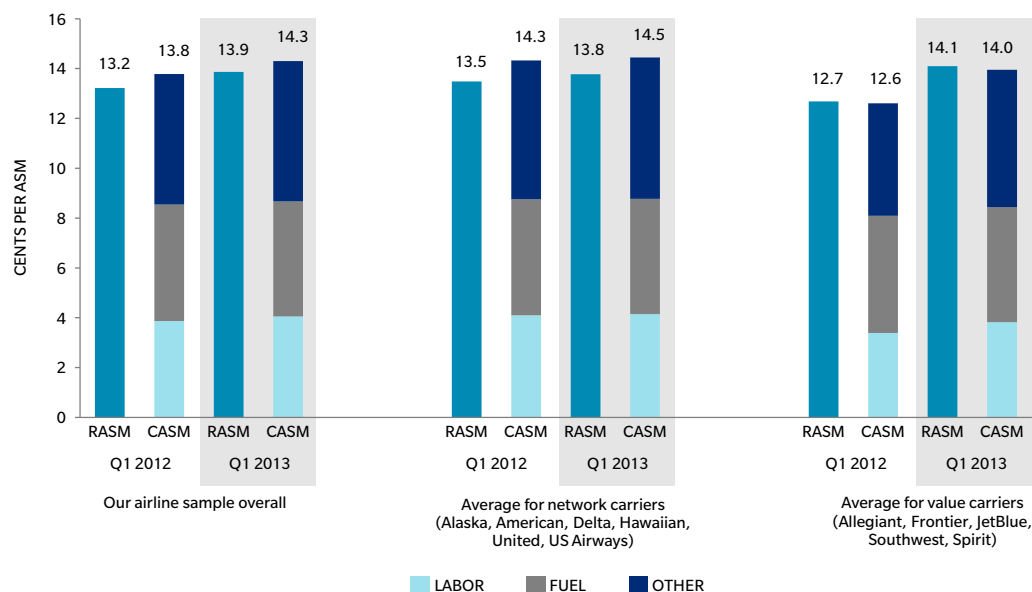
Source: PlaneStats.com for Q1 2013. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

17. DOMESTIC RASM/CASM MARGIN

From Q1 2012 to Q1 2013 the negative domestic RASM/CASM margin for network carriers declined by 20% from -0.8¢ to -0.7¢. For value carriers, the small positive margin more than doubled from 0.1¢ to 0.2¢. On an absolute basis, these changes are much smaller than in past years.

Exhibit 23 compares RASM and CASM for network versus value carriers for domestic service for Q1 2012 and Q1 2013. As with the system comparison, the most noticeable year-over-year change shown is the substantial increase in value carrier RASM, matched by a corresponding change in value carrier CASM.

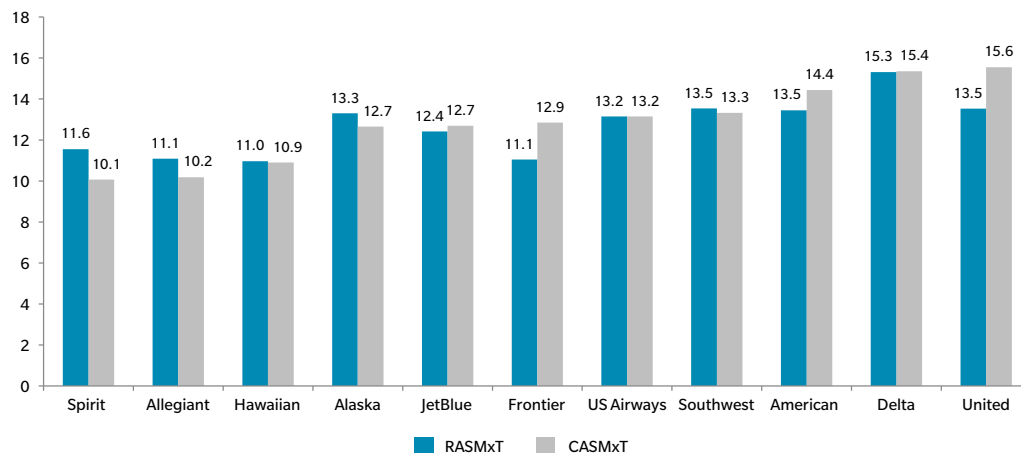
EXHIBIT 23: COMPARISON OF DOMESTIC RASM AND CASM (Q1 2013/2012)



Source: PlaneStats.com. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

Based on *Exhibit 24*, Spirit (1.5¢), Allegiant (0.9¢), and Alaska (0.6¢) ranked first, second, and third in terms of domestic RASM/CASM margins during Q1 2013. Hawaiian (0.1¢), Southwest (0.2¢), US Airways (0.0¢), Delta (-0.1¢), and JetBlue (-0.3¢) had domestic RASM that was relatively close to their domestic CASM. United (-2.0¢), Frontier (-1.8¢), and American (-1.0¢) had negative RASM/CASM margins. Although Delta and United had similar domestic CASM, Delta had significantly higher domestic RASM.

EXHIBIT 24: DOMESTIC CASM/RASM BY AIRLINE – STAGE-LENGTH ADJUSTED TO 1,000 MILES (Q1 2013)

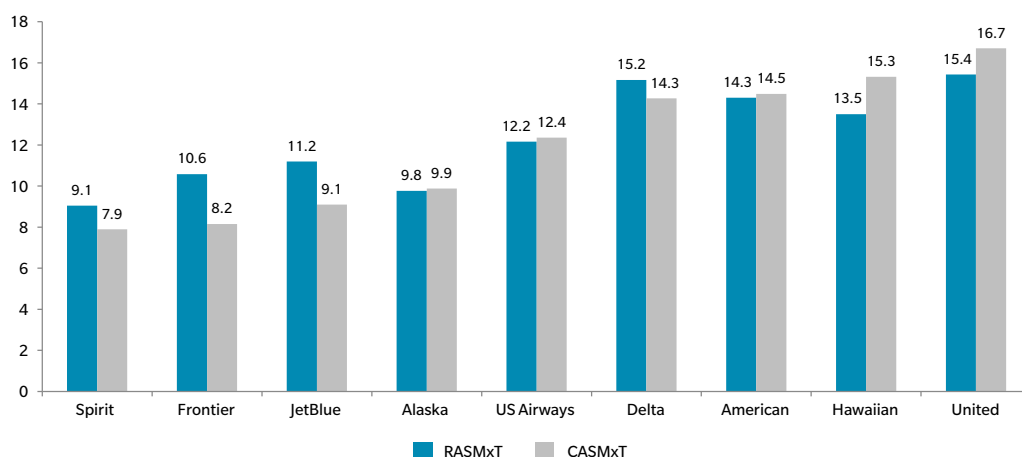


Source: PlaneStats.com. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

18. INTERNATIONAL RASM/CASM MARGIN

Exhibit 25 shows the RASM/CASM comparison for network and value carriers for international service for Q1 2013.⁷ Spirit (1.2¢), Frontier (2.4¢), and JetBlue (2.1¢) had strong international RASM/CASM margins. Delta (0.9¢) also had a positive RASM/CASM margin during the first quarter. Alaska (-0.1¢), US Airways (-0.2¢), and American (-0.2¢) had slightly negative international RASM/CASM margins during the quarter. Hawaiian (-1.8¢) and United (-1.3¢) had negative international RASM/CASM margins. As noted previously, the first quarter is traditionally weak, so these results are not indicative of revenue or margin results for the full year.

EXHIBIT 25: INTERNATIONAL CASM/RASM BY AIRLINE – STAGE-LENGTH ADJUSTED TO 2,000 MILES (Q1 2013)



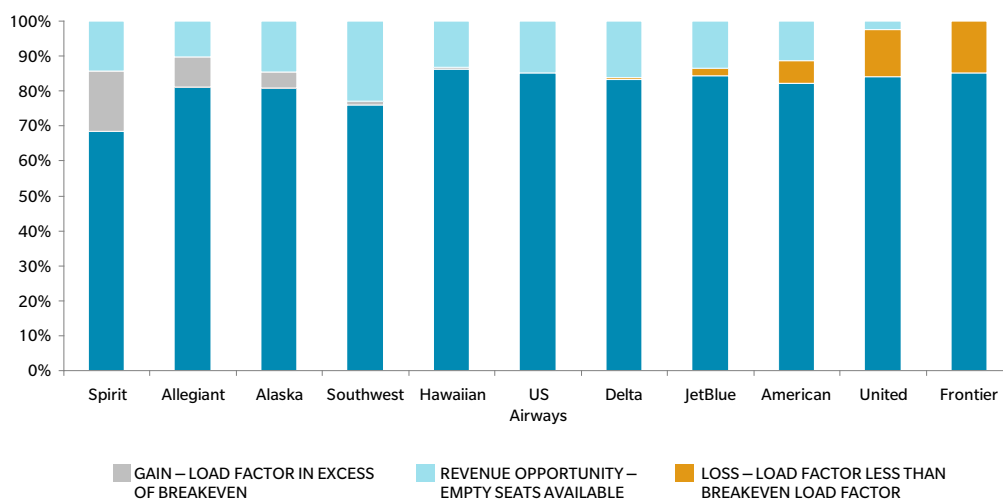
Source: PlaneStats.com. Mainline operations only, excludes Transport-Related Revenue and cost (regionals).

19. BREAKEVEN LOAD FACTORS

The largest network carriers have load factors in the low-to-mid-80s, while the largest value carriers have load factors a few points lower. From Q1 2012 to Q1 2013, the average network carrier load factor grew from 82.4% to 83.8%, while the average value carrier grew from 79.8% to 80.2%. With breakeven load factors above 80% for most carriers, future profitability improvements will depend on yield increases, as there is little room for additional load factor growth. Exhibit 26 shows the high breakeven load factors for most carriers and the limited opportunities for additional revenue provided by the small percentage of unfilled seats.

⁷ US DOT Form 41 international RASM and CASM information was not available for Southwest or AirTran for Q1 2013.

EXHIBIT 26: DOMESTIC BREAKEVEN LOAD FACTOR VERSUS ACTUAL LOAD FACTOR (Q1 2013)

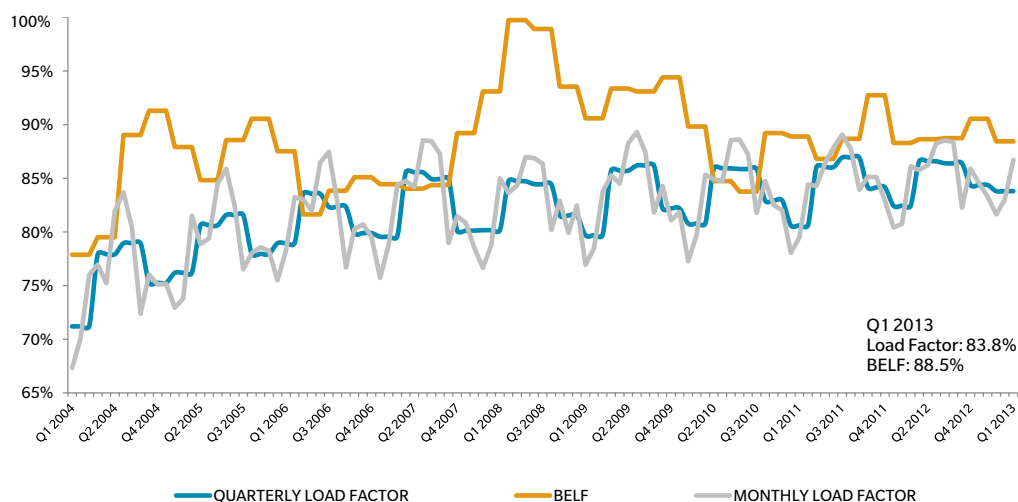


Note: Breakeven load factor calculated without transport (regional) revenue/expense.

Source: PlaneStats.com.

Further historical perspective is provided for network and value carriers. *Exhibit 27* shows that network carriers achieved a load factor of 83.8% in Q1 2013 in their domestic operations, and required a breakeven load factor of 88.5%. They were eight seats short of breaking even on aircraft averaging 160 seats. (For network carriers, the average mainline domestic aircraft has had about the same number of seats over the past several years.) Since 2001, the network carriers' load factor has increased, but their domestic operating margin has turned slightly positive only very briefly and intermittently.

EXHIBIT 27: NETWORK CARRIER DOMESTIC LOAD FACTOR AND BREAKEVEN LOAD FACTOR (Q1 2004 – Q1 2013)

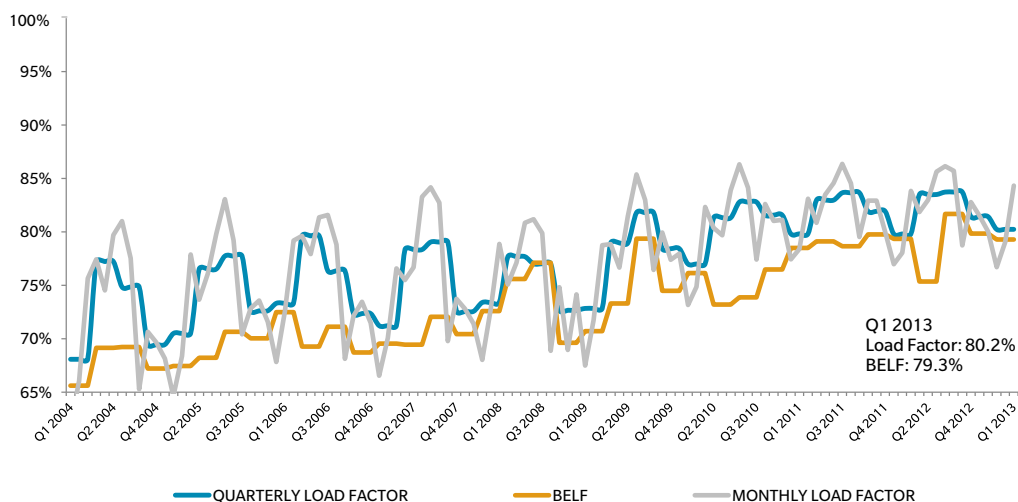


Note: Breakeven load factor calculated without transport (regional) revenue/expense.

Source: PlaneStats.com.

Exhibit 28 shows that value carriers achieved a domestic load factor of 80.2% in Q1 2013, and had a breakeven load factor of 79.3%. They were one passenger ahead of breaking even on aircraft averaging 142 seats. (For value carriers, the average mainline aircraft has had about the same number of seats over the past several years.) Since 2001, the value carrier load factor has increased, while their operating margin has not.

EXHIBIT 28: VALUE CARRIER DOMESTIC LOAD FACTOR AND BREAKEVEN LOAD FACTOR (Q1 2004 – Q1 2013)



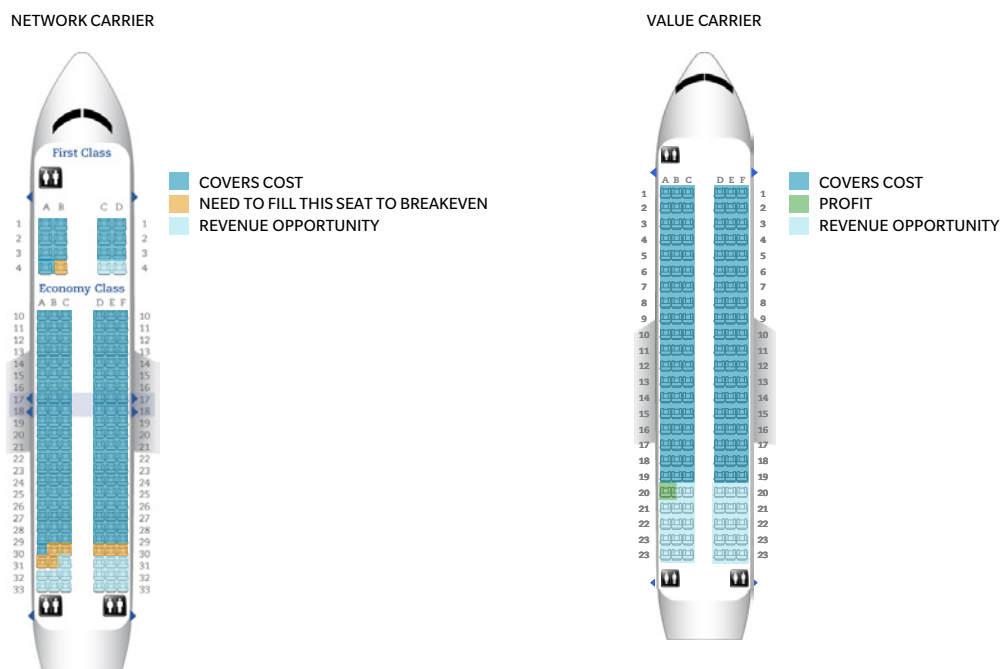
Note: Breakeven load factor calculated without transport (which is mostly regional operations) revenue/expense.

Source: PlaneStats.com.

Using seat maps, *Exhibit 29* compares the situation of network carriers and value carriers, operating domestically, in terms of seats needed to breakeven and seats still available to be sold.⁸

For network carriers, the illustration assumes the same breakeven load factor for both the first/business cabin and coach, and that any differences between actual and breakeven passenger levels are distributed between the two cabins in proportion to the number of seats in each. Although not accurate with respect to the separate cabins, the illustration provides a useful graphical overview. During this period, the average network carrier needs one more business class passenger and seven more coach passengers to breakeven. Approximately two business class and 23 coach class seats were available for additional revenue generation.

EXHIBIT 29: SEATS NEEDED TO BREAKEVEN, AND STILL AVAILABLE FOR SALE (Q1 2013)



Note: Breakeven load factor calculated without transport (regional) revenue/expense.

Source: PlaneStats.com.

The illustration is more representative for value carriers, as they typically have only one class of service. During the first quarter of 2013, the average value carrier had just over one passenger per trip who was profitable. Nearly 29 empty seats were available for additional revenue generation.

The net effect is that each year more and more seats must be filled to generate a profit. Stated differently, there are declining revenue opportunities from selling more seats. Future operating margin gains must depend on yield increases or cost improvement.

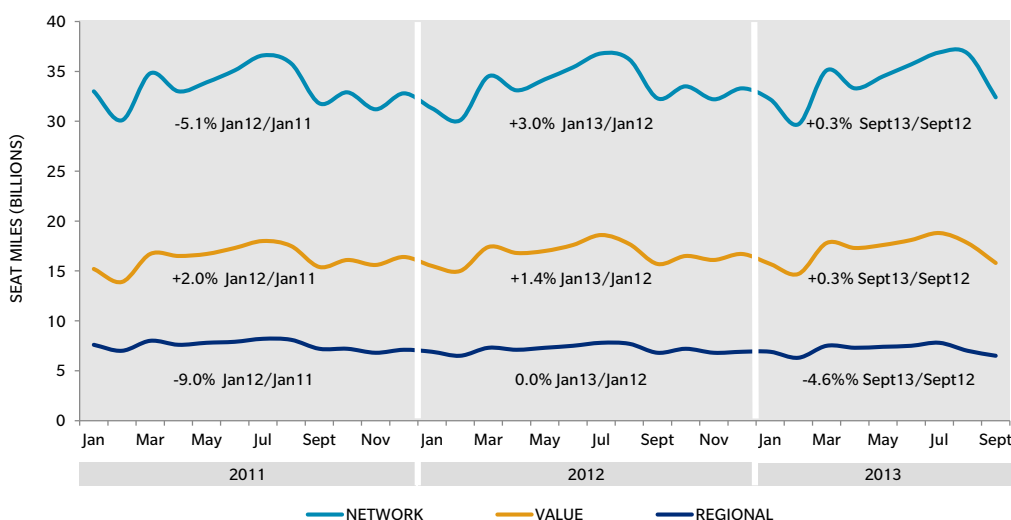
⁸ Note: Seat maps are illustrative only and do not recognize differences in individual carrier performance or revenue composition. Illustration based on average industry segment fares, including first, business and coach fares, and assumes same load factors in different classes.

CAPACITY

20. CHANGING CAPACITY IN THE US DOMESTIC MARKET

Exhibit 30 shows changes in domestic capacity since January 2011. For network carriers, capacity declined by 5.1% in 2011, followed by 3.0% growth in 2012, and 0.3% growth for YEQ3 2013. For value carriers, capacity growth was 2.0% in 2011, 1.4% in 2012, and 0.3% for YEQ3 2013. For regional carriers, capacity declined by 9.0% in 2011, was flat in 2012, and declined by 4.6% for YEQ3 2013. Although none of these three segments would be considered a growth business over the past three years, the once fast-growing regional airlines experienced by far the greatest decline in capacity.

EXHIBIT 30: CHANGE IN SCHEDULED DOMESTIC US ASMS
(JANUARY 2011 – SEPTEMBER 2013)



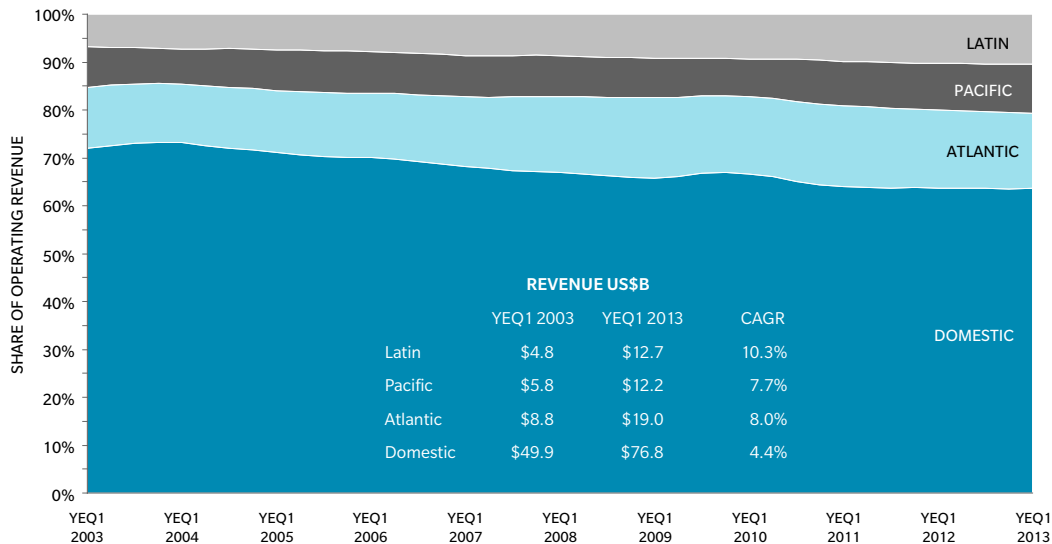
Source: Planestats.Com. Schedule data for all carriers.

21. INTERNATIONAL PORTION OF US NETWORK CARRIER REVENUE

US mainline carriers have continued to look overseas for revenue opportunities, with their domestic operations contributing an increasingly smaller percentage of their system revenue. As shown in *Exhibit 31*, the share of network carrier system revenue contributed by domestic operations dropped by 8.4 percentage points between YEQ1 2003 and YEQ1 2013, going from 72.0% of total revenue to 63.6%. While the domestic share of revenue has been decreasing, total revenue has grown steadily over the past decade. Domestic revenue has grown at a compound annual rate (CAGR) of 4.4%, Pacific revenue by 7.7% CAGR, Atlantic revenue by 8.0% CAGR, and Latin American revenue by 10.3% CAGR. The Atlantic remains the largest source of international revenue for US network carriers, generating \$19.0 billion

for YEQ1 2013. During this period, Pacific revenue was \$12.2 billion, and Latin America revenue was \$12.7 billion.

EXHIBIT 31: US NETWORK CARRIER OPERATING REVENUE BY GEOGRAPHIC AREA (YEQ1 2003 – YEQ1 2013)



Source: PlaneStats.com > Form 41 Financials > P1.2 Income Statement for all reporting carriers.

Over the one-year period between Q1 2012 and Q1 2013, the domestic share of total network carrier revenue decreased marginally from 63.7% to 63.6% as domestic revenue grew at a slightly lower rate (1.6%) than international revenue (2.1%). As shown in the table below, international revenue growth for the one-year period was driven by increases in the Pacific region, up 7.2%, and the Latin region, up 3.7%, while the Atlantic region declined 1.9%.

REVENUE CHANGE, YEQ1 2013 VERSUS YEQ1 2012	
Pacific	7.2%
Latin	3.7%
Atlantic	-1.9%
Domestic	1.6%
Total	1.8%

Value carriers are growing internationally, with the focus so far on Latin America. Although their share of revenue derived from domestic service remains at 95.5%, revenue from Latin American service has grown from 1.6% of operating revenue in YEQ1 2008 to 4.5% in YEQ1 2013. Almost 70% of Latin America revenue for value carriers is presently generated by JetBlue with AirTran (now Southwest) and Spirit splitting the remaining 30%. For JetBlue, Latin America revenue makes up 18.2% of its operating revenue. The growing Latin America revenue trend is likely to continue as Southwest, the largest US value carrier, acquires AirTran's international routes and develops its own international capabilities.

22. REVENUE GROWTH DRIVERS

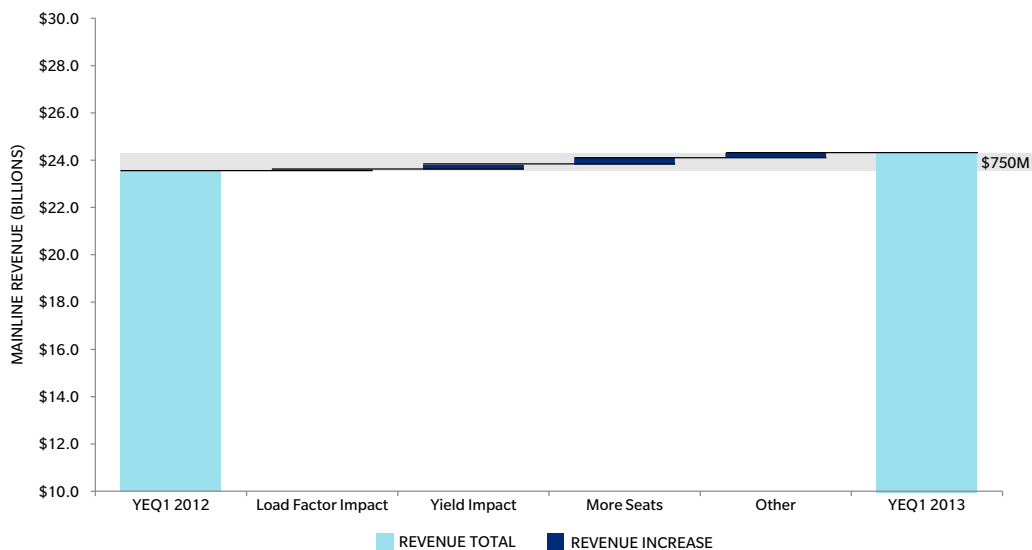
The charts below identify the sources of revenue growth for value and network carriers from Q1 2012 to Q2 2013, divided into four categories:

- Load factor
- Yield
- Seat capacity
- Other (primarily ancillary fees)

During this period, value carriers increased revenue by \$750 million. Network carriers increased revenue by \$677 million from their domestic operations and \$1.1 billion from their international operations. These revenue growth numbers are much smaller than in the past several years, and therefore the graphs show much smaller contributions from each of the four categories.

The sources of revenue growth are different for the two groups. For value carriers, the impact of seat capacity growth was greater than that of higher yields and load factors. See *Exhibit 32*.

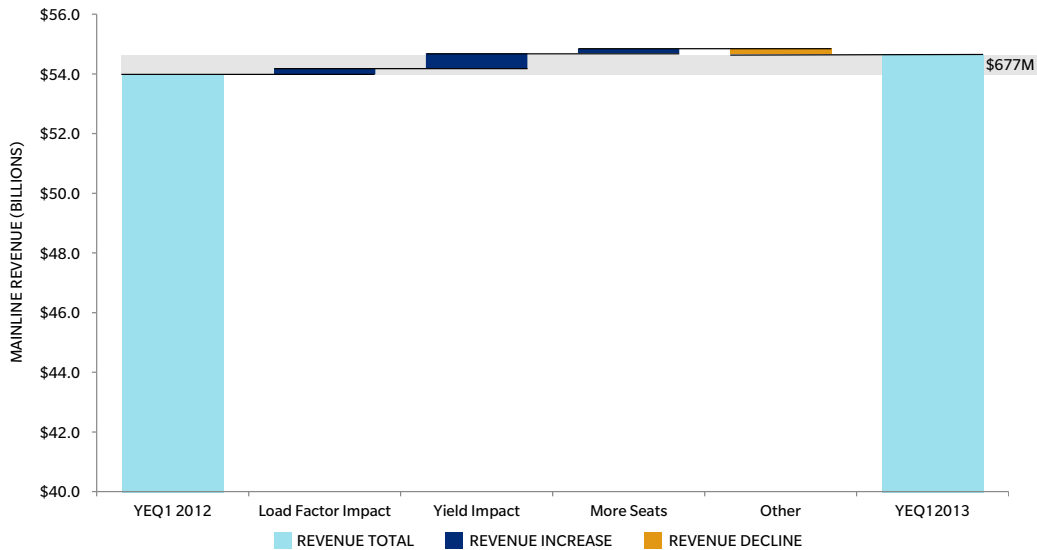
EXHIBIT 32: VALUE CARRIERS REVENUE INCREASE – PRICE AND VOLUME DRIVERS (YE Q1 2012/2013)



Source: PlaneStats.com advanced query > income statement for value carriers, domestic, mainline operations only. Excludes Transport Revenue (regionals) and public service revenue.

For network carriers' domestic operations, most of the revenue increase is attributable to higher yields, with minor contributions from higher load factors and more seats.

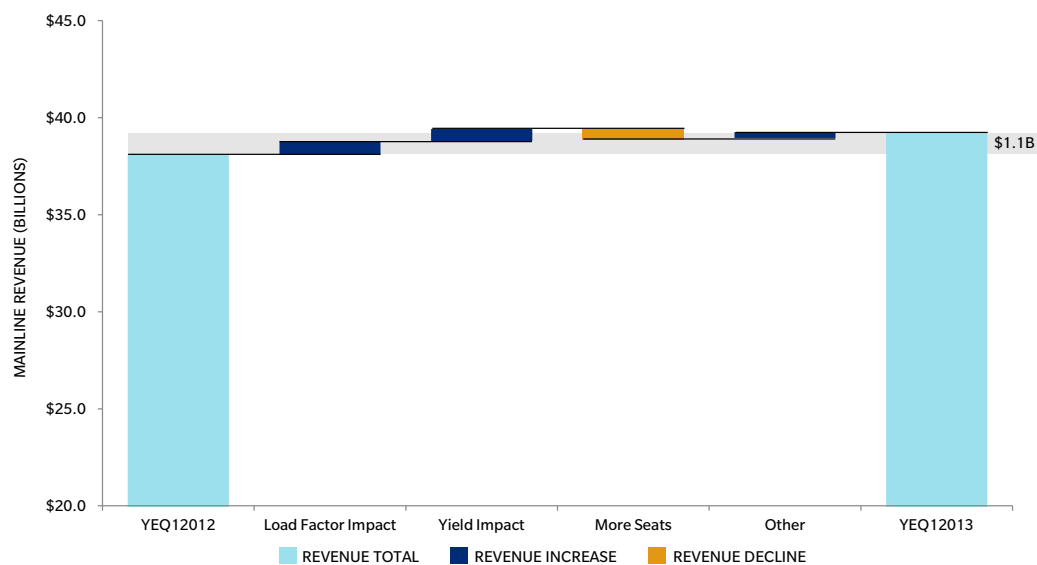
EXHIBIT 33: DOMESTIC NETWORK REVENUE INCREASE – PRICE AND VOLUME DRIVERS (YE Q1 2012/2013)



Source: PlaneStats.com advanced query > income statement for network carriers, domestic, mainline operations only. Excludes Transport Revenue (regionals) and public service revenue.

For network carriers' international operations, slightly higher load factors and yields were the primary drivers, as seats declined slightly.

EXHIBIT 34: INTERNATIONAL NETWORK REVENUE INCREASE – PRICE AND VOLUME DRIVERS (YE Q1 2012/2013)

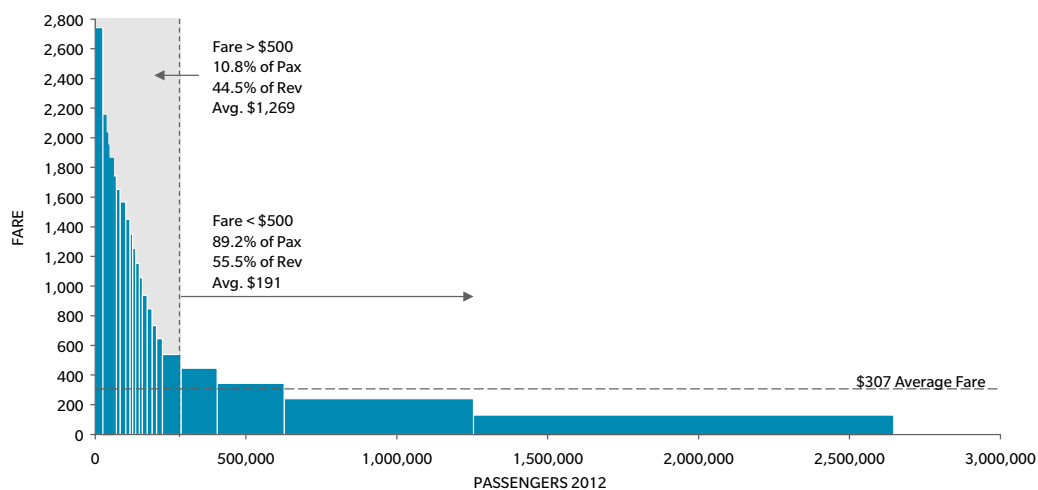


Source: PlaneStats.com advanced query > income statement for network carriers, domestic, mainline operations only. Excludes Transport Revenue (regionals) and public service revenue.

23. REVENUE PROFILE

In *Exhibit 35*, we provide an example of the fare and revenue distribution for a large US domestic market served by multiple carriers, JFK-LAX, which has an average fare (each way) of \$307. The graph segments passenger fares by \$100 increments from less than \$200 to more than \$2,200, and shows the number of passengers who bought tickets at each fare level and the revenue they generated. The graph shows that the top 10.8% of the passengers contributed 44.5% of the revenue and those passengers paid an average fare of \$1,269. At the same time, the remaining 89.2% of the passengers contributed 55.5% of the revenue and paid an average fare of only \$191. This revenue profile illustrates how effective airlines have become at managing multiple price points – a practice that is rapidly spreading to other industries – and shows that there is a segment of passengers on this route willing to pay a premium for comfort and/or the ability to change flights without penalty.

EXHIBIT 35: JFK – LAX REVENUE 2012



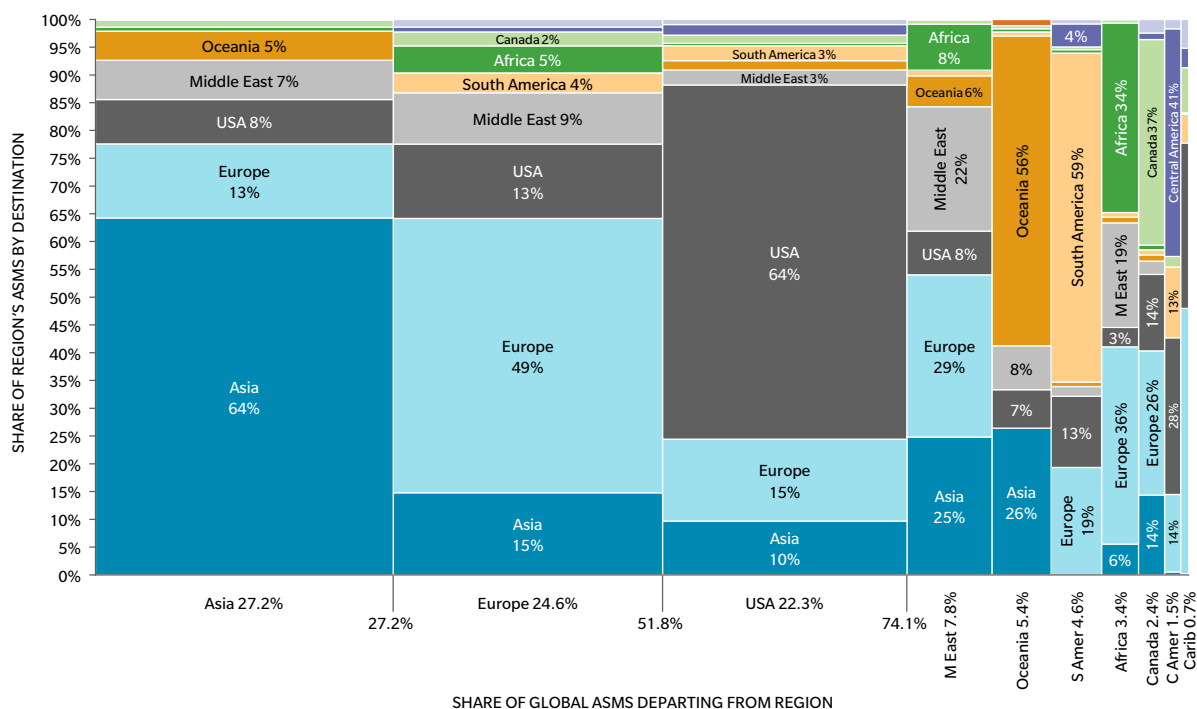
Source: PlaneStats.com > US O&D Survey > Fare and Yield Analysis 2012.

GLOBAL TRENDS

24. WORLD CAPACITY AND GROWTH BY REGION

A detailed view of world capacity by ASMs is provided in *Exhibit 36*. The three largest regions – Asia, Europe, and the US – account for almost 75% of ASMs. Asia is now the largest aviation market with 27.2% of ASMs, followed by Europe, at 24.6%, and the US at 22.3%. If we were to show the same information in 2009, the rankings would be reversed, as then the US had 26.3% of world capacity, Europe had 25.6%, and Asia had 24.6%.

EXHIBIT 36: WORLD AIRLINES SCHEDULED ASMS (SEPTEMBER 2013)



Source: PlaneStats.com > Schedule > Monthly Operations for September 2013

Within each of the three largest regions and most others, service within the region constitutes a majority of the ASMs. Three exceptions to this are Africa, Middle East, and the Caribbean, where the largest destination region is outside the home region.

Growth by region is shown in *Exhibit 37*. From September 2009 to September 2013, the largest absolute increases in capacity were in Asia, Europe, and the Middle East. During this period, the fastest growing regions in percentage terms were the Middle East, Oceania, and Asia; these same regions also grew at the fastest rate in 2013. South America grew rapidly between 2009 and 2013, but by only 1.7% from September 2012 to September 2013. The US and the Caribbean have been the slowest growing regions over both the most recent one-year and four-year periods. From September 2012 to September 2013, US capacity grew by 1.4%; Caribbean capacity declined by 3.6%.

EXHIBIT 37: ASMS BY WORLD REGION, SEPTEMBER 2009, 2012, 2013

	ASMS (BILLIONS)			2009 – 2013 CHANGE		2012 – 2013 CHANGE	
	2009	2012	2013	Absolute	CAGR	Absolute	Percent
Asia	75.4	95.7	104.6	29.2	+8.5%	8.9	+9.3%
Europe	78.6	91.2	94.4	15.8	+4.7%	3.2	+3.5%
USA	80.6	84.5	85.7	5.1	+1.6%	1.2	+1.4%
Middle East	19.4	26.1	29.8	10.4	+11.3%	3.7	+14.2%
Oceania	14.5	18.9	20.8	6.3	+9.4%	1.9	+10.1%
South America	12.8	17.4	17.7	4.9	+8.4%	0.3	+1.7%
Africa	10.8	12.0	12.9	2.1	+4.6%	0.9	+7.5%
Canada	7.8	8.8	9.1	1.3	+3.9%	0.3	+3.4%
Central America	4.5	5.4	5.7	1.2	+6.3%	0.3	+5.6%
Caribbean	2.4	2.8	2.7	0.3	+2.8%	(0.1)	-3.6%
World Total	306.9	363.1	384.0	77.1	+5.8%	20.9	+5.8%

Source: PlaneStats.com > Schedule > Monthly Operations for September 2009 and 2013.

25. AIR SERVICE PROVIDED BY VALUE CARRIERS AROUND THE WORLD

Value carrier market shares vary by region, but the business model is firmly established everywhere. As shown in *Exhibit 38*, the highest percentage of air service provided by value carriers is in Oceania, home to Virgin Australia, Jetstar, and Tiger Australia, where 33.6% of ASMs are flown by value carriers. Central America is second, home to Volaris, Interjet, and VivaAerobus, where 23.4% of ASMs are flown by value carriers. All of the value carriers in that region are in Mexico. Europe (20.1%) and the US (19.4%) follow. The lowest percentage of service provided by value carriers is in South America (6.0%) and Africa (6.5%). In all regions of the world, except the US, value carriers have increased their share over the past year. Over the past four years, the biggest changes have been in Central America (+10.0 percentage points) and Oceania (+6.0 percentage points).

EXHIBIT 38: VALUE CARRIER SHARE OF ASMS (AUGUST 15-21, 2013)

	VALUE SHARE OF ASMS			PERCENTAGE POINT CHANGE		
	2009	2012	2013	2009 – 2012	2009 – 2013	2012 – 2013
Asia	7.2%	9.2%	10.0%	+2.0 pts	+2.8 pts	+0.2 pts
Europe	16.1%	19.4%	20.1%	+3.3 pts	+4.0 pts	+0.7 pts
USA	17.7%	19.7%	19.4%	+2.0 pts	+1.7 pts	-0.3 pts
Middle East	3.7%	8.4%	9.1%	+4.7 pts	+5.4 pts	+0.7 pts
South America	1.8%	5.6%	6.0%	+3.8 pts	+4.2 pts	+0.4 pts
Oceania	27.2%	33.2%	33.6%	+6.0 pts	+6.4 pts	+0.4 pts
Africa	6.4%	6.0%	6.5%	-0.4 pts	+0.1 pts	+0.5 pts
Canada	16.4%	16.4%	17.8%	–	+1.4 pts	+1.4 pts
Central America	12.2%	22.2%	23.4%	+10.0 pts	+11.2 pts	+1.2 pts
Caribbean	0.9%	12.1%	13.7%	+2.5 pts	+6.8 pts	+1.6 pts

Source: PlaneStats.com > Schedules > Weekly Operations for all scheduled passenger airlines. Value carrier share of ASMs for the week August 15-21. Percentage point change is the change in the value carrier share of the total ASMs.

26. GLOBAL ALLIANCES

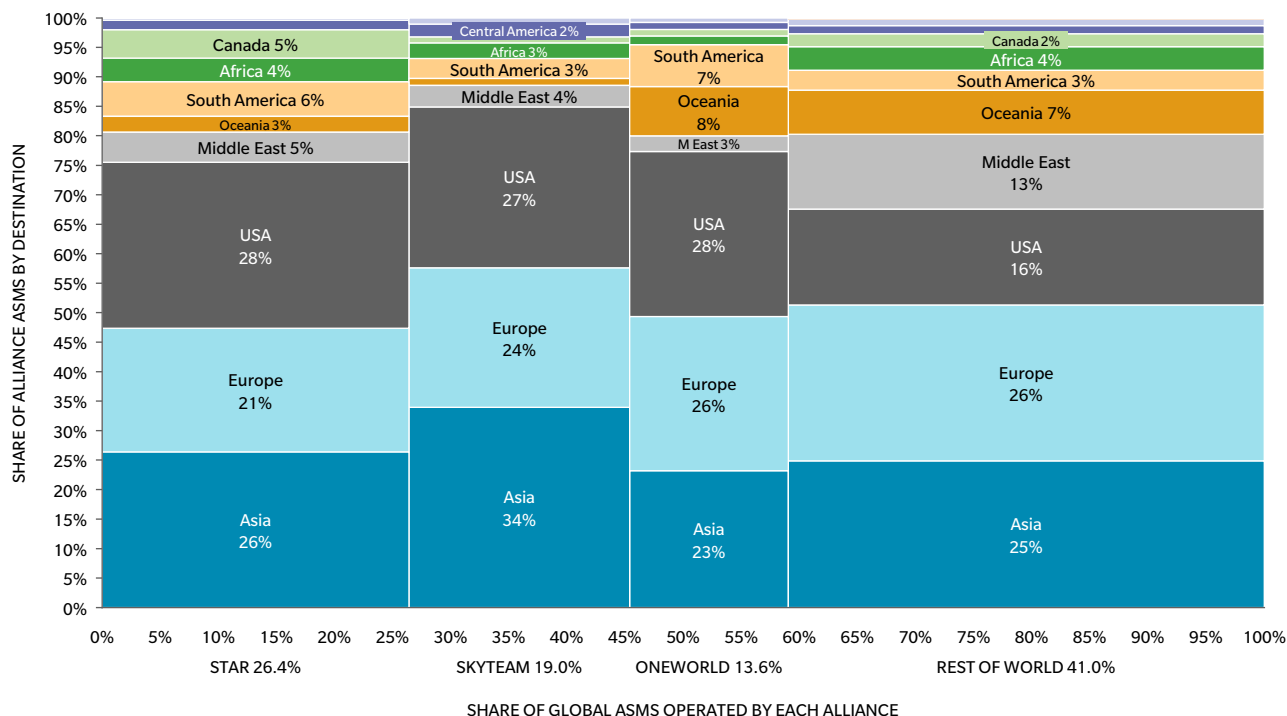
The three global alliances generated 59% of the world's ASMs in August 2013, down 0.4 percentage points since August 2012. Looked at from a different perspective, 41% of the world's ASMs are provided by airlines that are not members of an alliance. Global scheduled ASMs increased by 23.9 billion, or 6.1%, during the one-year period, with non-aligned airlines growing at a faster rate (9.8%) than the alliance airlines (3.8%).

Star continues to be the largest of the three alliances, making up 26.4% of total ASMs in August 2013 (down from 27.1% in August 2012). Star ASMs grew by 3.6% from August 2012 to August 2013.

SkyTeam ranks second with 19.0% of total ASMs (down from 19.2% in August 2012). SkyTeam ASMs grew by 5.4% from August 2012 to August 2013.

Oneworld ranks third with 13.6% of total ASMs (down from 14.2% in August 2012). Oneworld ASMs grew by 1.8% from August 2012 to August 2013.

EXHIBIT 39: SHARE AND GEOGRAPHIC DISTRIBUTION OF ASMS OPERATED BY GLOBAL ALLIANCES
(AUGUST 2013)

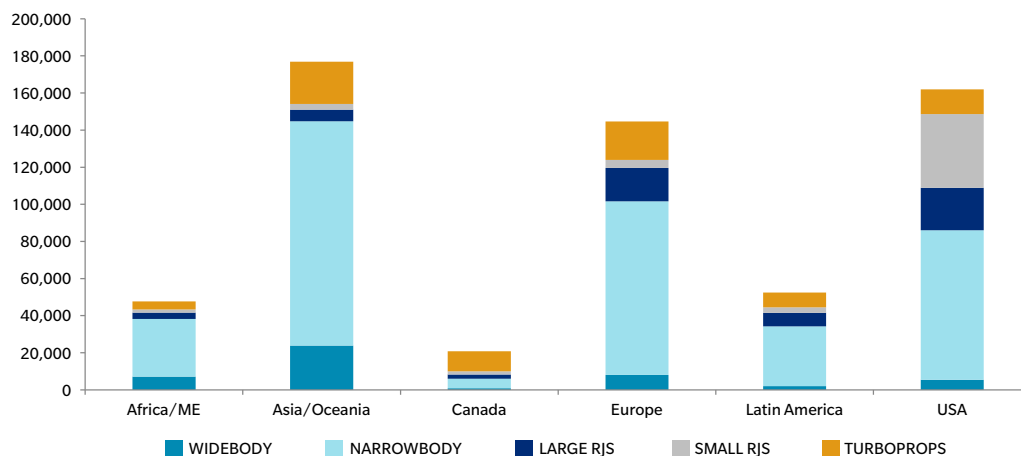


Source: PlaneStats.com > Schedule > Monthly Operations for August 2013.

27. CHANGING FLEET COMPOSITION

Another perspective on how the aviation industry is meeting changes in demand is provided by changes in the composition of the active commercial airline fleet. Aircraft type usage varies by world region, as shown in *Exhibit 40*, which shows total departures by world region in September 2013 by different aircraft types. Of note, the US has a higher percentage of smaller regional jets; Canada has a higher percentage of turboprops; Asia and the Middle East have a higher percentage of widebodies.

EXHIBIT 40: DEPARTURES BY AIRCRAFT TYPE (SEPTEMBER 2013)

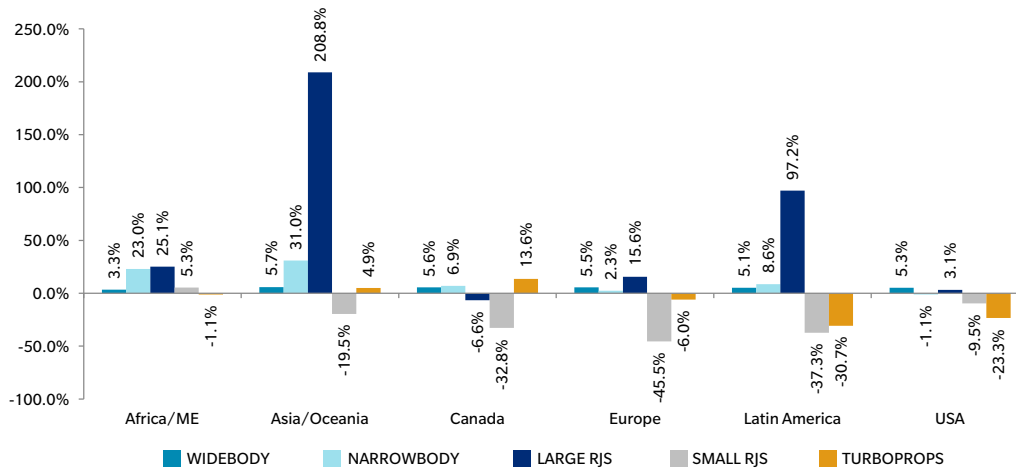


	AFRICA/ MIDDLE EAST	ASIA/ OCEANIA	CANADA	EUROPE	LATIN AMERICA	USA
Widebody	15.1%	13.5%	4.2%	5.6%	3.8%	3.3%
Narrowbody	65.2%	68.3%	24.7%	64.6%	61.5%	49.8%
Large RJs	7.0%	3.5%	10.9%	12.4%	13.9%	14.1%
Small RJs	3.8%	1.7%	8.4%	3.0%	5.6%	24.5%
Turboprops	9.0%	12.9%	51.8%	14.3%	15.3%	8.3%

Source: PlaneStats.com schedule data.

Exhibit 41, which compares departures by aircraft type for each region in September 2013 versus September 2010, shows that the two clear recent trends are the growth of larger regional jets in some regions, and the decline of smaller regional jets everywhere except Africa/Middle East.

**EXHIBIT 41: CHANGE IN DEPARTURES BY AIRCRAFT TYPE
(SEPTEMBER 2013/SEPTEMBER 2010)**



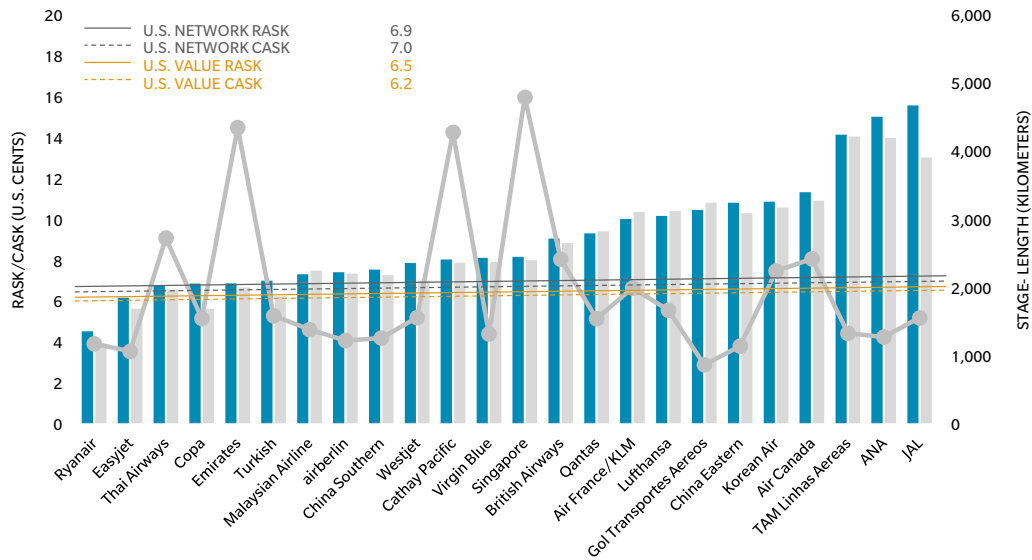
Source: PlaneStats.com schedule data.

28. STAGE-LENGTH ADJUSTED COSTS FOR INTERNATIONAL CARRIERS

In *Exhibit 42*, RASK (kilometers instead of miles) and CASK are provided on a stage-length adjusted basis for selected European, Asian, and South American carriers. The gray line shows the average stage-length for each carrier. To help compare these results with those provided for US carriers, the average RASK and CASK for US network and value carriers are also shown. Because of differences in time period (e.g., fiscal years that end on different months) and other factors, this information is most useful in showing the relative differences in RASK/CASK between the carriers, and should not be relied on for precise benchmarking or other analysis.

In all regions, the value carriers have lower unit costs than their network carrier rivals. Also, in all regions, the lower CASK carriers produce lower RASK. Both Europe and Asia, in addition to having typical value carriers, have successful ultra low cost carriers in Ryanair and Air Asia, which have CASKs that are a step lower than even the value carriers in those regions.

EXHIBIT 42: RASK/CASK FOR INTERNATIONAL CARRIERS STAGE-LENGTH ADJUSTED TO 1,609 (1,000 MILES)



Source: McGraw-Hill Aviation Week Intelligence Network (AWIN).

CONCLUSION

By airline industry standards, this past year has been relatively stable, although weak demand in Europe has taken its toll. Mature carriers, both network and value, continue to maintain capacity and cost discipline as they seek additional revenue through price increases and ancillary revenue increases. The lowest cost value carriers, increasingly referred to as ultra low cost carriers, continue to demonstrate the success of their business models.

Global growth has shifted away from the US and Europe to Asia, Latin America, and the Middle East. In these regions, value carriers have lower market shares than elsewhere, perhaps a sign of likely changes to come. In both developing and mature markets, recent intra-country and cross-border mergers are creating new airlines of substantial scale.

Members of the three major airline alliances continue to provide a majority of global traffic, although capacity provided by non-aligned carriers has been growing more rapidly.

Finally, as demonstrated in this report, for US carriers, the margin between RASM and CASM remains very slim. The challenges once posed by low cost carriers to network carriers are now being posed by ultra low cost carriers to both network and low cost carriers. As 2013 draws to a close, we'll keep a close eye on how airlines respond to these challenges in the US and abroad.

RECENT PUBLICATIONS FROM OLIVER WYMAN

For these publications, please visit www.oliverwyman.com.



AUTOMOTIVE MANAGER 2013 TRENDS, OPPORTUNITIES, AND SOLUTIONS ALONG THE ENTIRE VALUE CHAIN

A magazine for automotive industry leaders that provides insights into trends, prospects, and solutions for manufacturers, suppliers, and dealers



A BILLION DOLLAR DECISION CHARTING A NEW COURSE FOR U.S. HEALTHCARE BENEFITS

In today's complex healthcare landscape, companies really have just three basic options



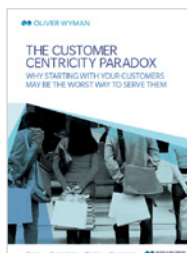
THE CLASH FOR CASH ATTRACTING CORPORATE LIQUIDITY IN ASIA PACIFIC WITHOUT A TRANSACTION BANKING FRANCHISE

Our latest thinking on how non-transaction banks can compete for corporate liquidity in Asia Pacific



FUNDING THE FUTURE INSURERS' ROLE AS INSTITUTIONAL INVESTORS

This study, published with Insurance Europe, argues that the investment strategies of insurers, with \$11 trillion of assets under management, should play a stabilizing role in the global economy



THE CUSTOMER CENTRICITY PARADOX WHY STARTING WITH YOUR CUSTOMERS MAY BE THE WORST WAY TO SERVE THEM

"Customer centricity" isn't a new idea, but retailers can get more from it by focusing on the places where better customer data means better decision making



GLOBAL BANKING FRACTURES THE IMPLICATIONS – MORGAN STANLEY AND OLIVER WYMAN WHOLESALE & INVESTMENT BANKING OUTLOOK 2013

Balkanized regulations, over-the-counter market reforms, and rising fixed costs are fracturing the global wholesale and investment banking industry



MANAGING IN AN AGE OF EARNINGS UNCERTAINTY

The 2013 AFP Risk Survey (published by the Association for Financial Professionals in collaboration with Oliver Wyman's Global Risk Center) identifies and analyzes the most significant risks to companies' earnings



MRO SURVEY 2013 THRIVE RATHER THAN SURVIVE – IT'S TIME FOR MROS TO ACT

For independent aviation maintenance, repair, and overhaul providers, the world is shrinking as original equipment manufacturers muscle into the maintenance market



THE OLIVER WYMAN RETAIL JOURNAL

A collection of articles describing how mature retailers can develop the advanced capabilities they need to succeed in today's fiercely competitive markets



THE OLIVER WYMAN RISK JOURNAL VOL. 2

A collection of perspectives on the complex risks that are determining many companies' futures



THE OLIVER WYMAN TRANSPORT & LOGISTICS JOURNAL

A publication that discusses issues facing global transportation and logistics industries



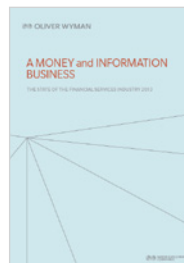
PERSPECTIVES ON MANUFACTURING INDUSTRIES

A collection of viewpoints on industrial companies' challenges as well as their opportunities and potential courses of action



REALIZING THE PROMISE OF THE WORLD'S ENERGY REVOLUTION

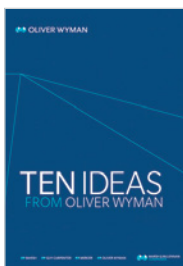
Five recommendations for governments and energy companies that wish to advance unconventional gas resources outside of the United States



THE STATE OF THE FINANCIAL SERVICES INDUSTRY 2013

A MONEY AND INFORMATION BUSINESS

The 16th edition of this annual report argues that the industry's greatest opportunity, and its greatest threat, is information



TEN IDEAS FROM OLIVER WYMAN

At Oliver Wyman, we love ideas. In this collection of articles, we showcase 10 ideas from across our firm for how business leaders can improve and grow their businesses without taking on excessive risk



WORLD ENERGY TRILEMMA

TIME TO GET REAL – THE CASE FOR SUSTAINABLE ENERGY POLICY

This report, prepared by the World Energy Council with Oliver Wyman's Global Risk Center, argues that policymakers and energy industry executives urgently need to work together to make sustainable energy systems a reality

Oliver Wyman is a global leader in management consulting that combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation.

Oliver Wyman's global Aviation, Aerospace & Defense practice helps passenger and cargo carriers, OEM and parts manufacturers, aerospace/defense companies, airports, and MRO and other service providers develop value growth strategies, improve operations, and maximize organizational effectiveness. Our deep industry expertise and our specialized capabilities make us a leader in serving the needs of the industry. Also, Oliver Wyman offers a powerful suite of industry data and analytical tools to drive key business insights through www.planestats.com.

For more information on Oliver Wyman, please visit www.oliverwyman.com.

For more information on this report, please contact:

BOB HAZEL

+1 202 331 3684

bob.hazel@oliverwyman.com

PETER OTRADOVEC

+1.214.758.1876

peter.otradovec@oliverwyman.com

TOM STALNAKER

+1 202 331 3683

tom.stalnakar@oliverwyman.com

AARON TAYLOR

+1.631.745.6875

aaron.taylor@oliverwyman.com

www.oliverwyman.com

Copyright © 2013 Oliver Wyman

All rights reserved. This report may not be reproduced or redistributed, in whole or in part, without the written permission of Oliver Wyman and Oliver Wyman accepts no liability whatsoever for the actions of third parties in this respect.

The information and opinions in this report were prepared by Oliver Wyman. This report is not investment advice and should not be relied on for such advice or as a substitute for consultation with professional accountants, tax, legal or financial advisors. Oliver Wyman has made every effort to use reliable, up-to-date and comprehensive information and analysis, but all information is provided without warranty of any kind, express or implied. Oliver Wyman disclaims any responsibility to update the information or conclusions in this report. Oliver Wyman accepts no liability for any loss arising from any action taken or refrained from as a result of information contained in this report or any reports or sources of information referred to herein, or for any consequential, special or similar damages even if advised of the possibility of such damages. The report is not an offer to buy or sell securities or a solicitation of an offer to buy or sell securities. This report may not be sold without the written consent of Oliver Wyman.