Clear Skies?

The fight for dominance in the airline industry

BY RENEE COURTOIS

Looking for a flight out of Charlotte, N.C.? You'll have 3.6 percent fewer flight options by June 2009 compared to the same month last year. Excited to spend a summer week in Myrtle Beach, S.C.? You'll have 7.3 percent fewer flights for getting home than you would have had last summer. Even our nation's capital has seen about 6.5 percent fewer flights departing from Washington Dulles International Airport this June compared to June 2008.

The main reason behind the capacity cuts at most of the country's major airports, of course, is the recession. When the economy turns sour, people fly less. Since it doesn't pay to fly empty planes, airlines cut capacity by running fewer flights or swapping big planes for smaller ones. "Right now there are too many seats chasing too few passengers," says Vaughn Cordle of AirlineForecasts, an industry consulting group.

But any seasoned traveler knows the recession is just the latest in a series of shocks to hit the airline industry in this decade. Oil prices — a key determinant of jet fuel prices and, to a lesser extent, would-be travelers' expendable cash — spiked to a record-breaking $147 per barrel in July 2008. The terrorist attacks of 9/11 led to huge costs for the industry in the form of security protocols, and they worried travelers, many of whom opted to just stay home.

The airline industry as a whole has been profitable for only two years during this decade, 2006 and 2007. They booked a loss again in 2008, and industry analysts are split on what's in the cards for this year. Analysts do agree, however, that because of the succession of shocks the industry has experienced, and the emergence of a new breed of competitors, we may be at a turning point in the airline industry that could change how airlines operate in the future.

Turbulence On the Books

In order to keep this in perspective, it is important to note that the airline industry has never been consistently profitable. This is mostly a result of its structure. Airlines have large upfront fixed costs for their fleet of jets, but their real product is seats on those planes. They charge a fare for each seat that is well above the marginal cost of flying one additional passenger in order to recoup those fixed costs over time.

With the exception of fuel, airlines' costs are relatively stable. The real uncertainty that they face is exceptionally erratic demand resulting from business cycles, and they are more sensitive to weather patterns and geopolitical turmoil than perhaps any other industry in existence. The airline industry experienced its first-ever decline in world traffic volume in 1991, an outcome of anxiety over traveling during the Gulf War. Other notable extremes since have included airlines' high-profit years during the dot-com boom, the subsequent decline in global air travel following 9/11 and the current financial crisis. The International Air Transport Association (IATA) predicts global passenger traffic will fall by 3 percent in 2009. Despite the industry's cyclicality, this is only the third time in the last 35 years that passenger traffic has fallen. This may be one reason why industry analysts are now speculating on whether the industry's oldest players will survive in their current form.

In an industry whose profits are so volatile, it is no surprise that the competitive landscape for airlines is constantly changing through mergers, bankruptcies, and liquidations. A small handful of airlines have stayed in the game since the industry was deregulated in 1978. These so-called "legacy carriers" include some of the country's biggest names in air travel: American, Continental, United, US Airways, Delta, and Northwest (the latter two of which merged in October 2008 and are in the process of being fully integrated under Delta's brand). They have seen their share of financial distress.

When times are tough for airlines, new competitors tend to enter or expand in the market when aircraft, labor, and airport space are cheaper. They also gobble up any routes that have been abandoned by existing airlines. In the last two decades, the most intense competition has come from the so-called "low-cost carriers," or LCCs. The LCCs are the group of airlines — the names Southwest, JetBlue, AirTran, Allegiant, and Frontier, the biggest of the LCCs, might ring a bell — known for offering cheap fares for flights all over the country. The LCCs aren't always the cheapest flight option, but many times they are. Customers have increasingly chosen them over the legacy carriers.

This is because seats are a commodity. They are not easily differentiated among airlines and have no intrinsic value on their own — people fly to get somewhere, not for the sake of taking a flight. The airline's sole aim is to control the supply of that commodity relative to its competitors in order tomanage the fares at a profitable level, or carry more traffic for a given fare.

The commodity nature of seats means that price is king in the airline industry: The airline that offers the cheapest flight for a given market will usually win the customer. Because the LCCs tend to offer cheaper flights, they often act as price-setters for the rest of the industry and "everyone else has to scramble to meet them," according to Edmund Greenslet, author of *The Airline Monitor*, an industry publication. The market share of the LCCs has grown from about one-tenth of the industry in the early '90s to over one-quarter in 2008. Southwest now carries more

passengers than any other U.S. airline.

How do the LCCs serve up cheap flights? Aptly named, they operate within a business model that allows them to keep costs down, run more efficiently, and thus charge lower fares. The defining characteristic of the LCCs is that they have a relatively nondiverse fleet of jets. Frontier Airlines runs only three types of jets. The rest of the LCCs fly either one or two. Notably, at the end of 2008 Southwest had the third-largest fleet of jets in the industry (after the Delta/Northwest merger) at 537 jets and they're all 737s.

A homogeneous fleet saves the LCCs bundles in terms of maintenance and staff training since they don't need to train staff on how to repair and operate multiple types of jets. This helps the LCCs better utilize their staff, including cross-training them on lots of jobs — which is why you may have noticed that the person who checked your bags on your last LCC flight also appeared on board to deliver your peanuts. The LCCs are also known for offering "no frills" service by sometimes eliminating seat assignments, in-flight meals, and entertainment. They often have an uncomplicated fare structure, sometimes selling only one-way flights. These simplifying features streamline flight operations.

This lean business model has created a considerable cost advantage in terms of "cost per available seat mile" (CASM) — or the cost of flying one airline seat for one mile. Over time, consulting firm Oliver Wyman estimates the LCCs operate about 25 percent more cheaply than the legacies in terms of CASM. No legacy carrier beats any LCC in terms of this cost measure. The cost gap between the two groups in absolute terms has also widened over time, despite avid cost-cutting measures by the legacies. As much as 65 percent of the cost advantage of the LCCs may be attributable to its simplified business model, according to consulting firm Booz Allen Hamilton.

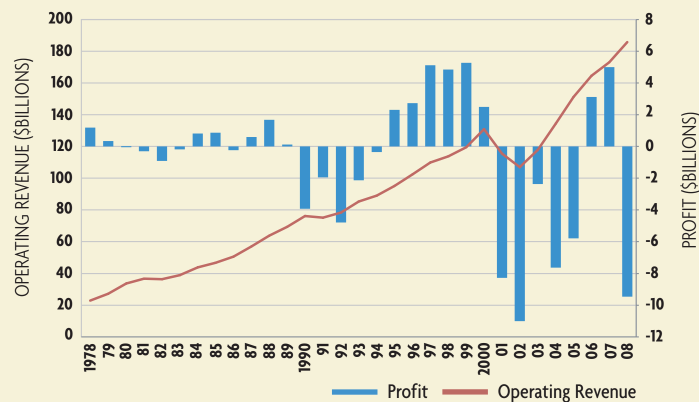
Labor remains the biggest expense for airlines, between one-quarter and one-third of total operating expenses. But because the LCCs are able to better manage other costs, this is not an impediment. Southwest in particular is so good at keeping costs down that it completely compensates for the fact that it has the most expensive labor force of the major airlines as a percentage of its CASM. Its labor force is 77 percent unionized, and its staff and pilots make among the highest incomes in the industry, with the biggest benefits packages — yet Southwest still has among the lowest CASM in the industry.

Coming to a Hub Near You

Another key difference between legacies and LCCs is the routes they fly. The airline industry was heavily regulated prior to 1978, with the Civil Aeronautics Board determining what routes airlines could fly and what fares they could charge. Thus, in effect the government determined the market share of each airline. Decisions were typically made based on what would best serve the "public interest." (The holdover from this regulatory regime is the painstaking merger approval process that still exists for airlines today.)

Volatile Profits for the Airline Industry

U.S. passenger and cargo airlines



SOURCE: Air Transport Association

After deregulation in 1978, American Airlines pioneered a new method for determining routes. They funneled all their passengers through one common location, called a hub, bundled them into common connecting flights, and shipped passengers out from there to the final destinations. By accumulating passengers in one location, the legacy airlines could schedule a greater number of flights, serve more cities, and earn more revenue. This became known as the "hub-and-spoke" setup, and all the airlines at the time quickly adopted it.

But the hub-and-spoke model does come with some costs. Key to the model is amassing lots of passengers into the hub at peak points during the day to fill outgoing flights and minimize the amount of time that planes are left idle waiting for passengers. Idle time means lost revenue. "You wind up piling up everybody and trying to get them in and out at the same time," says Greenslet. It also means the airlines must build in time between flights to move bags, staff, and passengers from one flight to the next.

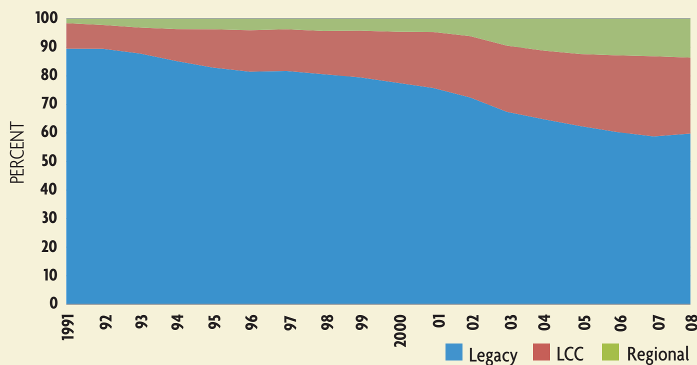
The LCCs revolutionized commercial flying by providing direct flights under a "point-to-point" model, with no hub at all. The LCCs provide more flights that run directly from one city to another, even if neither city is particularly large. The reduced congestion and idle time allows LCCs to get planes back in the air more quickly. "The LCCs' planes are more productive. They're flying 11 to 13 hours a day, compared to 9 to 11 hours a day for the legacies," says Cordle. This business model turned the costs and benefits of hub-and-spoke airlines on its head: The point-to-point model is less costly in part because it reduces idle time, but offers less in connectivity and flight times, and therefore risks accumulating fewer passengers per flight. Over time, cost-conscious vacationers, who are relatively flexible on flight times, have come to rely on the lower-fare LCCs, while business travelers, for whom connectivity and scheduling convenience is most important, have stuck with the legacy carriers.

Meeting in the Aisle

In some ways the business models of the LCC and legacy airlines are merging. As LCCs grow and the two groups fight

Legacy Carriers Losing Domestic Market Share to LCCs

Relative market share by airline type in terms of available seat miles



NOTE: One ASM is one seat flown one mile. Total ASM is the number of seat miles offered by all passenger airlines in a period. ASM is a measure of the total "product on the shelf" offered by airlines.

SOURCE: Airports:USA DataMiner

directly for market share, they're picking up each other's habits. Legacy carriers have started to mimic some of the streamlined features of the LCCs. Many legacy carriers increasingly charge for, or eliminate, the "frills" of air travel. They have paid attention to the cost-minimizing innovations pioneered by the LCCs, like the fuel hedges that have famously saved Southwest billions.

Some have also migrated to "rolling hubs." Traditional hubs schedule many planes to land and depart around the same time during peak hours, which reduces the layovers with which passengers must deal but leads to costly congestion. Rolling hubs, on the other hand, smooth flights over the day rather than coordinating many flights to take off and land around the same time. This reduces congestion and gets planes back in the air more quickly.

As the LCCs have grown, their traffic has inevitably accumulated in certain cities where demand is strong. As a result, low-cost carriers increasingly operate out of hubs, they just might not call them that. Many of the LCCs instead call these de facto hubs "focus cities" or "gateways." Therefore it is something of a misnomer to say that the LCCs operate strictly with a point-to-point model, according to Mike Boyd of Boyd Group International, an airline forecasting firm based out of Colorado. Southwest, for example, specifically calls itself a "point-to-point" airline, even though Boyd estimates as much as a third of its flights are connecting traffic. The LCCs don't make a concerted effort to market themselves as hub carriers, and many are still much less reliant on hubs than the legacies.

Resorting to a partial hub system has allowed the LCCs to offer the greater connectivity that the legacy airlines do. This has expanded the number of markets they serve. They have also begun to target "the most lucrative passenger, the business traveler," by offering more perks and frequent flier programs, "and that's the bread and butter of the legacies," according to Cordle. He estimates that business travelers are 8 percent to 12 percent of the passengers for legacy carriers, but they are about 35 percent to 45 percent of their revenue, and in some cases as much as half.

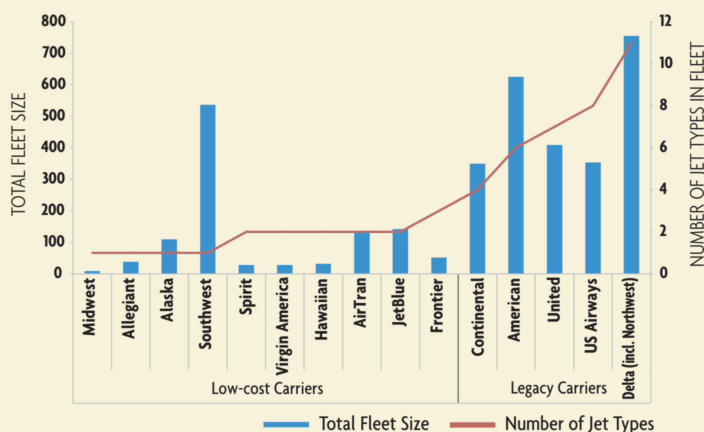
It looks as though hubs are here to stay, even though, by some measures, they're more expensive to run. Hubs may be the only way to serve a country of our size and composition. "A country like ours, with a lot of population centers, generates a lot of travel demand even for relatively small cities, but not always enough traffic to support a direct flight to another medium-sized town. The only way to serve all those points is to hub the traffic," says Greenslet. "The train system does that in Europe. The hub-and-spoke system does that in this country."

As the LCCs saturate their existing markets, they have two options if they want to keep growing. They can branch into small-city short-haul traffic currently served by the regional airlines — the small, 50- to 70-seat airlines that serve very small cities, often as a subsidiary of a legacy carrier. Or, they can branch into long-haul (generally defined as six or more hours) and international travel like the legacies. The LCCs can't expect to continually branch into these areas while maintaining only one or two types of jets. However, buying an array of new jets departs rather dramatically from the business model that has kept their costs so low to begin with. "Right now they're too big to go to Montgomery, Ala., and too small to go to Shanghai," Boyd says.

What this means is that the low-hanging fruit for the LCCs may be just about gone. They used their novel business model to connect markets in a way that didn't previously exist — point-to-point service between midsized cities that created a low-cost alternative for people who would otherwise drive 300 miles to their destination. In other words, the LCCs expanded overall demand instead of taking it away from their competitors. As they've grown, they've moved into big-city markets and have been largely successful at undercutting the legacies for many flights. But they won't be able to keep growing without fighting tooth and nail to take that market share from the legacy carriers, especially if consumer demand continues to fall.

What's more, the cost advantages that made them so successful to begin with may be dwindling. Their planes are becoming less fuel efficient as they age. Labor costs are getting higher too: Their staffs are gaining tenure and airline wages are determined on a graduated scale by seniority. It's not obvious what more they can do to win market share from the legacy carriers and keep their cost advantage. "The big thing you'll continue to see is that the legacy carriers will keep pushing to lower their cost structure," says Yale University economist Steven Berry. "But the degree to which the LCCs can adopt the hub system, for example, is less certain." But don't be too fast to discount the innovative LCCs. Since it has been around since the 1970s, low-cost behemoth Southwest is a living case study of an aging LCC and it has only seemed to get stronger. Regarding its purported disappearing cost advantages, "I've been saying that about Southwest for about 30 years. So far aging has had no major affect," Greenlist says.

In light of the changes that have taken place, economist Severin Borenstein of the University of California at



SOURCE: Air Transport Association

Berkeley believes there appears to be a single "hybrid" airline model emerging. "The idea that some airlines have the 'right' business model is nonsense. I think we'll see LCCs move increasingly toward hubbing, and I think we'll continue to see the legacy carriers move in the opposite direction and streamline," he says. "We're definitely seeing the two models merge."

Landing on Common Ground

The legacy and low-cost carriers will face some issues that both will find hard to ignore. One is the possible adoption of a federal "cap and trade" emissions control program that threatens to dramatically raise their cost of jet fuel. Another is an outdated air traffic control system that forces costly delays. Of course, economic cyclicality will continue to plague the airlines. The industry expands and contracts in line with, and at roughly twice the pace of, the overall economy. When the economy slows, so does travel demand as businesses tighten their travel budgets and individuals opt for fewer recreational trips.

In the future, Cordle expects an airline industry that is smaller overall. "Because of excess spending and consumption in the United States since the early 2000s, with twin bubbles in stocks and housing, expenditures on air travel were inflated above long-run trend," he says. "Now we're getting back to the reality of what the consumers can actually manage. When you strip away all the noise, it really means the industry will be 10 percent or so smaller."

This can take place through mergers or capacity cuts — both of which can be aided by Chapter 11 bankruptcy, to which the airlines are no stranger. Of the six legacy carriers, four have filed for bankruptcy since the year 2000. There have been more than 40 airline bankruptcies overall in this decade alone. It's a normal course of business that helps the airlines renegotiate existing contracts, especially those with organized labor. "The airline industry's labor costs have come down 40 percent since 2000," Cordle estimates, "and much of that was accomplished through bankruptcy or near bankruptcy positions." He says that one airline got concessions from pilots as the lawyers were essentially walking up the steps of the court to file. This sort of negotiation has been a standard way for airlines to deal with labor costs during hard financial times.

Mergers are the way to go, according to Cordle, in part because he views the legacies' pension obligations as unsustainable. "Mergers can be win-win-win. Win for the customer, shareholder, and employees." A merger's ultimate impact on consumers depends on the airlines involved. For example, if the two airlines have largely overlapping routes, then consumers can be harmed because the airlines will eliminate the overlap which reduces the total network available to passengers, according to Berry. However, if the airlines have complementary networks, then mergers have the potential to create a broader network overall for consumers. "The government looks out for this and impedes mergers where the potential harm for consumers is greater," Berry says.

No matter what changes influence the new business models, it's hard to imagine a world without airlines. For U.S. airlines, there are 31,000 scheduled departures ferrying an average of 2.1 million passengers each day. The Federal Aviation Administration predicts global air traffic will double by 2025. The FAA also estimates that the industry adds more than 5 percent to U.S. gross domestic product through its direct and indirect economic impacts, and is responsible for nearly 10 million jobs in industries (other than airlines) related to hospitality and travel — even though U.S. spending on air travel is less than 1 percent of GDP, and airlines directly employ just over half a million people. "There is tremendous spillover that ripples through the entire economy," Cordle says.

From the passenger's perspective, ongoing capacity cuts by the airlines will mean "more crowded aircraft, less quality of service, yet better on-time performance because there are fewer capacity bottlenecks," Cordle sums up.

Boyd is also keen to put the ever-changing airline industry into perspective: "Flying will continue to be just as uncomfortable as ever in the same seat space," Boyd says. "We can count on continuity in that sense." **RF**

Readings

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