

United + Continental: A big win for all stakeholders

The following is a white paper by three industry experts making the case that the network airlines that provide essential access to global markets are in danger of slowly liquidating if they are not allowed to merge. Mergers provide a market-driven restructuring solution that effectively allows the network airlines to compete with the emerging low-cost carrier business model.

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The U.S. airline industry can only support three large network airlines.

The announcement of a United-Continental Airlines merger renews interest in the legal, financial and political issues surrounding consolidation in the U.S. airline industry. Perspectives on these issues among the many industry stakeholders—consumers, communities, investors, suppliers, labor, competitors and politicians—vary, but it is clear that the corporate and governmental policies applied to these subjects affect not only these stakeholders, but also the national economy and the trillion-dollar travel and tourism industry that relies so heavily on a healthy, reliable air transportation network.

The purpose of this white paper, and those to follow, is to make the case for market restructuring of the U.S. legacy airlines and the industry in general through consolidation and network restructuring. In the U.S., such consolidation provides an important network foundation that—with the right corporate, labor and political leadership—sets the path to sustained growth and U.S. leadership in the development of the emerging 21st-century global air transport networks. Without this leadership and without further consolidation, we expect there will be at least one, and perhaps two, more failures among the network airlines, as well as several low-cost-airline failures.

It is important to recognize that the airline industry is composed of a variety of business models that satisfy distinctly different, though often overlapping, transportation needs. For simplicity's sake we distinguish among network, low-cost and regional carriers.

AA, UA, DL, CO and US are the major U.S. network airlines. Using a broad mix of aircraft types, they gather passengers from small and large airports, domestic and international, and distribute passengers through hubs strategically located around the country. This model enables network airlines to accept passenger flows from other carriers' networks, so commercial relationships with regional carriers and international

network carriers efficiently extend the network carriers' reach. The network airline model provides a vast number of communities, their business travelers, and visitors with global access to the world's markets. However, these network efficiencies come at the price: Complexity, legacy labor policies, outdated infrastructures, and poorly considered government policies (domestic and foreign) have resulted in lost efficiencies and higher costs for the network carriers.

Southwest, Jet Blue, Air Tran, Frontier and Spirit are examples of low-cost carriers (LCCs). The low-cost model also operates from hubs (called "focus cities" by some), but LCCs tend to operate limited types of aircraft, to feature point-to-point services, and to operate only between high-density domestic and cross-border airport markets. Simplicity, newer fleets, and a younger labor force that began work in a low-cost environment, as well as quick turnaround times for their aircraft, provide efficiencies that result in low fares. However, this model does not lend itself to serving low-density or small communities. Moreover, the extension of this model internationally, beyond a few cross-border routes with Canada, Mexico, and a few Latin American destinations, has yet to be proven, although Southwest's large domestic market share makes it the most likely candidate to initiate long-haul international operations. We expect it to do so within the next five years.

Regional airlines such as Sky West, ExpressJet, Pinnacle, and Republic (the last a hybrid airline that also operates Frontier as a branded business) are "fixed-fee for departure" airlines that use a modified LCC model and operate smaller aircraft suitable for low-density airports. They connect at the hubs of network partner airlines pursuant to contract conditions that are subject to the often strict limitations of the scope clauses in the collective bargaining agreements of the network carriers. These carriers are specifically structured to link the smallest communities that receive air service with the network hubs.

All that said, in any discussion involving airline consolidation, there are a number of issues that should be put into perspective:

- DOJ policies related to their analysis of market concentration, product definition and potential market power in the air transport industry were first developed in the years just after deregulation in 1978 and have not been modified since. Simply stated, the policies are dated and stuck in the past.
- The years immediately following deregulation saw the proliferation of U.S. network carriers, most of which derived over 80% of their revenues from domestic air transportation. Combined, they provided a similar proportion of all U.S. domestic available seat miles (ASMs).

- Today, there are only five major U.S. network carriers and 28 LCC and regional airlines in the U.S., so there has been a considerable alteration in the composition of domestic competition. This has resulted in destructive price competition.
- The U.S. network carriers' share of the domestic market (excluding regional ASMs) has been shrinking annually. In 2009, Southwest, the largest LCC, continuing its faster *relative* growth trends, provided 14.6% of total U.S. ASMs, while DL provided 16.1% after the NW merger in late 2008 [Figure 1].
- UA and CO together provided 17.7% of the domestic ASMs in 2009. However, we ultimately expect to see a 5-10% reduction in combined capacity post-merger, which will reduce their market share and improve efficiencies. This outcome results because one of the major purposes of airline mergers is making routes more rational. For example, the pre-merger domestic shares of DL and NW, were 10.1% and 6.3%, respectively in 2008, but combined they had a 16.1% share in 2009.
- Given what we consider an appropriate amount of domestic ASMs produced post-merger, a AA/US combination would be approximately 19.6%, which is somewhat larger than UA (+CO), DL(+NW), and Southwest.

Figure 1:

2009 Market Share - ASMs and RPMs

in percentage terms

| | ASMs | RPMs |
|------------------------|------|------|
| 1 United + Continental | 17.7 | 18.4 |
| 2 Delta + Northwest | 16.1 | 16.8 |
| 3 Southwest | 14.6 | 13.7 |
| 4 American | 13.9 | 14.1 |
| 5 US Airways | 7.9 | 8.1 |
| 6 JetBlue | 4.3 | 4.2 |
| 7 AirTran | 3.4 | 3.4 |
| 8 Alaska | 3.2 | 3.1 |
| 9 Frontier | 1.5 | 1.5 |
| 10 Hawaiian | 1.3 | 1.4 |
| 11 Virgin America | 1.0 | 1.0 |
| 12 Spirit | 0.9 | 0.9 |
| 13 Allegiant | 0.7 | 0.8 |
| Regionals & Others | 13.5 | 12.6 |
| American + US Airways | 21.8 | 22.2 |

Our analysis of the trends over the last decade suggests that, without a new strategic direction and significant changes in the industry's structure, AA and US will continue on the slow liquidation path to failure. Corporate, labor and government policies that ignore these trends risk reshaping the competitive landscape and America's access to the global air transport network far more adversely for stakeholders than the current consolidation trend that naturally led to mergers between UA, CO, DL, and NW.

Bad industry fundamentals: The prisoner's dilemma

In game theory terms, the industry's problem represents the classic "prisoner's dilemma" because firm value, airline economics and passenger preferences provide strong incentives to cheat (by over producing to gain disproportionate market share and lower relative costs). These incentives are so great that the ability of the individual airline to profitably maintain seat production levels that optimally balance supply/demand is severely limited. The result is, collectively, the entire industry is laden with excess capacity. Excess capacity is at the heart of the industry's inability to earn its cost of capital.

This is a confusing issue because, when one looks at uncomfortably high passenger load factors, the concept of excess capacity doesn't ring true. However, when both price and supply elasticity are thoroughly examined, the airlines' excess capacity can be measured and defined in economic, finance, and even strategic terms to show its role in the industry's financial struggles in cold, hard numbers. We have developed models that produce such numbers. We ran the numbers for every airline from 1977 through 2009 and calculated how much excess capacity was in the system and each region. Then we calculated the economic spread (in Economic Value Added terms) returns for the industry during each business cycle and for each airline. What we found was that, for the decade ending in 2009, the industry produced an average of 7% excess capacity, and this factor alone led to \$70 billion in net losses (in 2009 \$), or negative 5.7% in revenue. The elasticity of demand analysis concluded that the industry underpriced the product by 11% over the 10 years ending 2009.

The only way the industry could have priced the product above its true economic cost would have been to reduce the 7% excess capacity by raising revenue to the required level. Of course, this was not possible because every airline had to grow market share in order to lower relative unit costs and expand valuation multiples. Growth results in lower relative costs because new employees are brought in at first-year pay and maintenance costs are lower when equipment is new. "Grow in order to lower relative costs" is a rational strategy for management at the individual-airline level but results in destructive price competition at the industry level.

So the fundamental industry problem is that what appears to be perfectly rational for the individual airline is irrational at the industry level because it negatively impacts industry structure and market concentration in such a way that the individual airline cannot earn its cost of capital. Hence, bad industry fundamentals result in an industry unable to attract and maintain shareholder support.

These bad industry fundamentals will not change without consolidation one way or another. For CO and UA, the best option is to merge because the alternative is to fail, and the same holds true for US and AA. Failure is not a good option for labor and other stakeholders, especially for the shareholders and for small communities, which can only be served if there are profitable and large network airlines. Network airlines must be able to afford to fly the thinly populated short haul flights utilizing small regional jets if small communities are to continue to receive air transportation service. The low-cost airline model is not designed to service these small communities.

Our analysis suggests that the U.S. market can support a maximum of only three major network carriers.

Although we are forecasting profits for the U.S. majors in 2010 and 2011, these profits are inadequate to address the airline industry's continuing problem of excess capacity and destructive price competition that leads to inadequate earnings, especially in the domestic market. The projected levels of earnings do not address poor balance-sheet and earnings fundamentals such as equity, capital investment, and growth. Without improvement in the industry fundamentals, the airlines will remain unable to satisfy consumer expectations and investor and labor requirements, all of which must be defined in sufficient and certain value terms.

Our financial models indicate that industry revenue must increase by 15-20% to offset over \$20 billion in higher costs that are estimated to be in the pipeline. Although charging higher fares and ancillary fees would reduce demand and result in 10-12% of excess capacity that should be removed, this is not likely to happen without additional mergers. If the industry is not allowed to consolidate in the most rational manner, the result will be a continuation of the slow liquidation and the inevitable failure of US and AA, the two remaining network airlines in need of restructuring. The most likely outcome would be an AA bankruptcy and outright liquidation of US.

While aviation is traditionally a cyclical industry, the current business cycle is different because the large network airlines have never been so weak or so over-leveraged. Capital expenditures have been inadequate for too long. Even if consolidation proceeds, the remaining legacy airlines must retain many years of earnings before they have a healthy capital structure.

We estimate that network airlines have a \$50 billion [book] equity deficit on the balance sheet. Growth and proper investment in equipment and human capital is not possible until this deficit has been addressed via retained earnings. And adequate retained earnings are not possible unless the market structure changes to increase market concentration. Succinctly stated, the industry has too many airlines and this does not allow the profitability required to properly invest in the business *and* satisfy key stakeholders.

Without consolidation, five separate weakened network carriers will be unlikely to accommodate the higher industry costs we project by 2014:

- \$6.5 billion more in fuel costs in 2010 over 2009, and an additional \$2 billion in 2011
- \$2 billion in higher airport passenger facility charges
- \$2.7 billion in additional annual security costs by 2014
- \$4-6 billion in higher labor costs.

The network airlines cannot absorb these costs by borrowing, since none of them are creditworthy; they all carry below-investment-grade credit ratings. What's more, they are not capable of either generating the level of earnings they need or readily accessing the credit market to fund the shortfalls in earnings that will inevitably occur with the next downturn or the next spike in fuel prices. In short, several of the network airlines are likely not to survive another downturn given their inability to raise capital. AA would benefit from the car wash of a bankruptcy, but management cannot take this action until it is painfully obvious that it's the only option left.

A merger of AA and US provides one path that can create real value for the stakeholders of these two airlines and the industry. In our judgment, it is the best option.

Why? The size of these increasing cost estimations leads to the conclusion that even consolidation from five to four network carriers is insufficient to stem the tide of failures or achieve stabilized network carrier competition. With the merger of UA and CO, the odds of liquidation and/or bankruptcy for US and AA increase because it will be too difficult, if not impossible, for them to remain viable as stand-alone businesses.

In the end, the loss of US through liquidation provides the same result—three network carriers. But without the national scope provided by merging with another network carrier, where would AA stand among global competitors such as the UA (+CO) and DL (+NW) alliances? In combination, AA and US would both gain from economies of scope, both benefit in terms of cost and earnings from eliminating redundant and overlapping functions, and both will be able to provide their customers with a more

rational domestic operation. In addition, an AA/US merger should remove even more uneconomic capacity than the UA-CO combination.

Airline liquidations and bankruptcies are chaotic events, and they do not always result in desirable outcomes like capacity reduction or more favorable market conditions.

Mergers, on the other hand, allow effective managers to control the restructuring of their networks and fleets in a way that works best against the market, industry, and economic forces that negatively impact company earnings and growth.

It's the network, stupid.

Removing costs and increasing an airline's scope with the least amount of capital is the path to financial success. Given the downward spiral in market share for network airlines that has occurred over the last decade, a powerful business and valuation case can be made that the three network combinations that would result in an optimal market structure could reduce costs in the \$3 billion range annually. On the revenue side, the economies of scope (i.e., the network effect) would also increase revenue and cash flows by approximately \$3 billion. The net effect of the mergers is approximately \$6 billion in additional value created, or roughly \$2 billion per combination. Revenue and cost synergies result in *lower* costs for the consumer than what would be the case otherwise, when all else is held constant.

Network efficiencies and the resulting lower costs are a function of the degree to which the various markets are integrated into the network. Optimizing efficiency through integration will result in a business worthy of longer-term investment, and one that can satisfy both consumers and labor.

Domestically, the regional carriers provide access to markets too small to support full service by network airlines, and internationally, foreign networks provide global access. Domestic integration with regional networks is a function of, among other things, the kind of effective labor-management relations that lead to unit costs that make service by small jets viable. Internationally, while cooperation among larger domestic carriers is somewhat circumscribed by U.S. antitrust laws, the U.S. DOT (over the objections of the DOJ) has encouraged US and certain foreign airlines to increase their network efficiencies through antitrust immunity, which led to the development of three global branded alliances. Although these alliances are still in the process of developing, one strategic element is clear: Each participating network carrier is valued in terms of its access to its national home markets. Broad market access is also highly valued by the network airlines' most important commercial customers.

For AA, this means that the UA/CO and DL /NW combinations can provide their global branded alliance partners and customers richer, more integrated access to the U.S. market than AA can, but an AA/US merger would enable AA to remain competitive within the U.S. market. Since neither CO nor US, on their own, can provide a comparable scope of market access, it should be evident that, if U.S. policy, as enforced by the DOJ, prevents CO or US from merging, these smaller network carriers will be consigned to second-class status within the branded global alliances in an environment of increasing costs and shrinking revenue.

Internationally, U.S. negotiators and DOT policy have positioned the major U.S. carriers at the center of the developing global networks. European, Chinese and other Pacific governments and their carriers seem content for the moment to let the U.S. and its carriers take the lead. Therefore, the big U.S. policy question is whether the DOJ will focus its competition concerns on a few narrow domestic markets (as it has in the past) or consider the national interest by encouraging a strong, dynamic global aviation network.

If it does the latter, then our analysis shows that the UA/CO merger will result in a more extensive national network that utilizes about 10% less capacity than the pre-merger airlines combined. Similarly, an AA/US merger will result in a national network with more scope utilizing, say, 10-15% less capacity than the pre-merger airlines combined. It is efficiencies such as these that start the industry back on track to sustainable profitability. (To make the optimal structural case, we assume that UA/CO and a hypothetical AA/US combination are each 10% smaller than the sum of the paired airlines before the mergers.)

However, even a UA/CO combination that is 10% smaller removes only 2% of the industry's domestic capacity, while the industry currently has 10-12% excess capacity and maintained approximately 7% too much capacity over the decade ending in 2009. This excess capacity resulted in over \$70 billion in losses system-wide for the U.S. airline industry, which represented 5.7% of revenue. Domestic losses represented 90% of those losses, and the network airlines reported the bulk of those losses.

Currently, there is no off-the-shelf replacement for the benefits that the network carriers bring to the local communities and the global economy. Five network carriers operate unprofitably, even with 80% + load factors, from a variety of hubs, and each of these hubs represents an American community that receives considerable benefits from the access to global markets. Allowing the network carriers to make their networks more rational is far preferable to continuing the hemorrhaging until one or two of the players wither on the vine.

Business, labor and government leadership is required.

Mergers are not a panacea. They involve risk, and without the right leadership from management, labor and government, they can perform poorly and fail miserably. The success or failure of any merger depends on the details of the deal, the ability to execute profitability, and the quality of labor and management cooperation. The DL/NW merger appears to have been implemented with unprecedented levels of labor cooperation from the pivotal pilots' groups, and reports are circulating that UA and CO pilots also exhibited insightful levels of cooperation.

The same cannot be said for either AA or US at this juncture. However, the structural dynamics we highlight are well recognized throughout the industry, so the announcement of a UA/CO deal may well provide a fresh perspective to the labor-management positions of US and AA.

Airlines cannot satisfy labor with the current industry structure.

Labor at the network carriers have lost, on average, 33% of their legacy pay and benefits while undertaking a heavier workload, and the resulting employee discontent in the service-oriented airline industry has contributed to public hostility. Unless a path to renewed growth can be found, employee disenchantment—and public hostility—will continue to grow.

We estimate the network carriers' domestic capacity will shrink to 53% of the total domestic capacity by the end of 2010, after the UA/CO combination versus 80% 10 years ago [Figure 2]. If network consolidation proceeds as we believe it should, the three rationalized networks will lower network capacity and costs considerably—approximately \$1 billion for each combination—and facilitate the profitability required to restore labor compensation to an acceptable level. Moreover, if the secular trend of faster relative growth in LCC capacity continues, and the three network airlines combine as we suggest, the remaining three networks would eventually provide only 35-40% of the total domestic ASMs. The result is a level of market concentration that protects the consumer from anti-consumer pricing and encourages an increase in lower-cost competition.

Figure 2:

Market Share in Available Seat Miles (ASMs)

Percentage of total domestic-only ASMs

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | % chg |
|------------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Network Airlines | 81% | 80% | 78% | 75% | 69% | 66% | 64% | 61% | 58% | 57% | 56% | -33% |
| Southwest | 8% | 8% | 10% | 10% | 11% | 11% | 11% | 13% | 13% | 14% | 15% | 88% |
| Other | 11% | 12% | 13% | 14% | 20% | 23% | 25% | 26% | 28% | 29% | 30% | 173% |

The resulting domestic market will be divided among the low-cost and regional carriers, on one hand, and the network carriers on the other. Southwest continues to be a dominant provider of ASMs but, viewed in global terms, this domestic configuration does not risk giving any player unreasonable market power. Airlines will be able to share more with labor and make much-needed capital investments if industry consolidation results in system-wide network rationalization.

Where do we go from here?

In the meantime, the network carriers remain vulnerable to higher costs that may be forced on them by poorly conceived government policies or labor actions. With higher costs, the network airlines' slow liquidation spiral will accelerate as more aggressive LCCs attack the network airlines' international and domestic markets.

The network carriers provide an essential service to the national economy as their networks link small, medium, large and international markets around the globe. Given the current condition of the industry, the network airlines can survive over the long run only if the government allows consolidation in the form of mergers.

The market structure work we recently completed provides data and analyses that demonstrate how network consolidation and rationalization can allow the industry to break even in economic cost term over a full business cycle. This is a valid measure of minimum profitability that we believe is the best way to assess the industry's health and viability. It is our contention that the market and its global network structure is the proper context for a healthy debate about the benefits and risks of network airline mergers and consolidation. Whether viewed in national or global terms there will remain a wide variety of competitive airlines providing consumers with many air travel choices.

It takes rational government policies and sound management and labor leadership to arrive at a public policy that can advance, rather than hinder, the restructuring this industry needs. Absent a change in industry structure, the network airlines will continue to shrink. As a result, communities around the nation will be increasingly isolated from global markets, and capital markets and labor will continue to withdraw their support in ways that ultimately harm the consumers of air travel and the broader economy. It is for this reason we believe that further consolidation is needed and that a merger between AA and US likely represents the best option for the stakeholders of these airlines.

UA, CO, DL, and NW management have made the right decision to combine operations in a way that benefits their employees, shareholders, and the communities and air travelers that can now be better served by a business that has a chance to earn the

required level of profitability. In the final analysis, we believe that mergers represent the best outcome for an industry in desperate need of consolidation.

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