

DELTA: PAST, PRESENT AND FUTURE

NOVEMBER 30, 2005



**ECONOMIC FORECASTING CENTER
J. MACK ROBINSON COLLEGE OF BUSINESS
GEORGIA STATE UNIVERSITY
ATLANTA, USA**



DR. RAJEEV DHAWAN, DIRECTOR

KRISTIN W. DIVER, ASST. DIRECTOR

CURRENT SITUATION

Particularly after September 11th, the airline industry business model has radically changed. Lean upstarts with better cost structures, cheaper labor and fuel-efficient equipment have squeezed traditional airlines so badly that four of the top six legacy carriers have been pushed into Chapter 11 and the industry has lost over \$38 billion in only four years.

Delta, one of Georgia's largest employers, has lost \$10 billion since 2001 and despite efforts to trim \$5 billion in savings by 2006 (which the airline is on track to deliver), Delta finally filed for bankruptcy on September 14, 2005. The airline quickly announced plans to cut an additional \$3 billion in costs by 2007 through a three prong strategy:

- \$1.1 billion in route restructuring
- \$970 million in fleet changes
- \$930 million in employment cuts

The \$1.1 billion in route changes will increase Delta's point-to-point system, reduce struggling domestic routes by 20% and increase profitable international capacity by 25%. Delta's \$970 million in fleet changes revolves around reducing the types of aircraft from 11 to seven, which will simplify maintenance costs and training. Bankruptcy

also allows Delta to reject leases on 40 planes and remove an additional 80 planes from its fleet. The \$930 million in employment cuts will come by eliminating up to 9,000 positions, trimming pilot salaries by \$325 million, and reducing management salaries by 25% and front-line employee salaries by 10%.

WHAT CAUSED IT?

Delta remained profitable until 2001 when the industry was severely shaken by the 9/11 attacks. Air travel immediately plummeted and the industry's insurance skyrocketed from \$15 million to \$903 million a year. Additionally, competition from smaller, leaner airlines with better cost structures, younger, cheaper labor and more fuel-efficient equipment stepped into the marketplace and squeezed traditional airlines into competing on price.

Beginning in 2003, with the installation of new CEO Gerald Grinstein, Delta made serious efforts to slash costs by \$5 billion by 2006. The company cut travel agent commissions, installed check-in kiosks, reduced airport personnel by 15,000 employees, renegotiated debt payments and eliminated its secondary hub in Dallas. However, the issues that made the largest difference to Delta's bottom line were the rising price of fuel and higher-than-average pilot salaries. We'll start with the latter.

Expensive Employees

Delta employs 7,200 pilots, whose salaries in 2004 made up 13.5% of the company's total costs, up from 8% in 1999. This significant increase is a result of a contract negotiated a couple months prior to 9/11 which agreed to an unconditional annual 5% salary raise, causing pilot salaries to balloon to \$2 billion a year by 2004, far above the industry average. While Delta's pilots agreed to a \$1 billion haircut in November 2004, the airline is seeking an additional \$325 million as part of its bankruptcy reorganization.

Spiraling Fuel Costs

Moving on to Delta's fuel costs, the rising price of oil has become a serious issue over the past two years for a number of reasons. An unprecedented increase in the demand for oil from emerging markets such as China and India, as well as the steady increase in demand from the US, has put pressure on oil supplies. Oil-producing countries are also charging more to make up for lost revenue from a weaker U.S. dollar, the currency in which oil is traded. Consequently, the market price for a gallon of jet fuel has tripled since 1999, going from \$0.51 a gallon in 1999 to just over \$2.00 after Hurricane Katrina in September. At this level, fuel costs are running at 20% of Delta's revenue instead of 10% just a few years ago. This rise has already wiped out much of Delta's savings from the last two years. Now, if fuel prices stay at these levels and Delta continued to operate the same level of flights, the fuel bill will rise from current \$3.5 billion to over \$5 billion dollars in 2006, almost 30% of the current revenue. Thus, filing for bankruptcy was inevitable to pare down operations.

When it comes to hedging fuel costs Delta actually sold a long-term fuel hedge contract in early 2004 to generate hard cash. Unfortunately, given Delta's current tenuous financial situation, the company is ineligible for a below-market fuel contract. In comparison, competitor Southwest, with the healthiest balance sheet in the industry, purchases its fuel at \$0.72 through a hedge contract. This is under half the current market rate, giving Southwest a tremendous advantage over its competition.

FALLOUT ON ATLANTA'S SOUTH SIDE

Given that nearly 20,000 Delta employees live in the Atlanta area, down from 28,000 in 2000, these layoffs and salary cuts will make a significant impact to Atlanta's economy. While Delta may claim that their Atlanta base will suffer the least from the reorganization, the final decision is with the bankruptcy courts. This will be felt particularly strongly on Atlanta's south side where a majority of Delta employees live in Clayton, Fayette, Coweta, Henry and southern Fulton County (see Table A below).

Table A
Number of Delta Employees
in Atlanta's Southern Counties

Fayette	3,500
Fulton	3,000
Henry	2,800
Coweta	2,400
Clayton	2,300

Source: Delta HR Dept

The south side of Atlanta has seen an airline in trouble before. When Eastern Airlines liquidated in 1991, 4,000 employees in Clayton County suddenly lost their jobs. While many were eventually picked up by other airlines, the short-term damage was immediate and severe. According to the Development Authority of Clayton County, retail sales in Clayton County declined sharply by 12% in 1991. Home prices fell and only recovered a few years later. The hotel occupancy rate near the airport, which in the 1980's was Atlanta's highest, plummeted.

Currently in Fayette County, there are 3,500 residents that work for Delta. According to the Fayette County Development Authority, the average salary for these employees is \$98,000, which is double the average salary for the Atlanta area and probably means that a large percentage of high-wage earners, such as pilots, management and long-term employees live in Fayette County. All these employees will be subjected to deep wage cuts.

To calculate the economic impact of eliminated positions and salary haircuts, we went through the following exercise and came to the conclusion that Delta's savings plan is equivalent to the Atlanta economy losing roughly 15,000 jobs.

Let's first take the maximum amount of announced layoffs (9,000) that will start in just a few weeks. Assuming that roughly one-third will be in Atlanta (the current share of Delta's total employment in Atlanta), this is the direct impact. Indirectly, these jobs support other jobs in the area with their spending or purchasing power, also known as the job multiplier effect. If one assumes a multiplier of 2.75 for these jobs, whose average salary is \$95,000 (a very conservative number), the indirect impact is that about 5,250 jobs will be lost or foregone as a result of Delta's cutbacks. This brings the total impact of outright job layoffs to 8,250 (see Figure 1). But that's only half the story.

Of the employees that survive this round, Delta will reduce their salaries. In taking out the current wages of the 9,000 layoffs from \$930 million, this leaves about \$390 million in salary cuts for the company. With approximately 1/3rd of Delta's 52,000 employees in the Atlanta area, this means that about \$150 million in wage cuts would occur in Atlanta. Assuming an average tax rate of 25% and a marginal propensity to consume of 0.9, we calculate a \$100 million drop in purchasing power for the local economy. This turns out to

Figure 2

Salary Cutbacks Lead to Job Losses



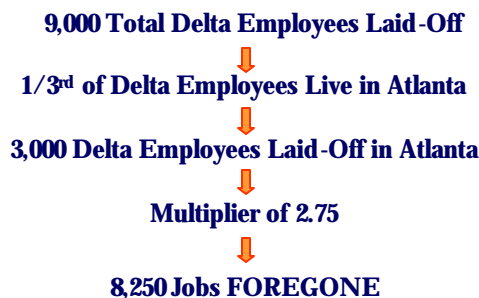
be \$5,000 per Delta employee.

Now, let's consider what \$100 million less in spending means for job growth (or losses) for the area. Given that Atlanta's average worker salary is \$41,000, this means that 2,500 fewer jobs will be created in the first round of salary cuts. Given that all jobs created (or lost) have a multiplier effect, the total number of jobs foregone from lost purchasing power is about 6,800 (see Figure 2). Thus, from these two calculations (outright layoffs and the salary haircut), a total of about 15,000 jobs will be lost or forgone from job growth in the Atlanta metro area. This is the impact from just the first round of scaling back. The question now is whether this is the first of several.

Unfortunately, Delta's woes don't stop there. A downsize in operations will have devastating effects on the airport's \$6 billion expansion plan. With the 5th runway complete, the next project was supposed to be the \$1.4 billion international terminal, which would have started construction in late 2006. Also up in the air is the \$1.8 billion new passenger complex, which was supposed to open in 2010. Now, construction for these projects and the jobs they would have created are temporarily on hold. Until Delta emerges from bankruptcy, which could take years, these projects will likely remain uncertain.

Figure 1

Delta Layoffs Lead to Job Losses



FUTURE STRATEGY: THINK OUTSIDE THE BOX?

Upstart airlines have purchased new, fuel efficient airplanes, spent less on fuel and hired workers with lower salaries and less expansive benefits. As a result, they have been very effective in competing on price and luring travelers away from the larger legacy carriers. The legacy airlines cannot match the low-cost airlines even with bankruptcy protection. Their hub-and-spoke system worked well in the booming 1990's when business travelers, flush with cash, had no qualms paying a premium. However, this system is much more expensive to operate than the low-cost carriers' point-to-point system.

With the dot-com burst in late 2000, followed by 9/11, the legacy carriers lost business travelers to a slow economy and short-haul passengers to the hassle of new 9/11 security requirements. This change in flying habits has moved the demand frontier permanently downwards. With low-cost upstarts coming into the game, the drop in the supply curve to maintain prices and profitability has been minimal. The net result is that prices have dropped and the industry is saddled with excess capacity, translating into record profits losses and concomitant worker layoffs for the less efficient players. So what should they do?

The best scenario for the airlines, and the industry, is to think outside the box. There is still one segment where low-cost carriers seldom tread and where legacy carriers can charge a premium price --- international. The old practice of using a hub-and-spoke system for domestic travel to feed international flights is now archaic as there are too many airlines in the domestic market. The only way out is a radical shift in thinking: *outsource to low-cost airlines to bring passengers to your hubs*. Then fly these travelers at premium prices to international destinations, where there is less competition.

Curiously, consumers won't have to pay higher domestic prices because any new entrants will have to have a low-cost model which will keep domestic prices low. Considering consumers already pay a premium for international travel, prices probably will not rise, in fact,

they might even drop as legacy airlines stop milking their international routes to pay for their losses on the domestic side. Of course, in the short-term, such a plan would cause a hefty number of job losses but the industry will be better off in the long-run as low-cost airlines grow to absorb these displaced people. This redeployment of assets to a better use is based on the principle of comparative advantage. If investors do this all the time when making changes to asset portfolios, why can't the airlines?

Delta in its public announcements has been calling for expansion in its international routes. However, the airline has a lot of catching up to do with its competitors. The table below shows the international component of flights for the major airlines. The percentage of Delta's international routes compared to its total routes is only 24%, the lowest of the legacy carriers. For Continental, its international flights make up 47% of its total! It seems other airlines are way ahead of Delta in this game. This is also reflected by the percentage of international flights leaving the hubs of these airlines. International flights out of Atlanta airport make up are only 7% of total flights, Chicago is 15%, Washington, D.C. is 20% and in New York is 45% (see Table B below).

Table B
Proportion of International Flights

New York	45%
Los Angeles	27%
Washington DC	20%
Chicago	15%
Atlanta	7%

Source: Airport websites, EFC Research

Delta has a long way to go before it becomes a viable model. Luckily oil prices have started to drop but any hiccup in this area will make Delta's turnaround plan very vulnerable. Our own "hurricane" Delta has begun, it's at category two and can easily escalate higher. One thing is for sure - Delta as we know it certainly won't be there a few years from now.