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The Brattle Group

Structural Causes of Airline Cyclicity: Are We Sowing the Seeds for the Next Downturn?

**What is Wrong with the Airline Industry,
and How Can We Fix It?**

**Kevin Neels
January 14, 2008**

The Industry Today

The industry is emerging slowly from a severe and extended downturn marked by a substantial number of bankruptcies

- US Airways
- United
- Northwest
- Delta



The Air Transport Association projects substantial profits for the industry over the year ahead

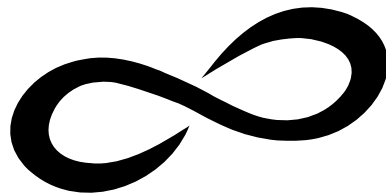
- US airlines will post a collective \$3.5-\$4.5 billion net profit in 2008, which would mark the US industry's third consecutive profitable year (excluding bankruptcy restructuring-related losses in 2006), a feat not achieved since 1998-2000.

Whether these good fortunes will last is anybody's guess

Have we been here before?

Eternal Recurrence

Eternal recurrence is a concept which posits that the universe has been recurring, and will continue to recur in the exact same form an incomprehensible and unfathomable number of times.



Sources of Cyclicity

Underlying industry structure

The compensation cycle

The order cycle

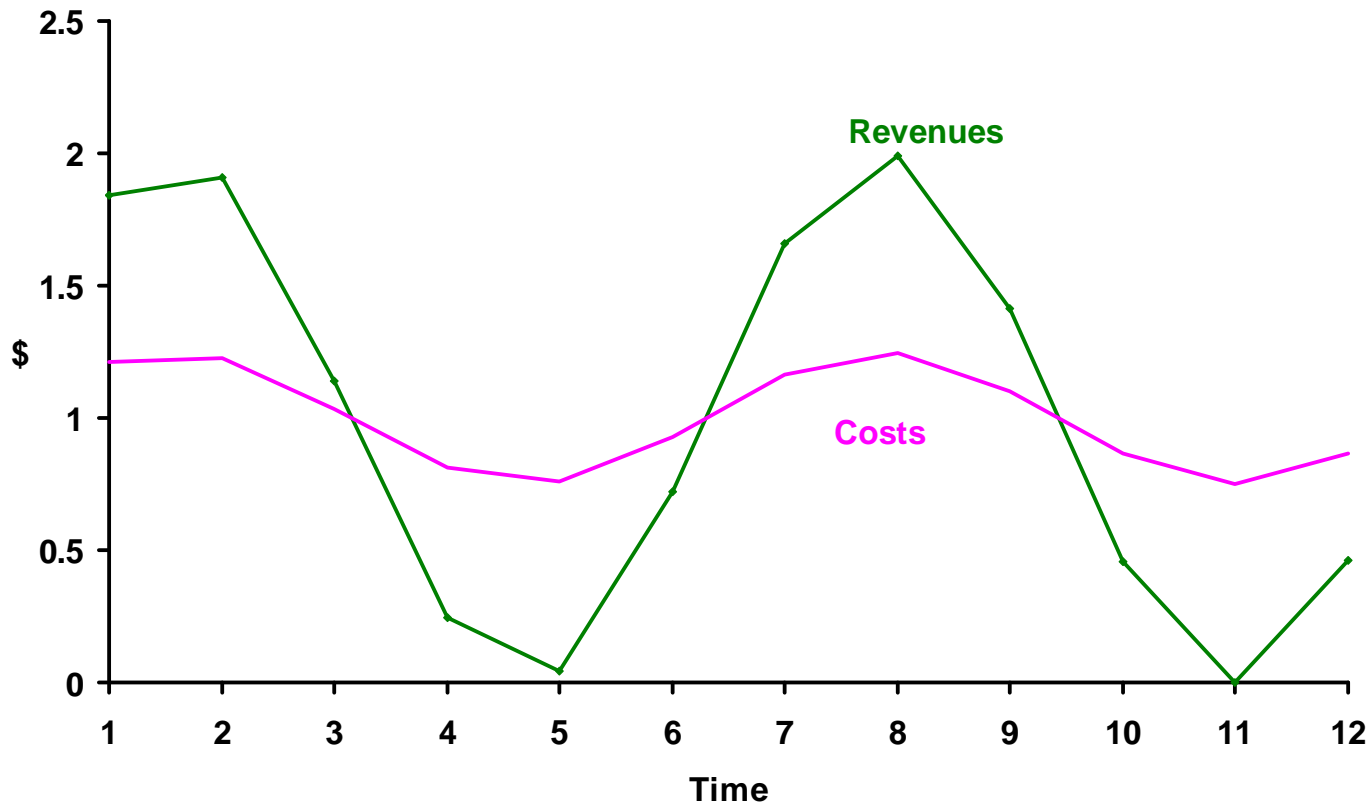
Sources of Cyclicity

Underlying industry structure

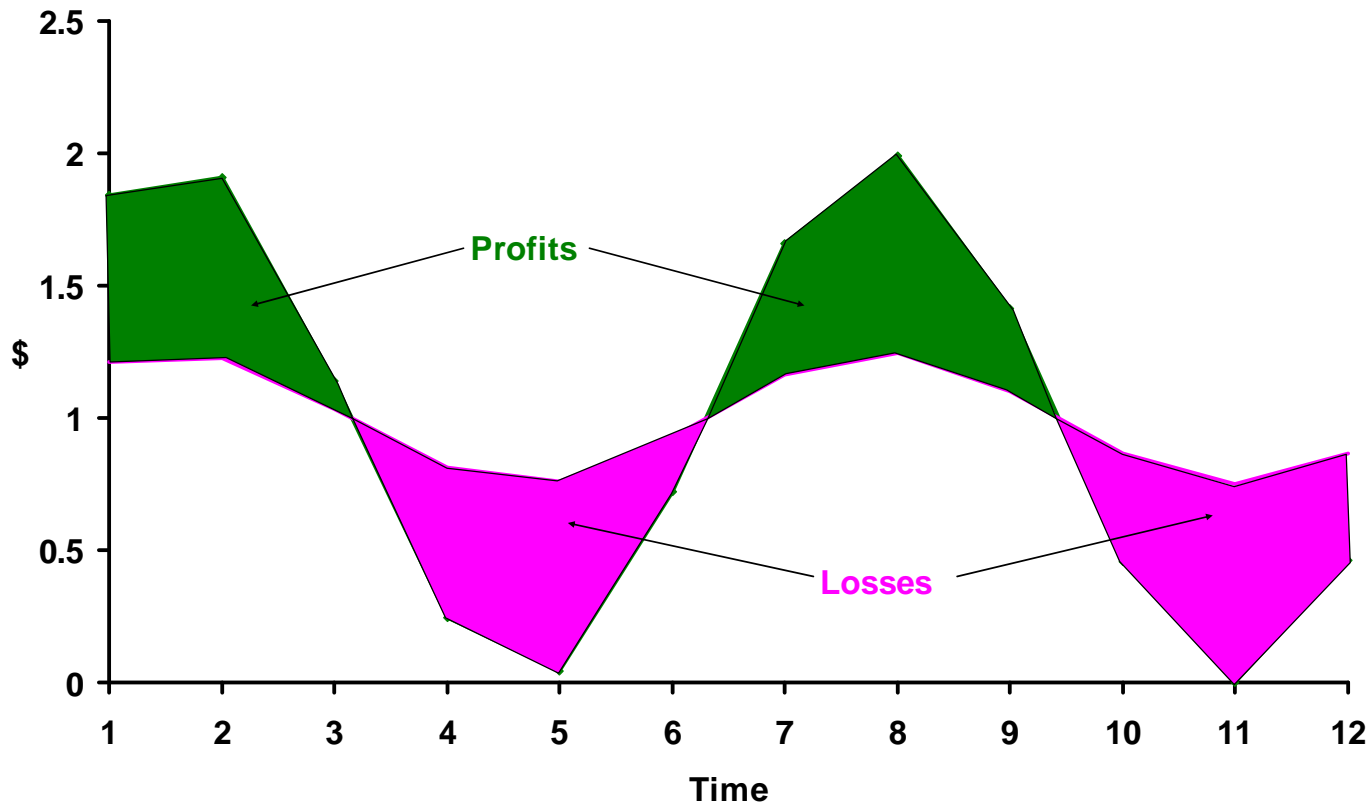
The compensation cycle

The order cycle

Some Industries are Characterized by High Fixed Costs, Low Variable Costs and Cyclical Demand



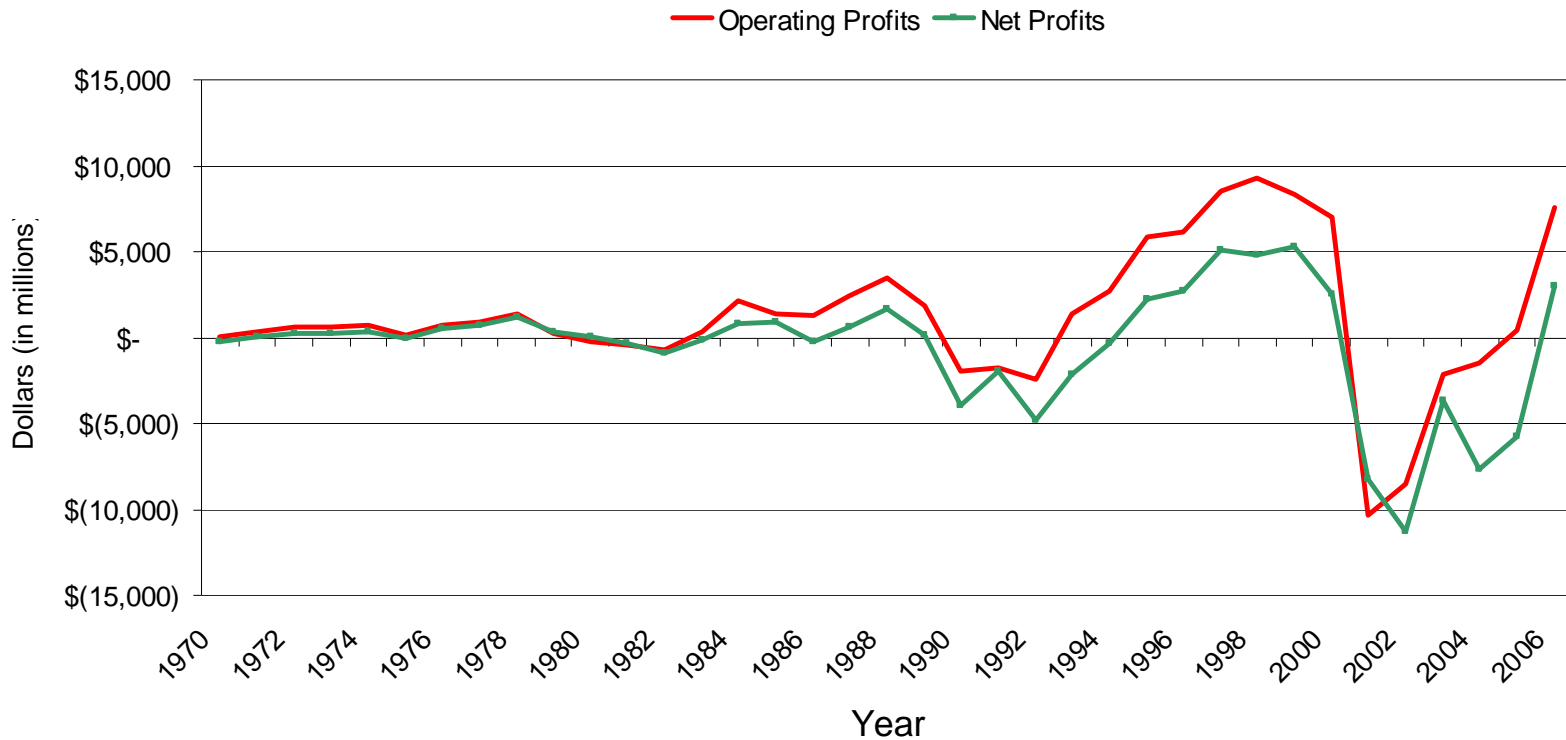
Such Industries Can Fluctuate between Profit and Loss



Does this describe the airline industry?

US Airline Industry Profits

US Airline Industry Profits



But there are some differences...

Generally even a cyclical industry will be profitable over the long term.

Cumulative profitability has eluded the airline industry, however.

- The good times are not good enough
- The bad times are terrible

Several aspects of the airline cycle amplify downturn losses

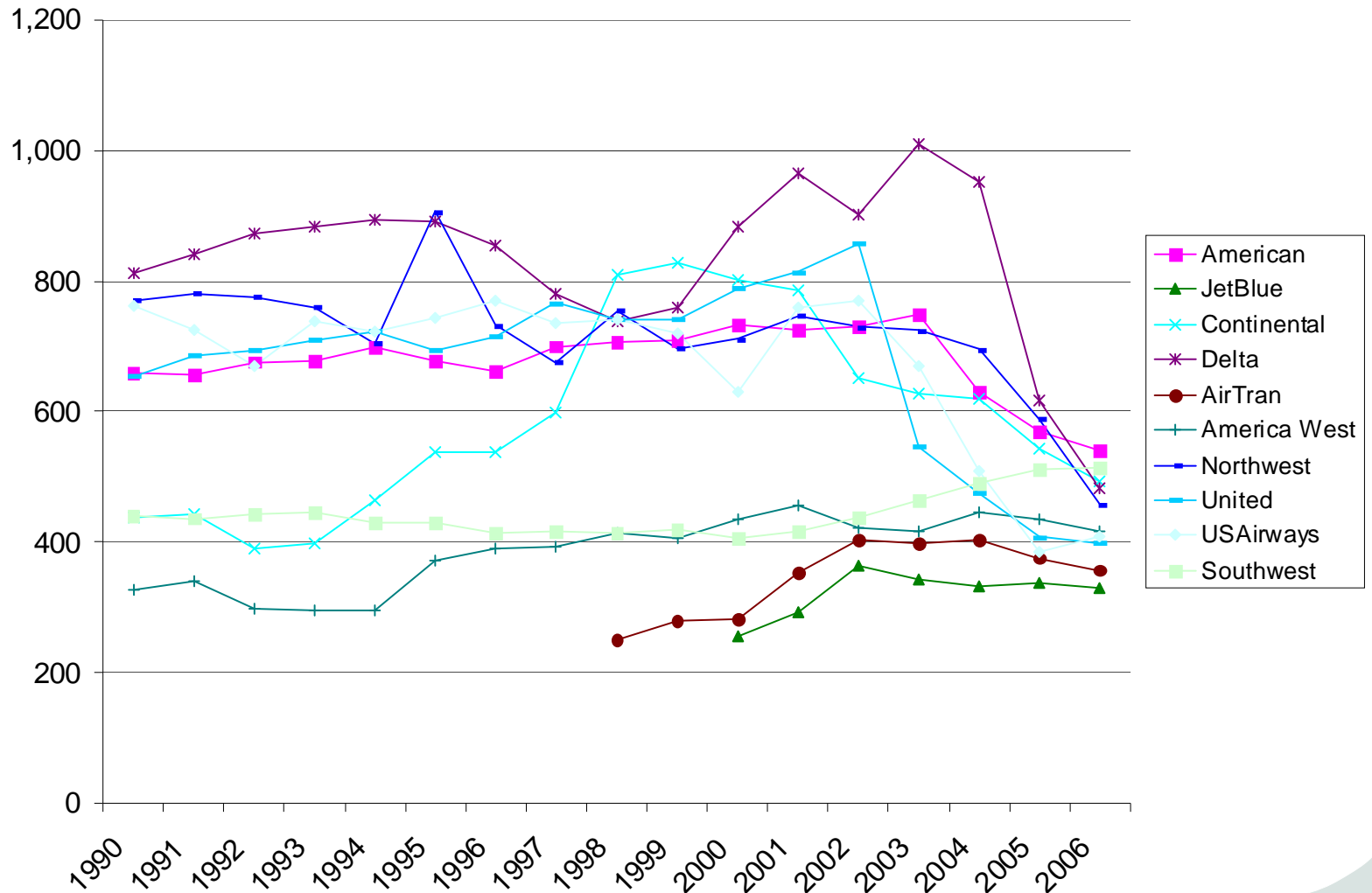
Sources of Cyclicity

Underlying industry structure

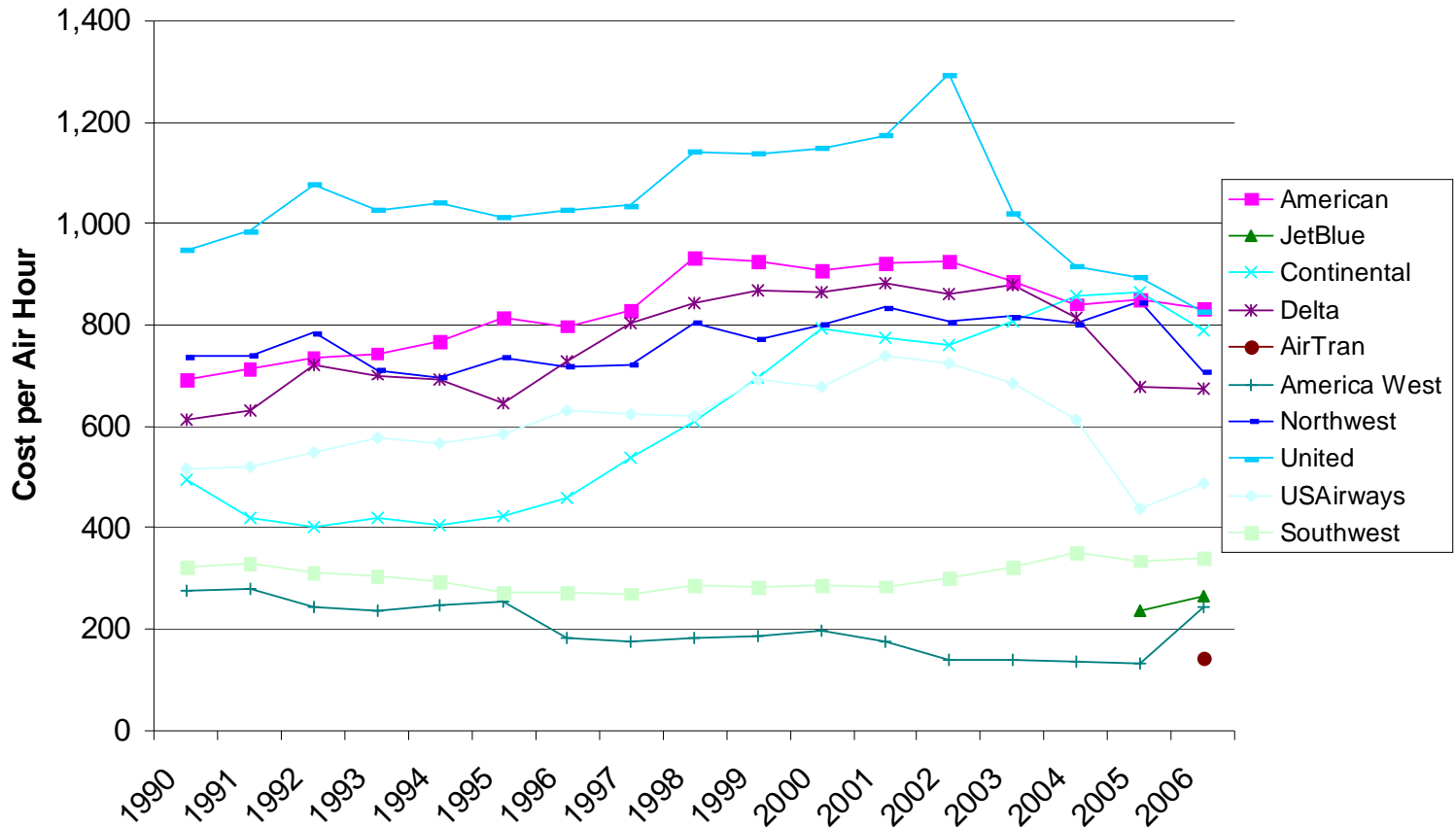
The compensation cycle

The order cycle

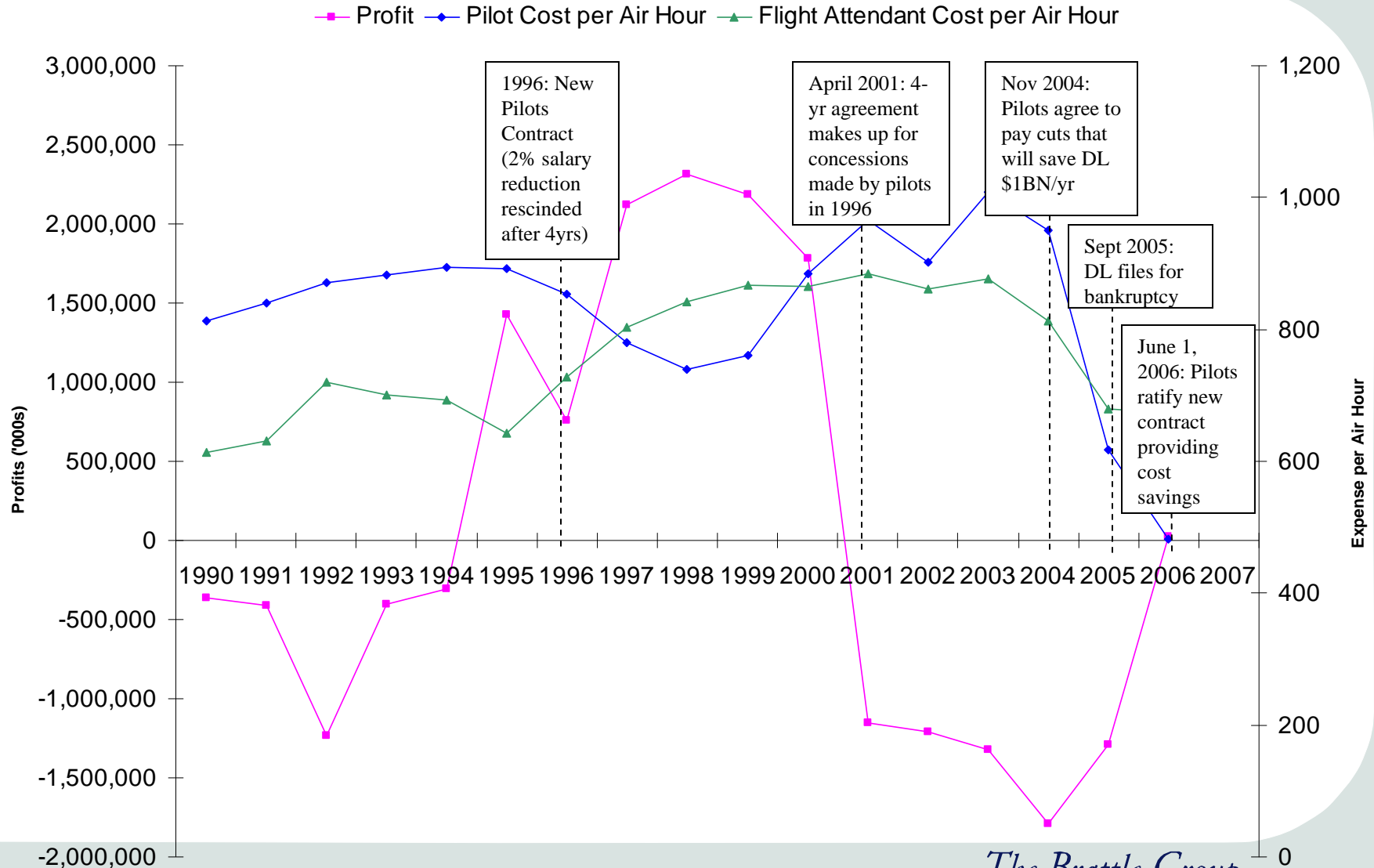
Pilot Costs per Air Hour (in 2007 dollars)



Flight Attendant Costs per Air Hour (in 2007 dollars)

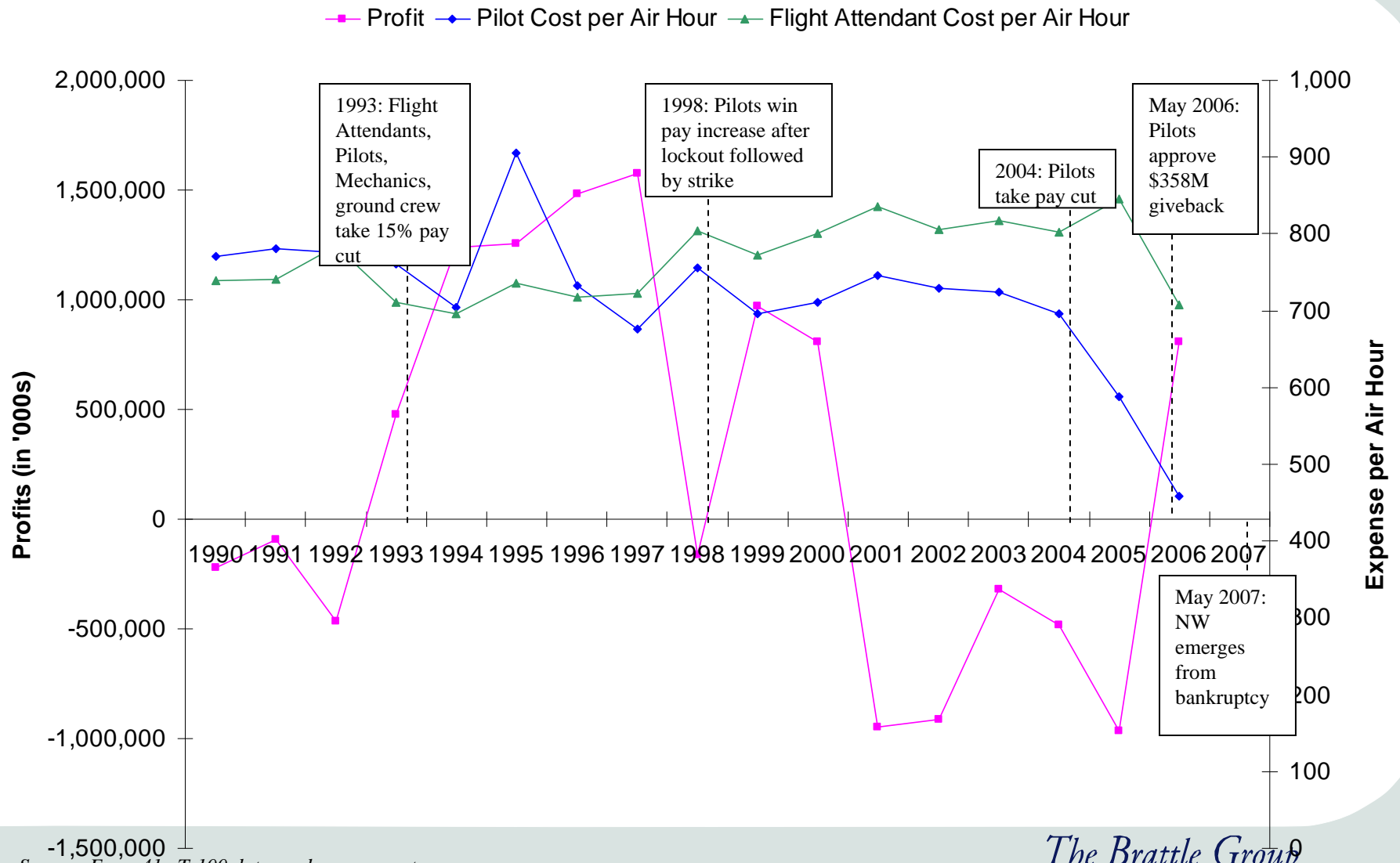


Delta Profits and Crew Costs (in 2007 dollars)



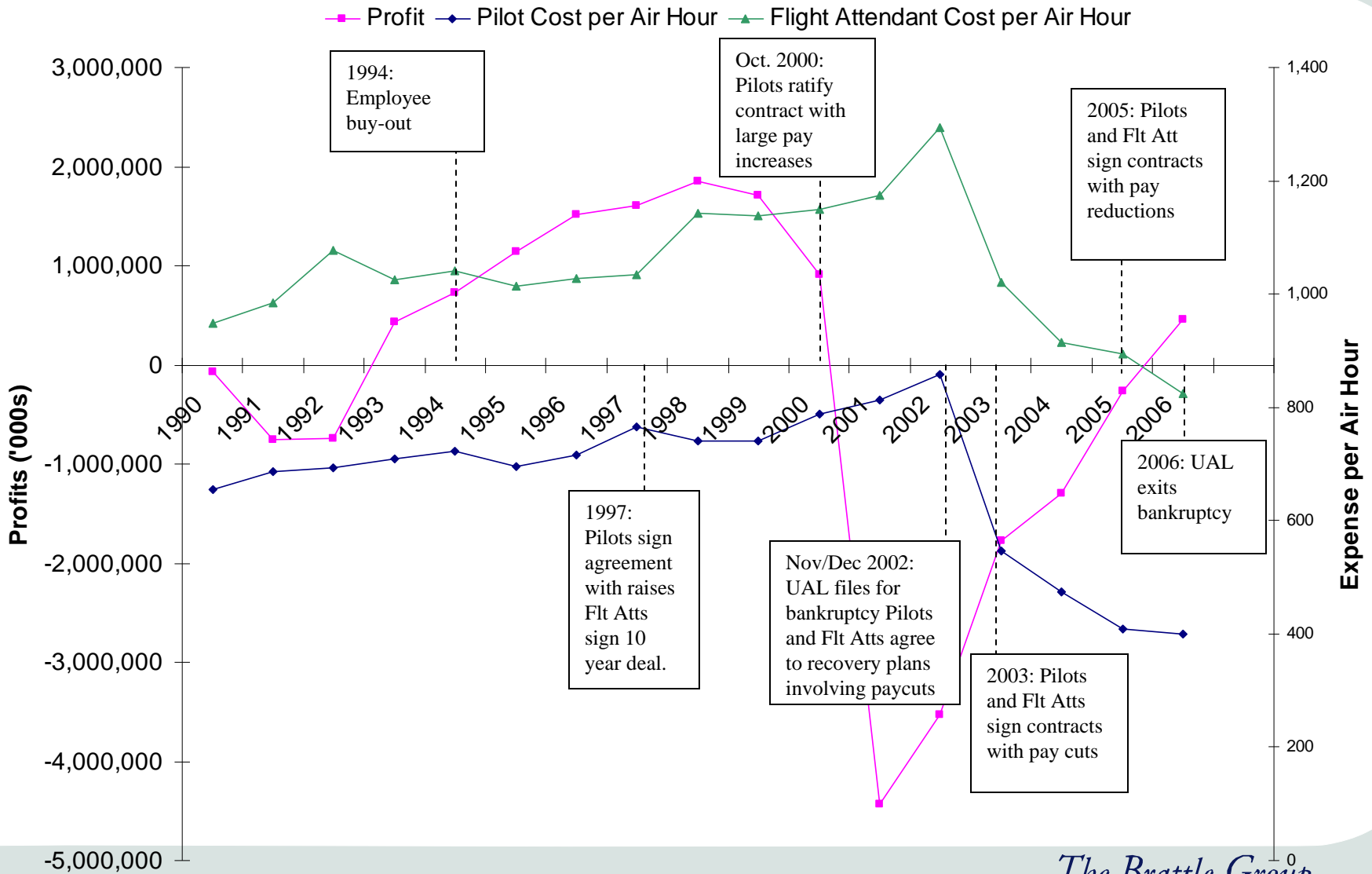
Source: Form 41, T-100 data, and news reports

Northwest Profits and Crew Costs (in 2007 dollars)



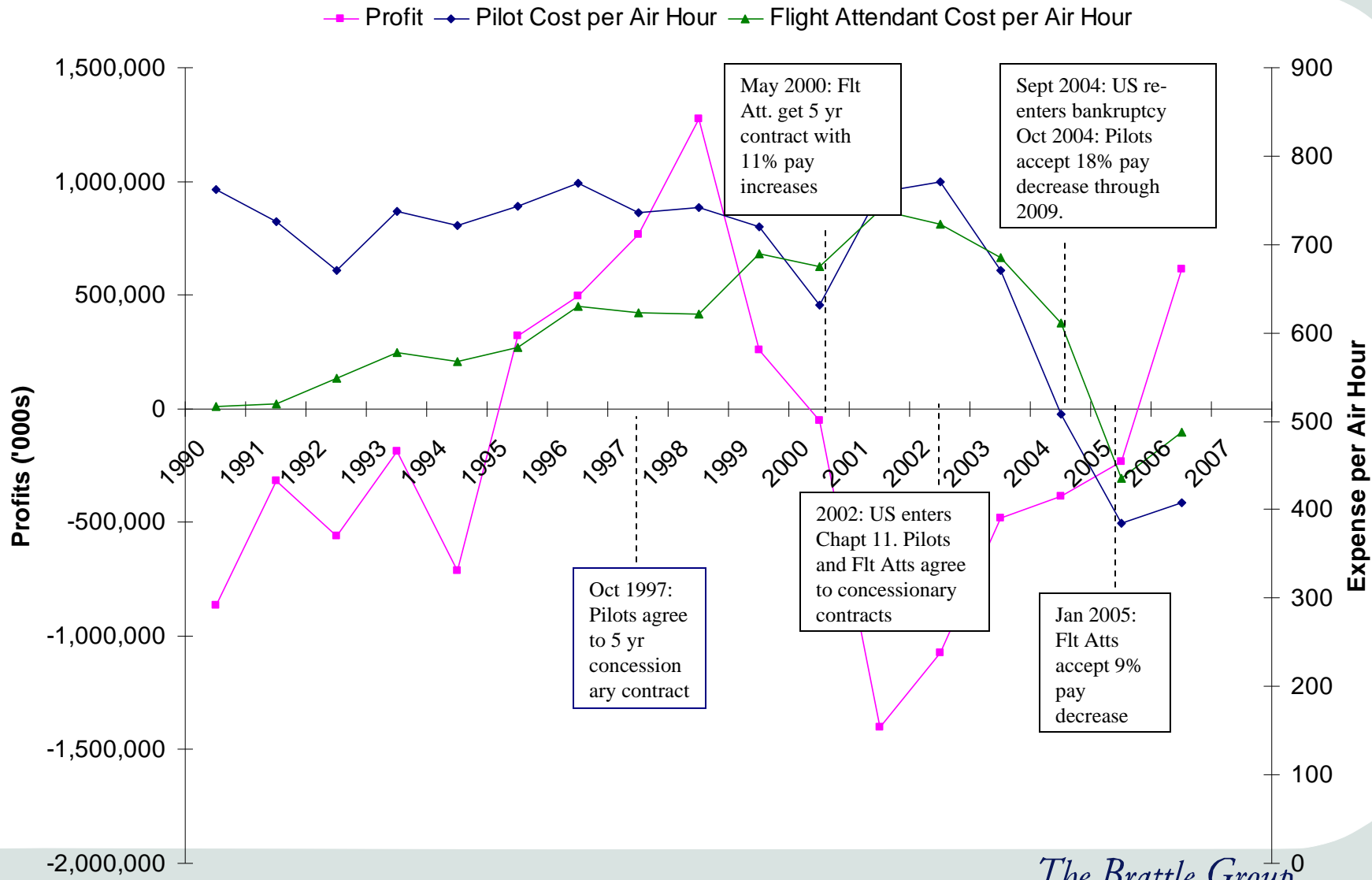
Source: Form 41, T-100 data, and news reports

United Profits and Crew Costs (in 2007 dollars)



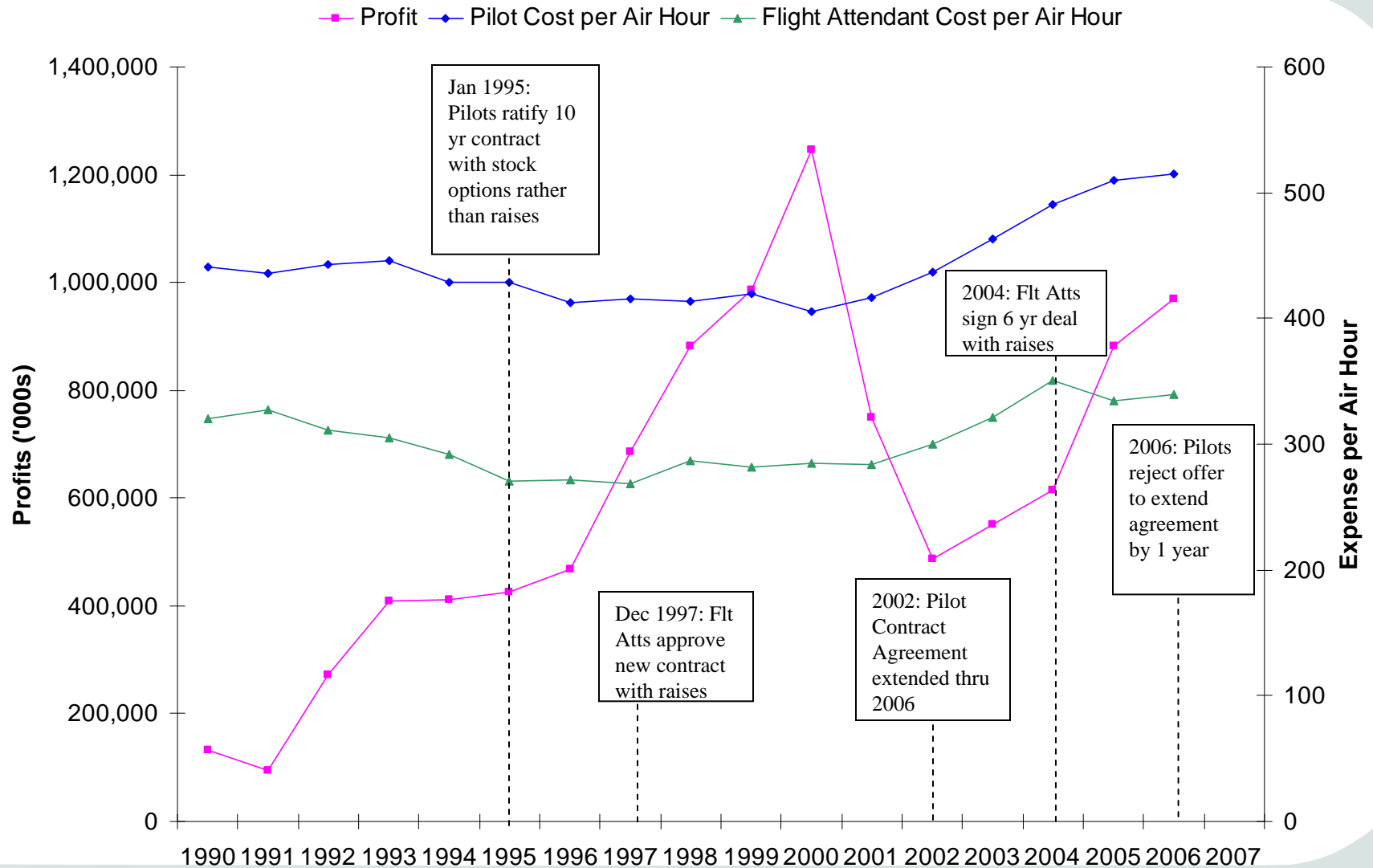
Source: Form 41, T-100 data, and news reports

US Airways Profits and Crew Costs (in 2007 dollars)



Source: Form 41, T-100 data, and news reports

Southwest Profits and Crew Costs (in real 2007 dollars)



Source: Form 41, T-100 data, and news reports

The Dynamics of the Compensation Cycle

The legacy of regulation

- Under regulation workers were well compensated, setting expectations for “what we deserve.”
- Competition created pressures to reduce labor costs.
- Memories are long, however, and expectations slow to adjust.

The Dynamics of the Compensation Cycle

Eternal recurrence...

- Losses during downturns pressure carriers to demand wage concessions.
- A return to profitability prompts workers to demand a return to pre-concession compensation levels.
- Increased labor costs erode upturn profits and amplify downturn losses.
- New entrant carriers have been less subject to this cycle.

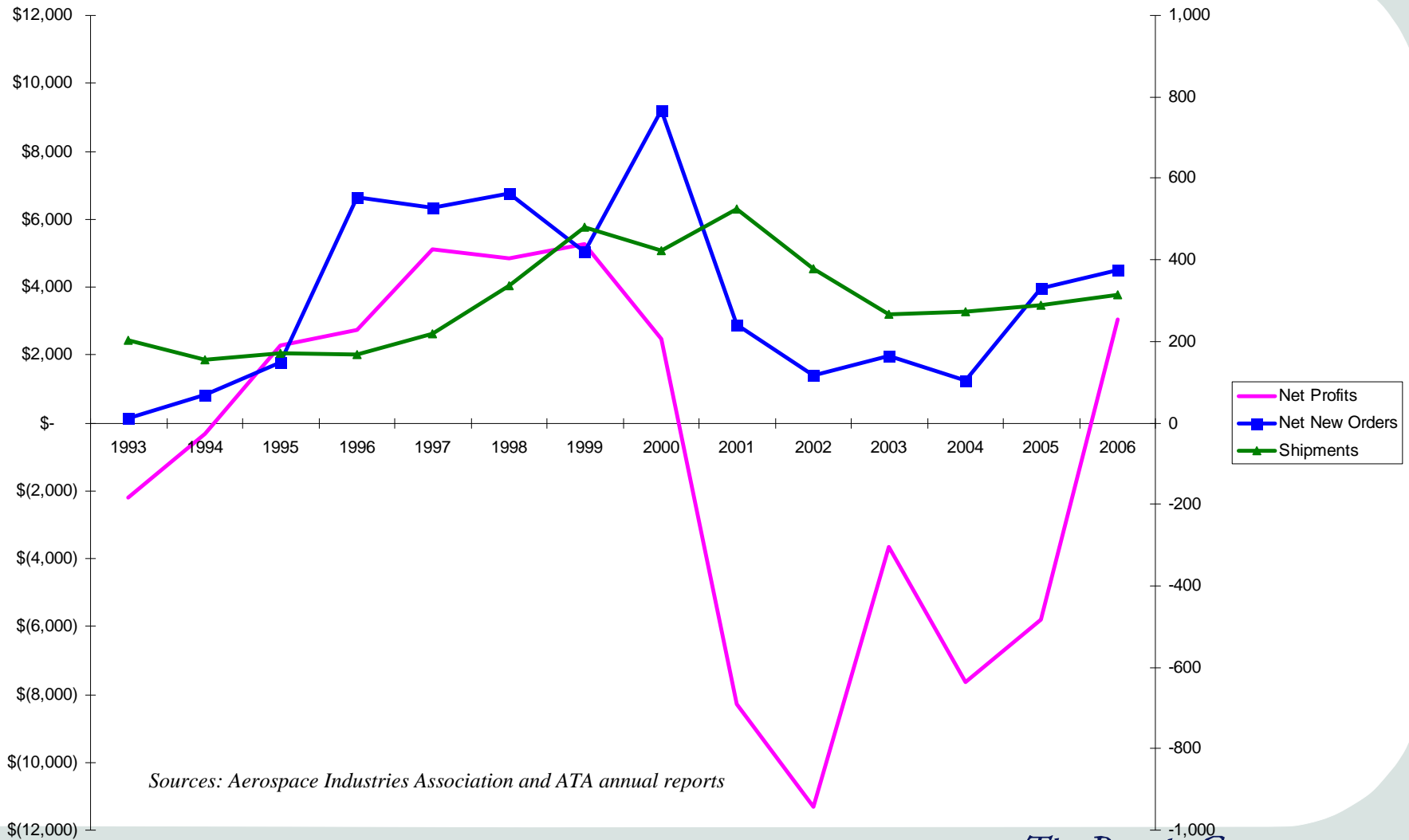
Sources of Cyclicity

Underlying industry structure

The compensation cycle

The order cycle

Profits, Aircraft Orders, and Aircraft Shipments



Sources: Aerospace Industries Association and ATA annual reports

Dynamics of the Order Cycle

- New orders increase during upturns.
- As orders accumulate, delivery schedules lengthen.
- The slow pace of deliveries limits carriers' ability to exploit the upturn.
- New aircraft deliveries spill over into the downturn, worsening an already unfavorable supply demand balance and amplifying downturn losses.

What to do? Some Potential Ideas for Change

- **Bankruptcy, and possibilities for “culling the herd”**
- **Indexing labor compensation**
- **Leasing**
- **Congestion pricing**

Should Bankrupt Carriers be Forced to Shut Down?

Some have advocated putting an end to the “living dead.”

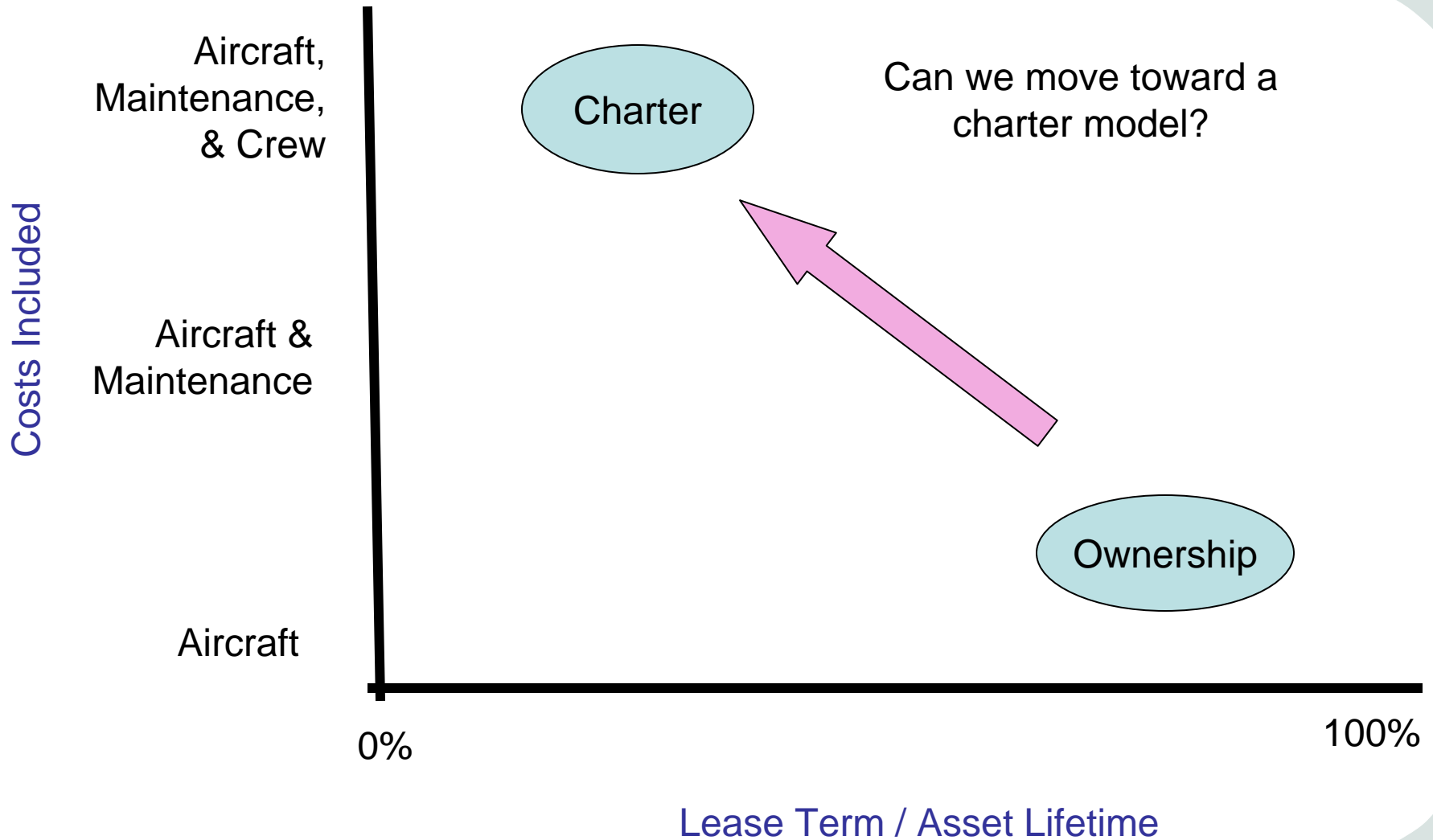
However there are potential problems...

- Would a shutdown really eliminate excess capacity?
- Would market concentration increase?
- Do we really want to liquidate firms in response to cyclical downturns?

Indexing Labor Compensation

- Labor compensation has varied over the industry cycle, changing in a series of acrimonious confrontations.
- Could unions and management agree to a formula-based adjustment mechanism?
- The positive example of state rainy-day funds.
- The negative example of the United ESOP.

Leasing Comes in Many Forms



If We Move toward the Charter Model...

Costs become more variable.

Profits become less variable.

Expansion incentives during upturns weaken.

Transfer of excess capacity to other markets becomes easier.

However,

Lessors are forced to absorb cyclical risks.

Congestion Pricing Could Dampen Industry Cycles

- Congestion worsens dramatically during upturns.
- Proceeds from slot auctions would rise during upturns.
- Incentives for expansion during upturns would weaken
- Funneling auction proceeds into the Aviation Trust Fund could permit reductions in other user fees.
- The Trust Fund as industry shock absorber.
- The Federal Reserve, the party and the punch bowl.

What Are the Prospects for Real Change?

Lessors have already assumed a larger role, and will likely continue to do so

Can the labor compensation cycle be broken? Good labor relations as a strategic advantage.

The futures of the Trust Fund and of congestion pricing remain unclear.

Is There a Will to Change?

Do we face Eternal Recurrence, or

A series of unfortunate events...