



# *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



U·S AIRWAYS



UNITED



nwa  
NORTHWEST AIRLINES



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

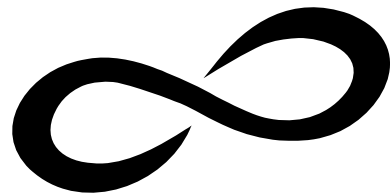
- US airlines will post a collective \$3.5-\$4.5 billion net profit in 2008, which would mark the US industry's third consecutive profitable year (excluding bankruptcy restructuring-related losses in 2006), a feat not achieved since 1998-2000.

**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**

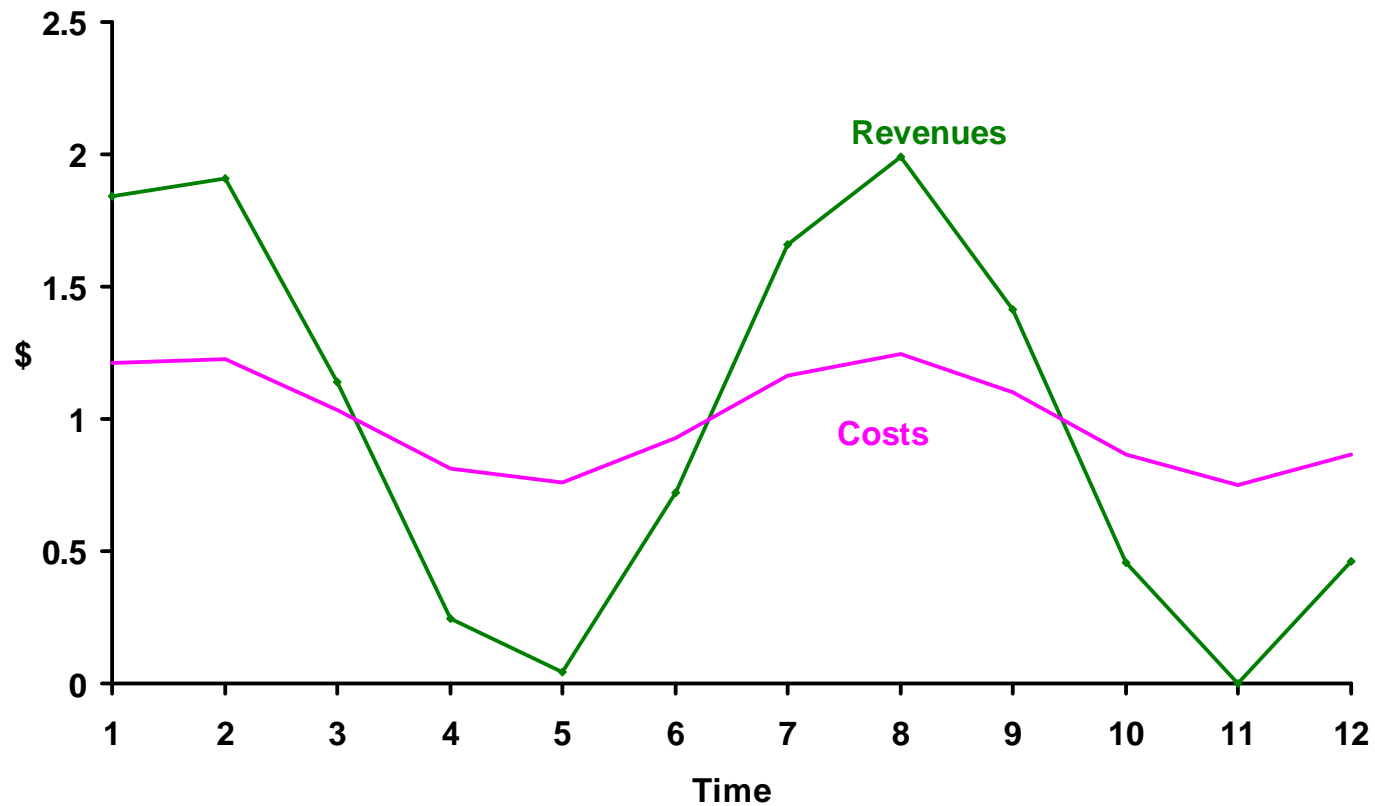
# Sources of Cyclicity

**Underlying industry structure**

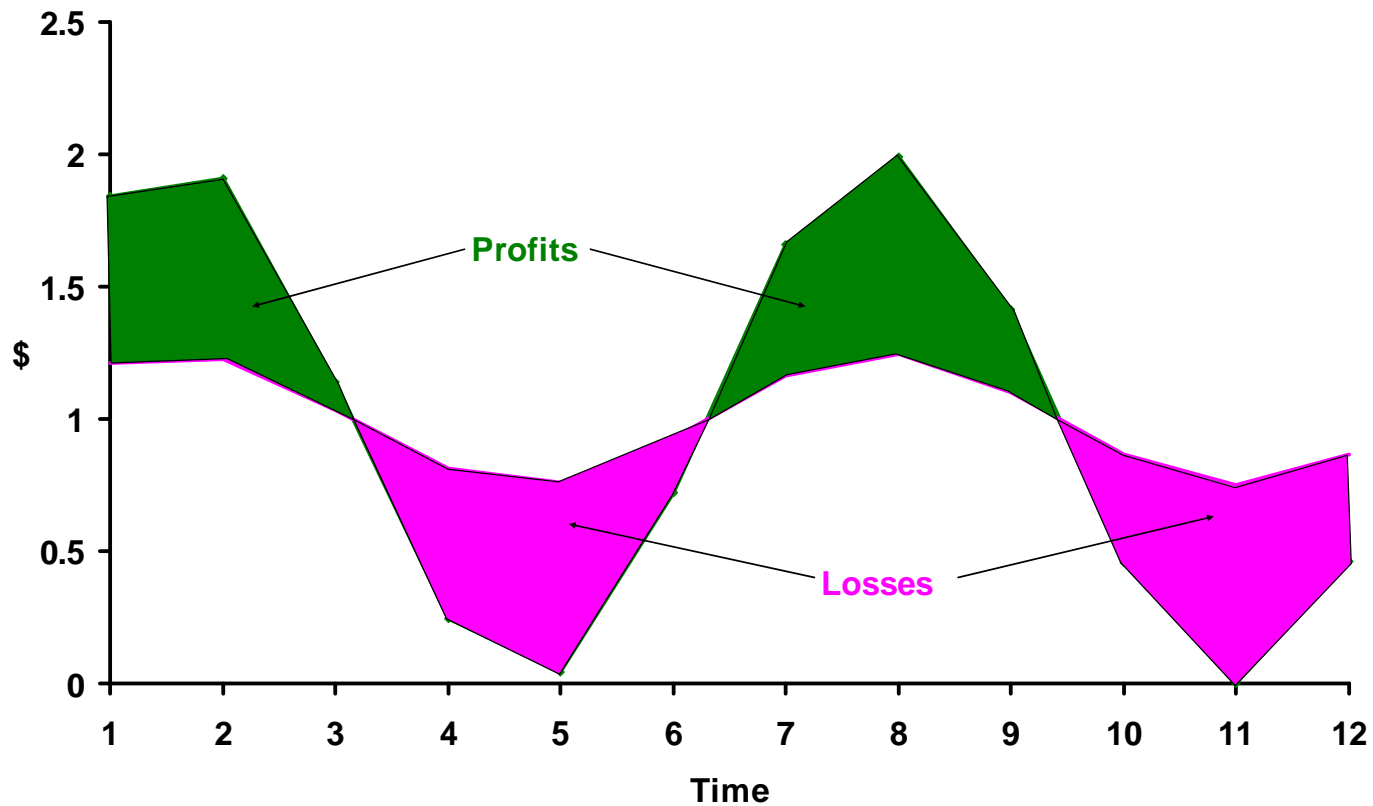
**The compensation cycle**

**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

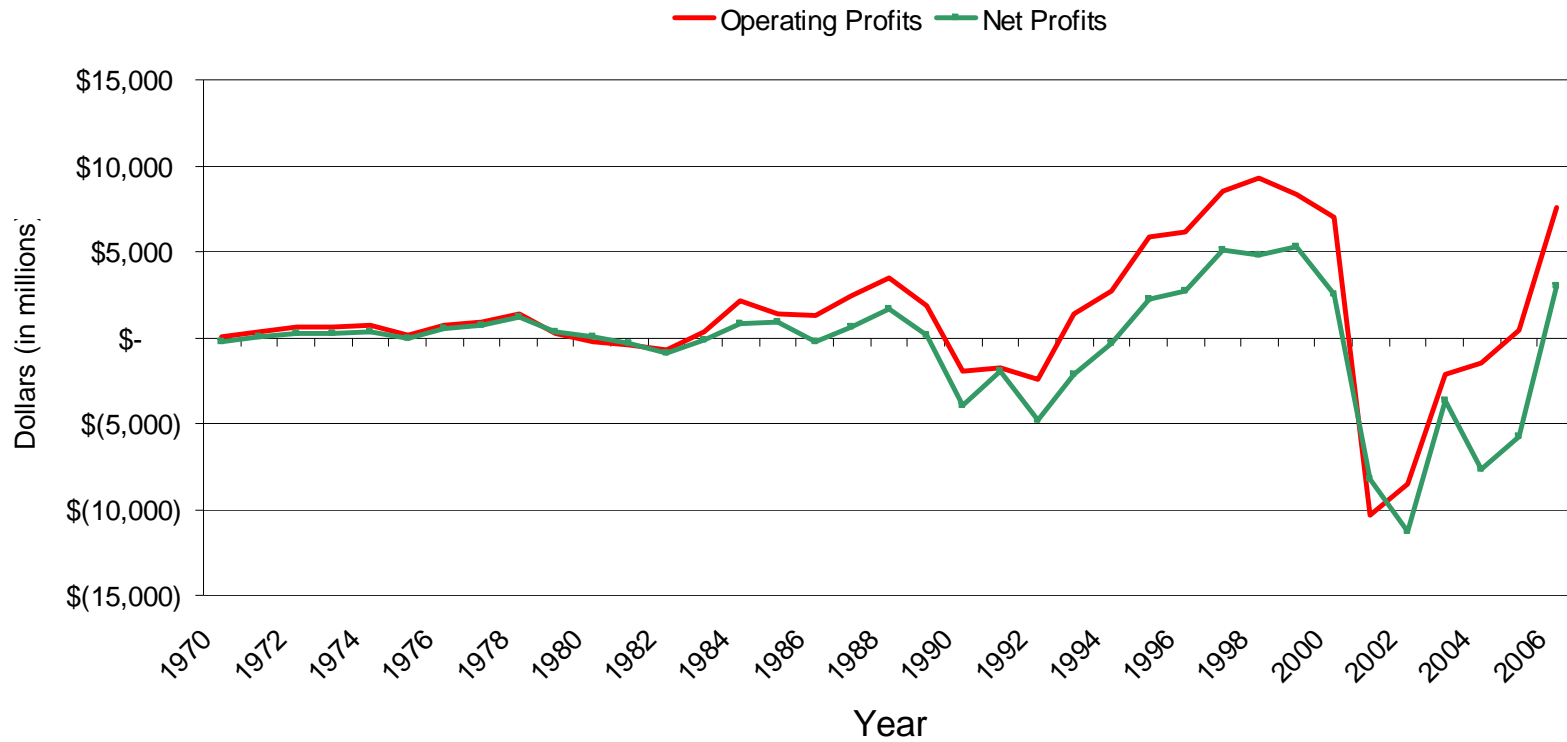




**Does this describe the airline industry?**

# 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**

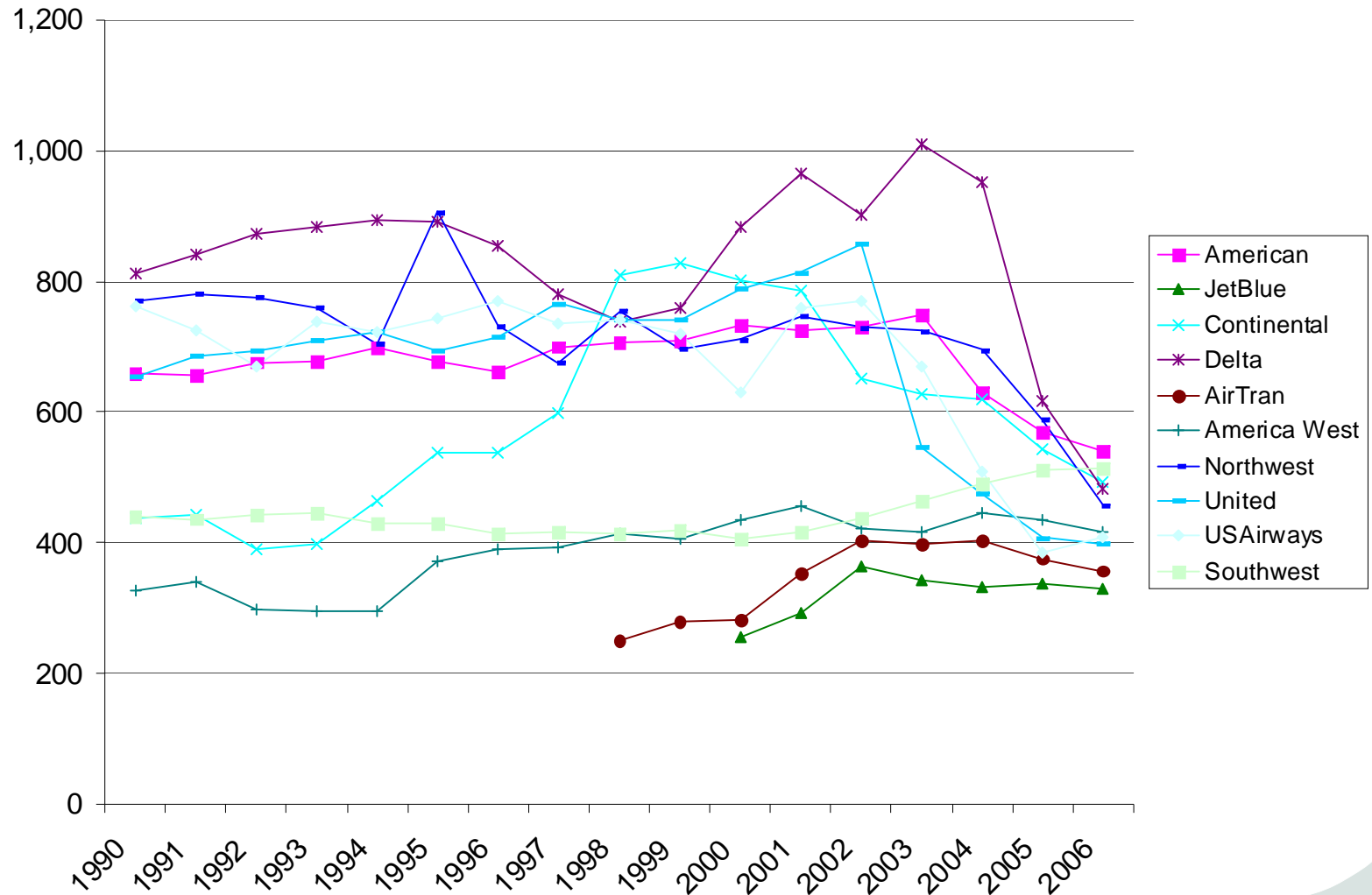
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**Underlying industry structure**

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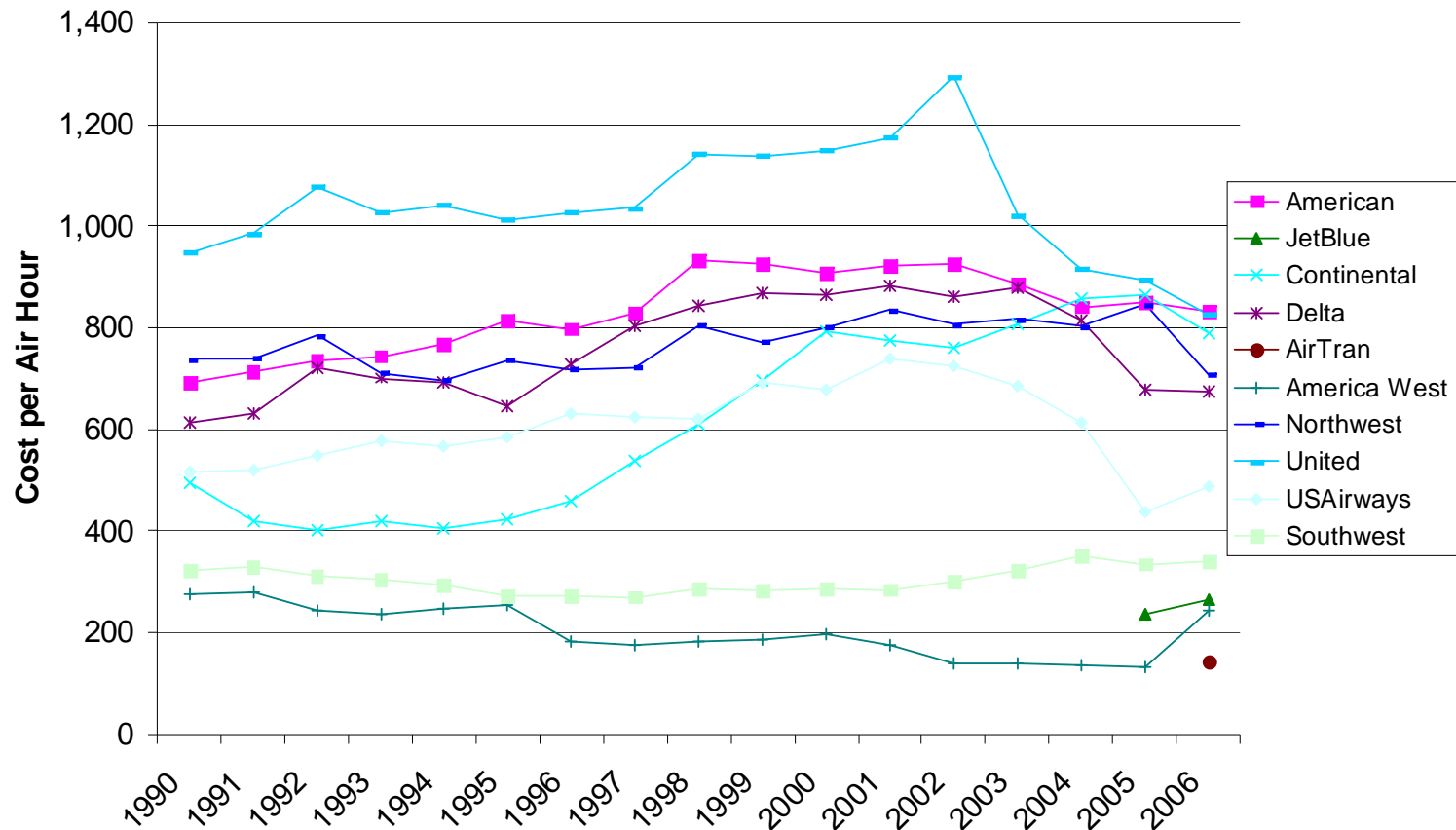
# Pilot Costs per Air Hour (in 2007 dollars)



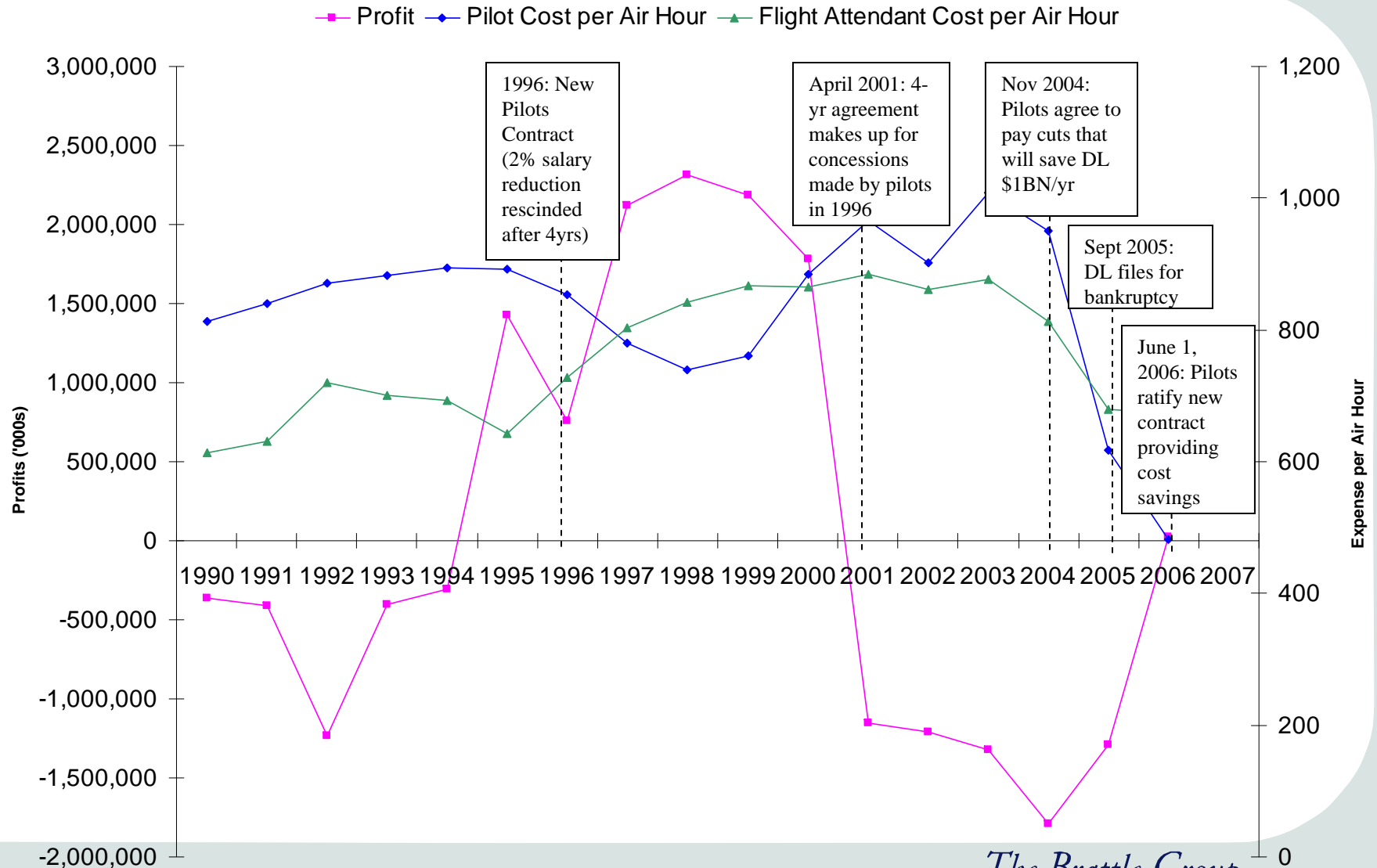
Source: Form 41, T-100 data

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# Flight Attendant Costs per Air Hour (in 2007 dollars)



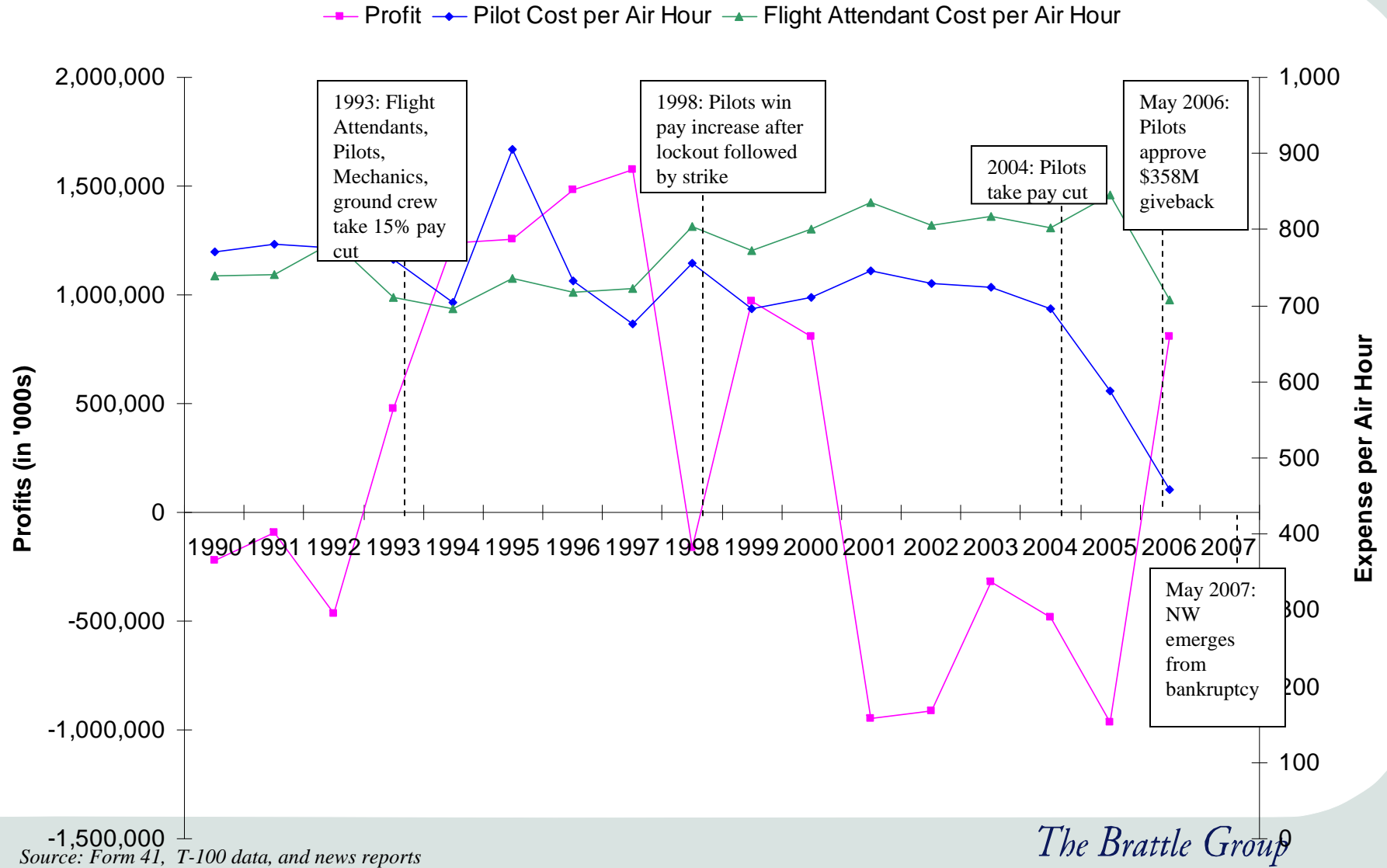
# Delta Profits and Crew Costs (in 2007 dollars)



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

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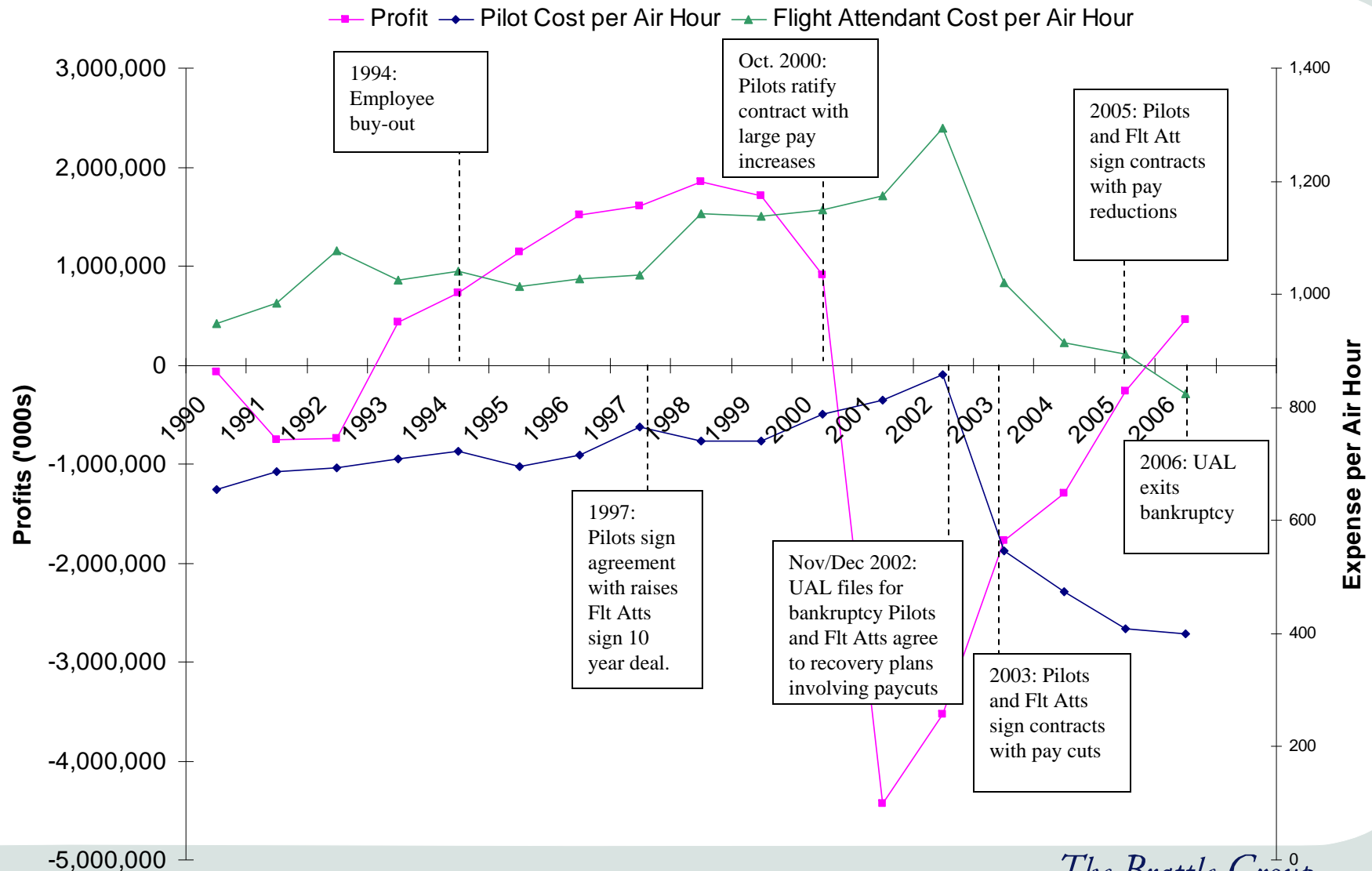
# Northwest Profits and Crew Costs (in 2007 dollars)



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



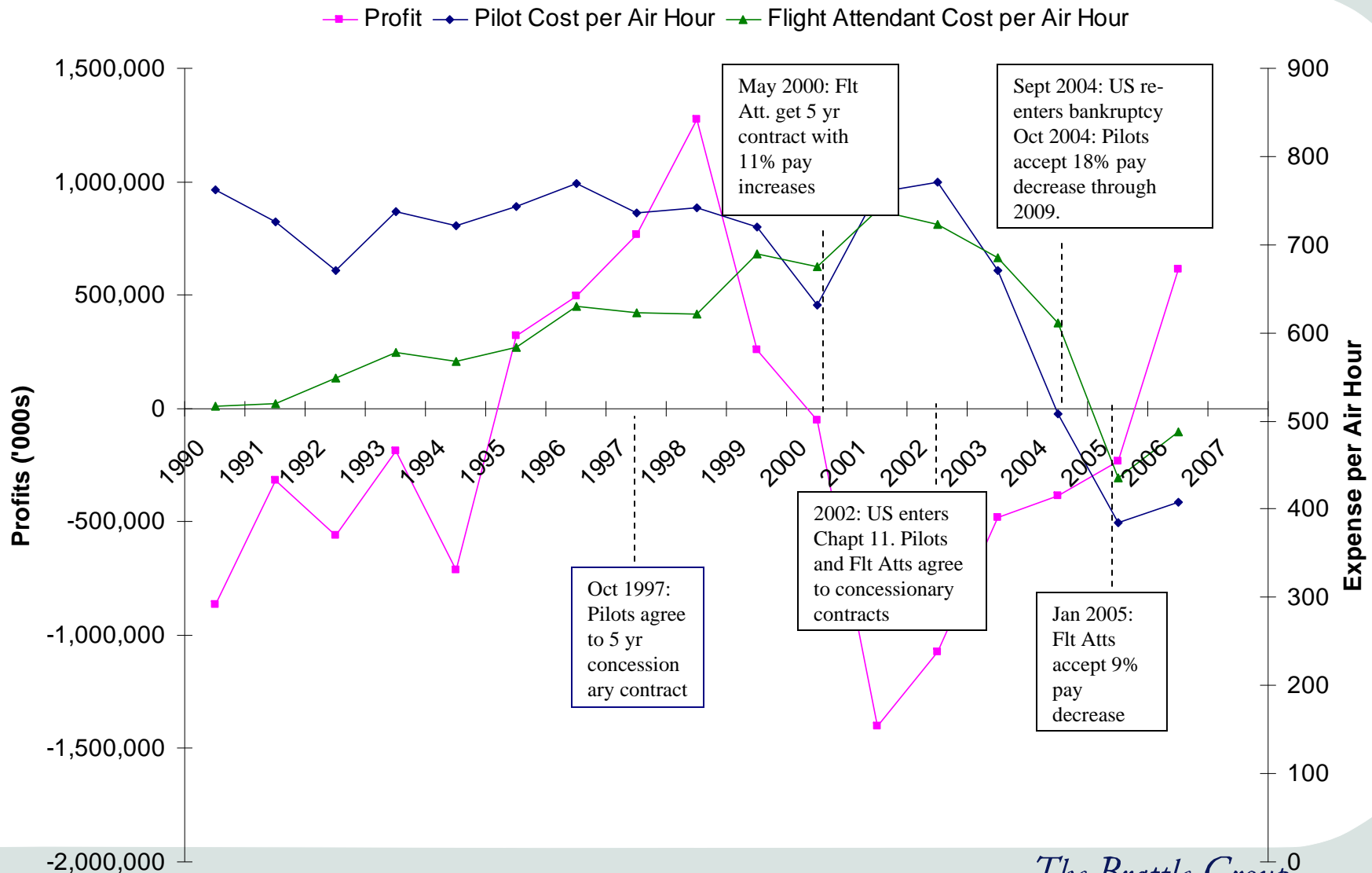
# United Profits and Crew Costs (in 2007 dollars)



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

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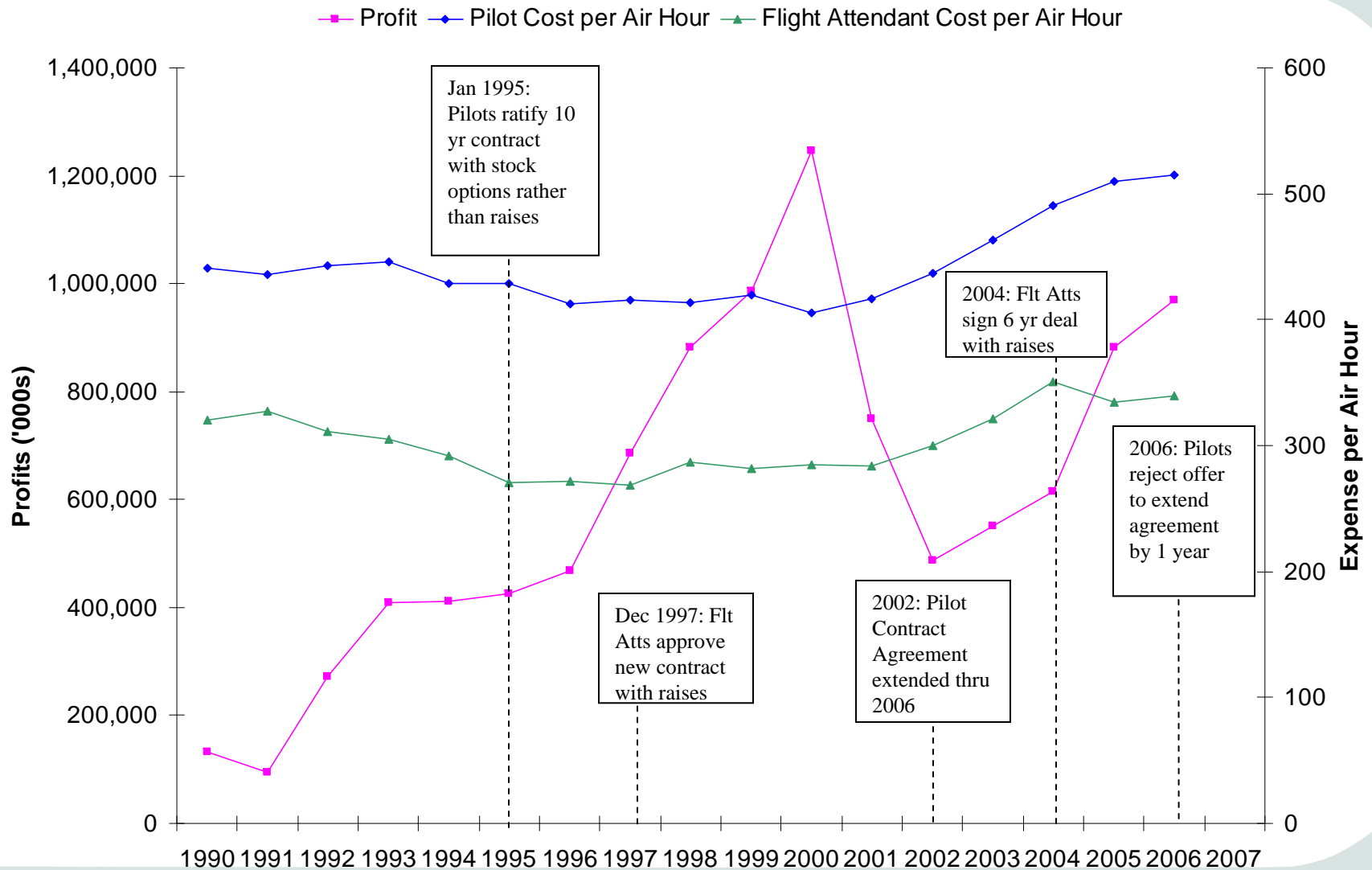
# US Airways Profits and Crew Costs (in 2007 dollars)



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

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# 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.

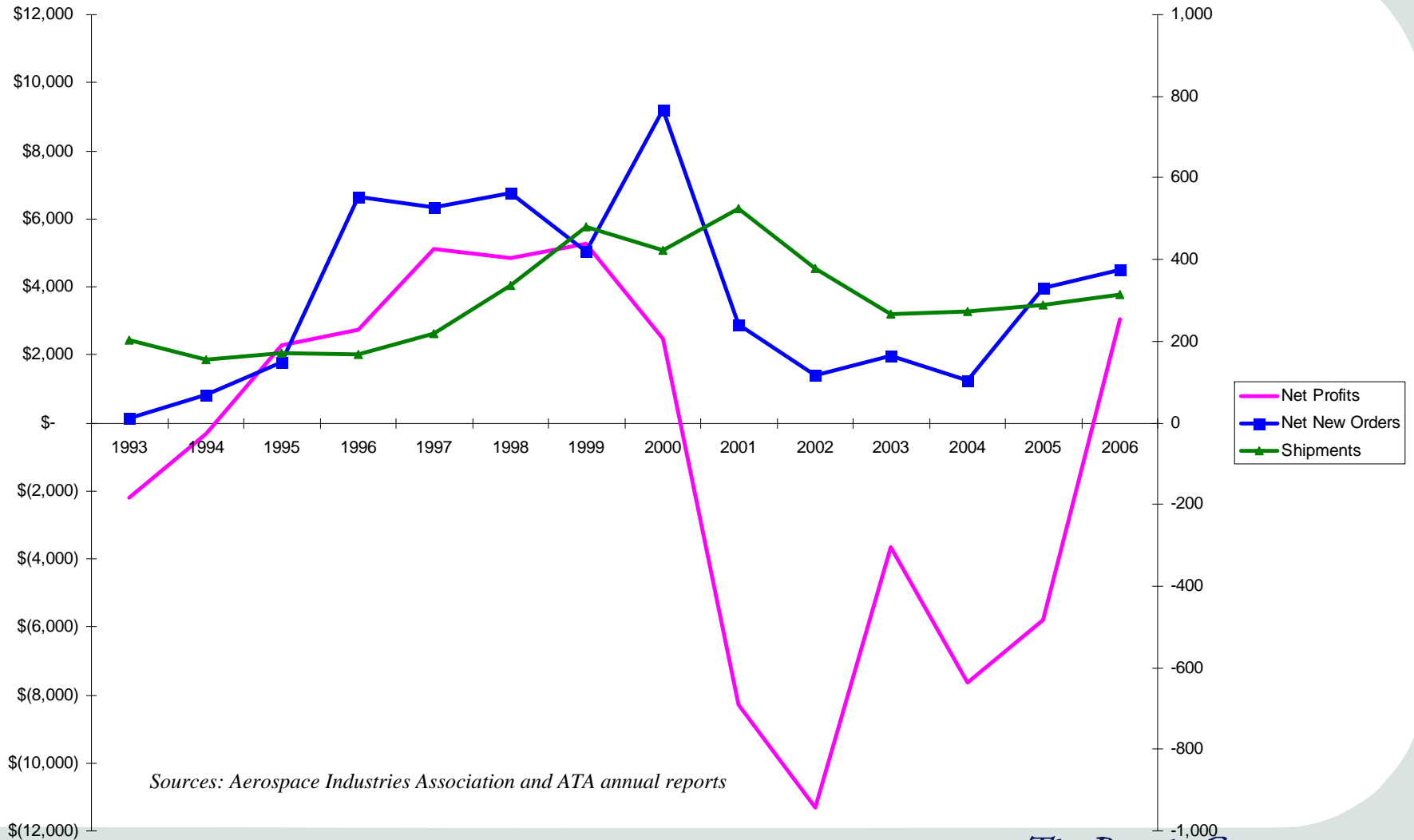
# Sources of Cyclicity

**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.”**

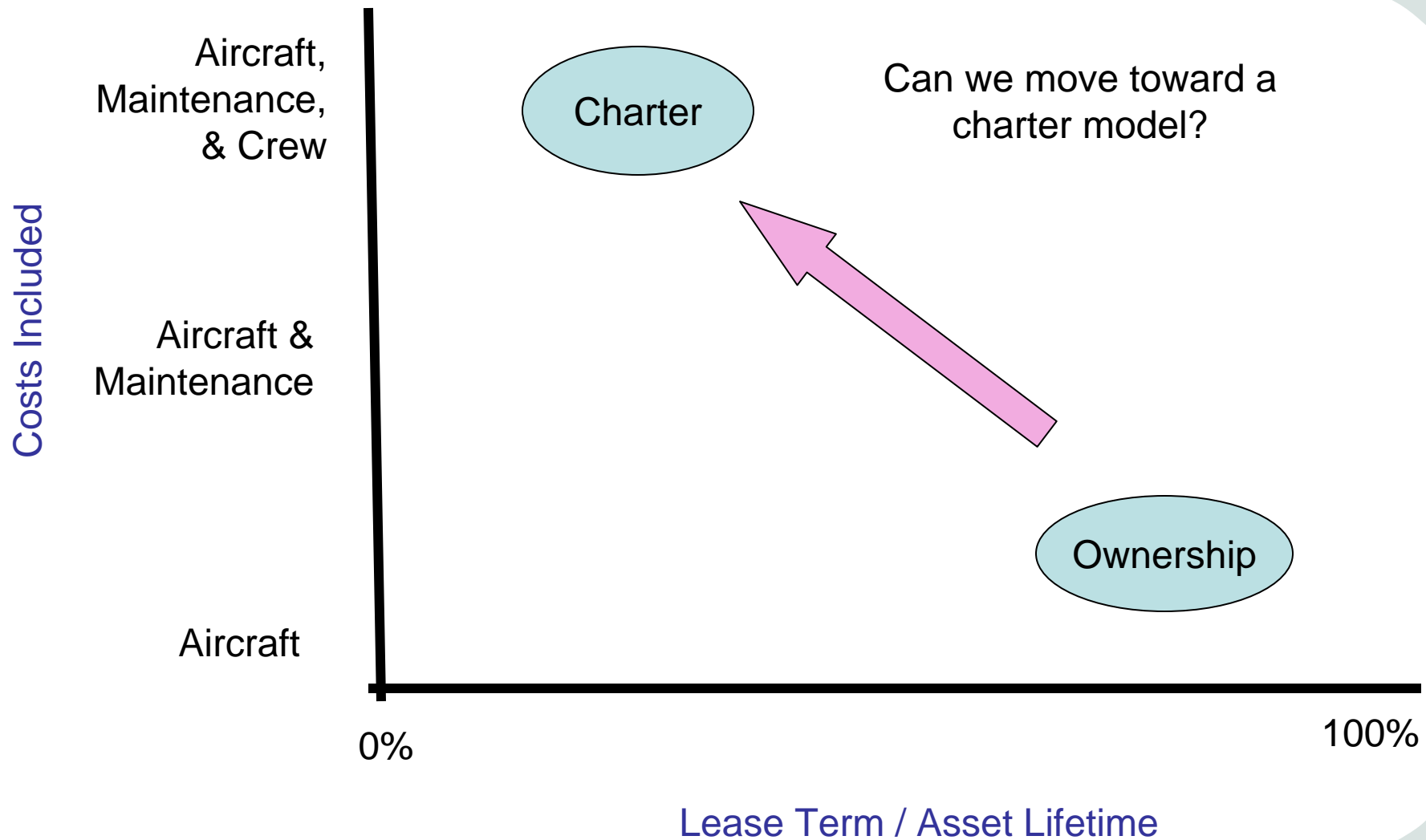
**However there are potential problems...**

- 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...**