



**Massachusetts
Institute of
Technology**

The US Airline Industry & Herbert Stein's Law

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MIT International Center for Air Transportation
36th Annual FAA Aviation Forecast Conference

February 16, 2011

www.swelblog.com

HERBERT STEIN'S LAW

*“If something
cannot go on forever,
it will stop”*

Herbert Stein (1916-1999) was chairman of the Council of Economic Advisers under Presidents Nixon and Ford



US Airline Industry: The Last Three Decades

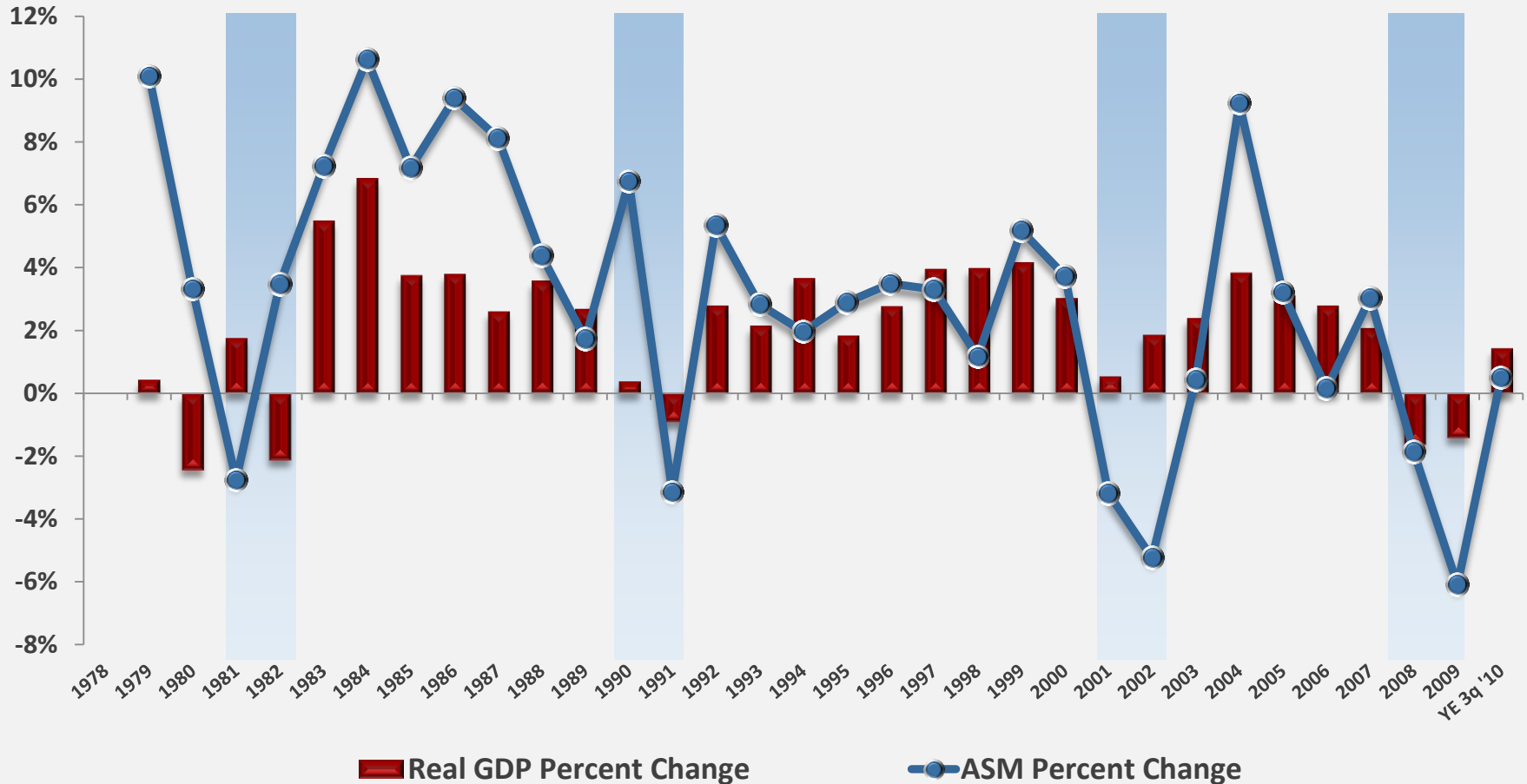
- ▶ **Barriers to entry for new and existing carriers were removed**
 - If one had a dollar, an airplane and a certificate: an airline was born
 - Entry and growth of Low Cost Carriers a major driver of change
- ▶ **Barriers to exit for inefficient carriers were erected**
 - Bankruptcy, government, labor as an internal source of capital
 - Inefficient providers remained in the market
- ▶ **Finally in the 2000's, cost reductions and efficiency improvements that were expected during the previous two decades began to happen**
- ▶ **A market share mentality created an industry grew too big to be sustainable**
- ▶ **The market share mentality giving way to a profit mentality?**



LOOKING BACK

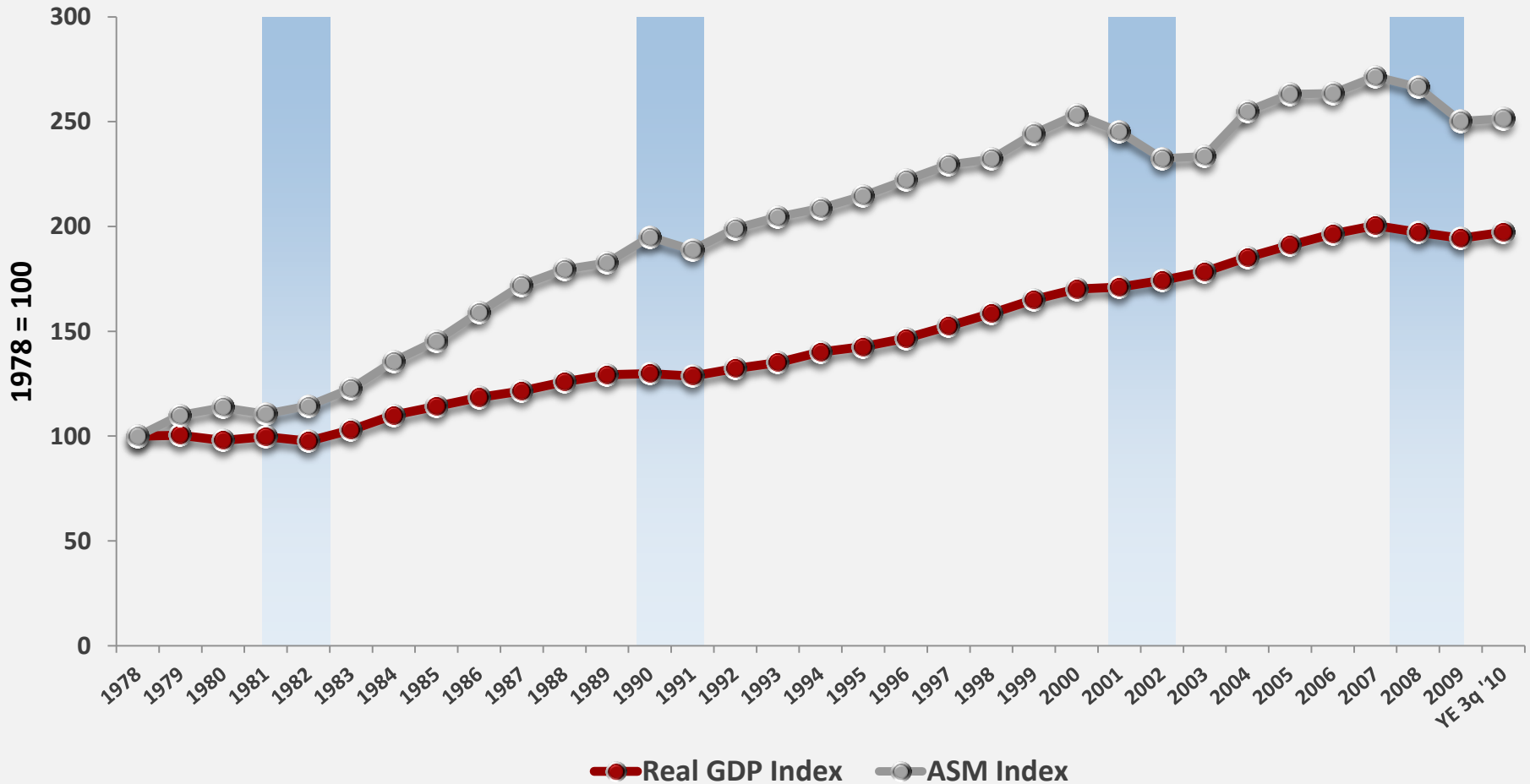


With Rare Exception, Capacity Growth Exceeded the Growth in Real GDP



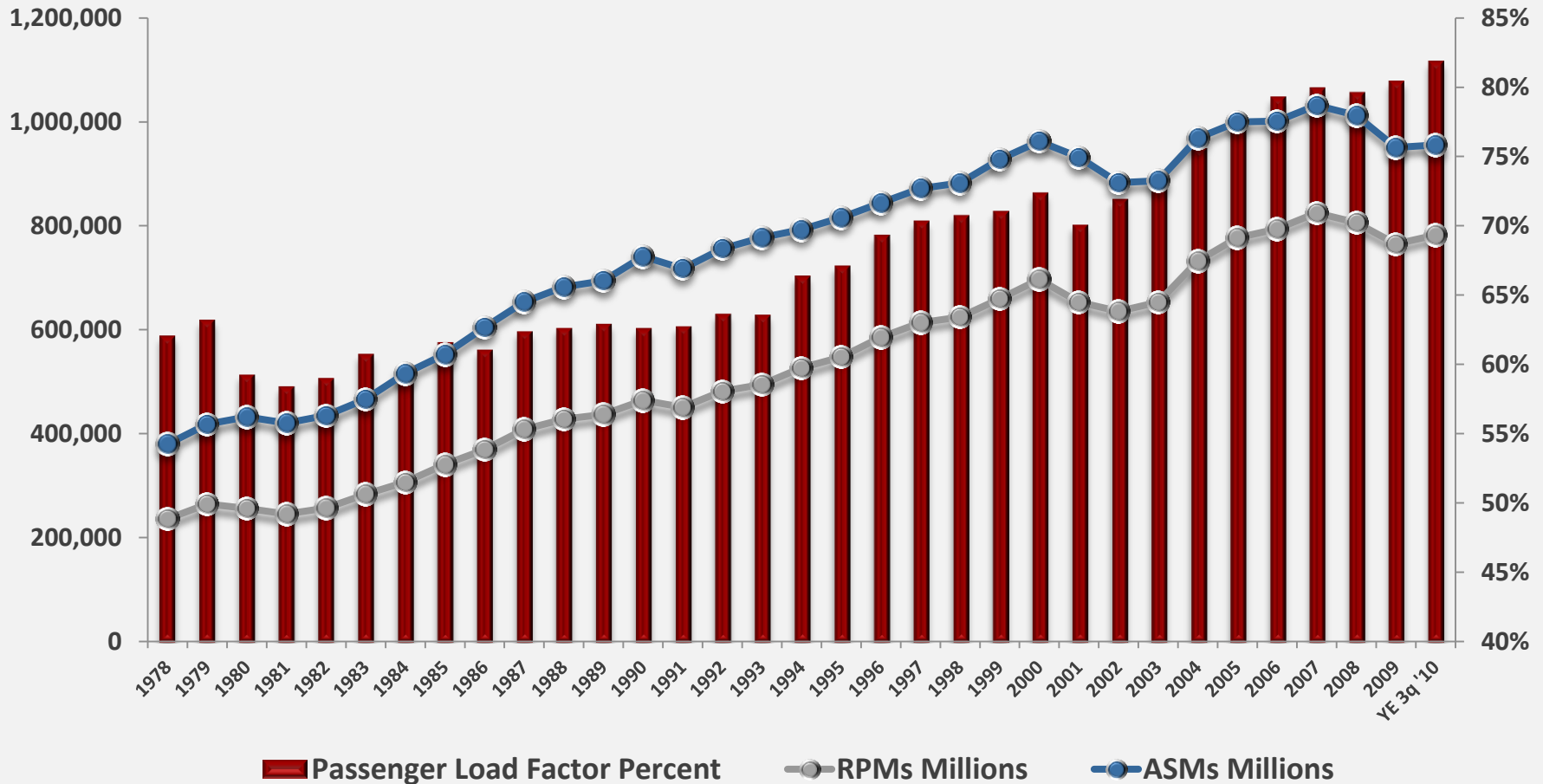


The Market Share Mantra Built An Industry Too Big



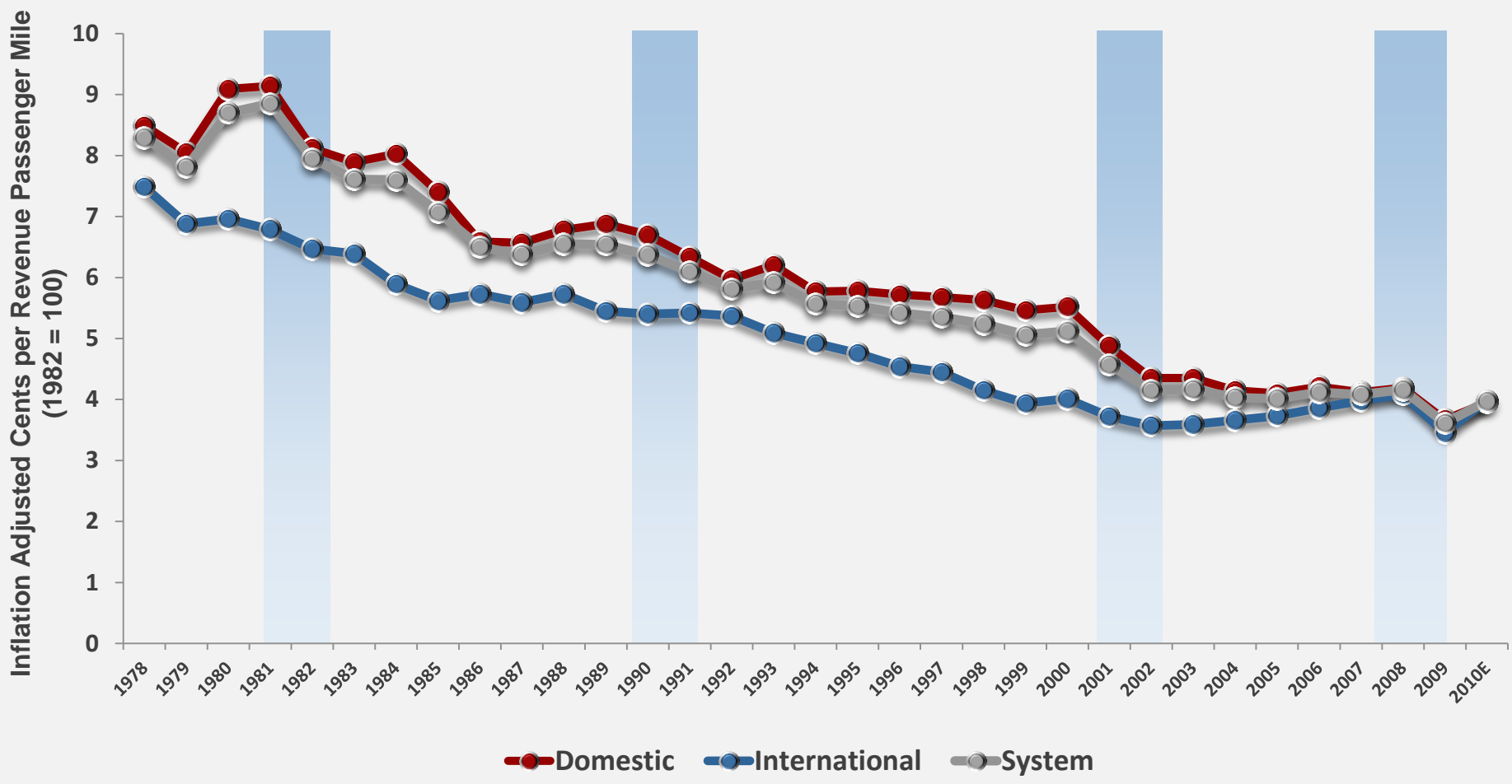


Filling Airplanes Not A Problem As Evidenced by the Growth in Load Factors



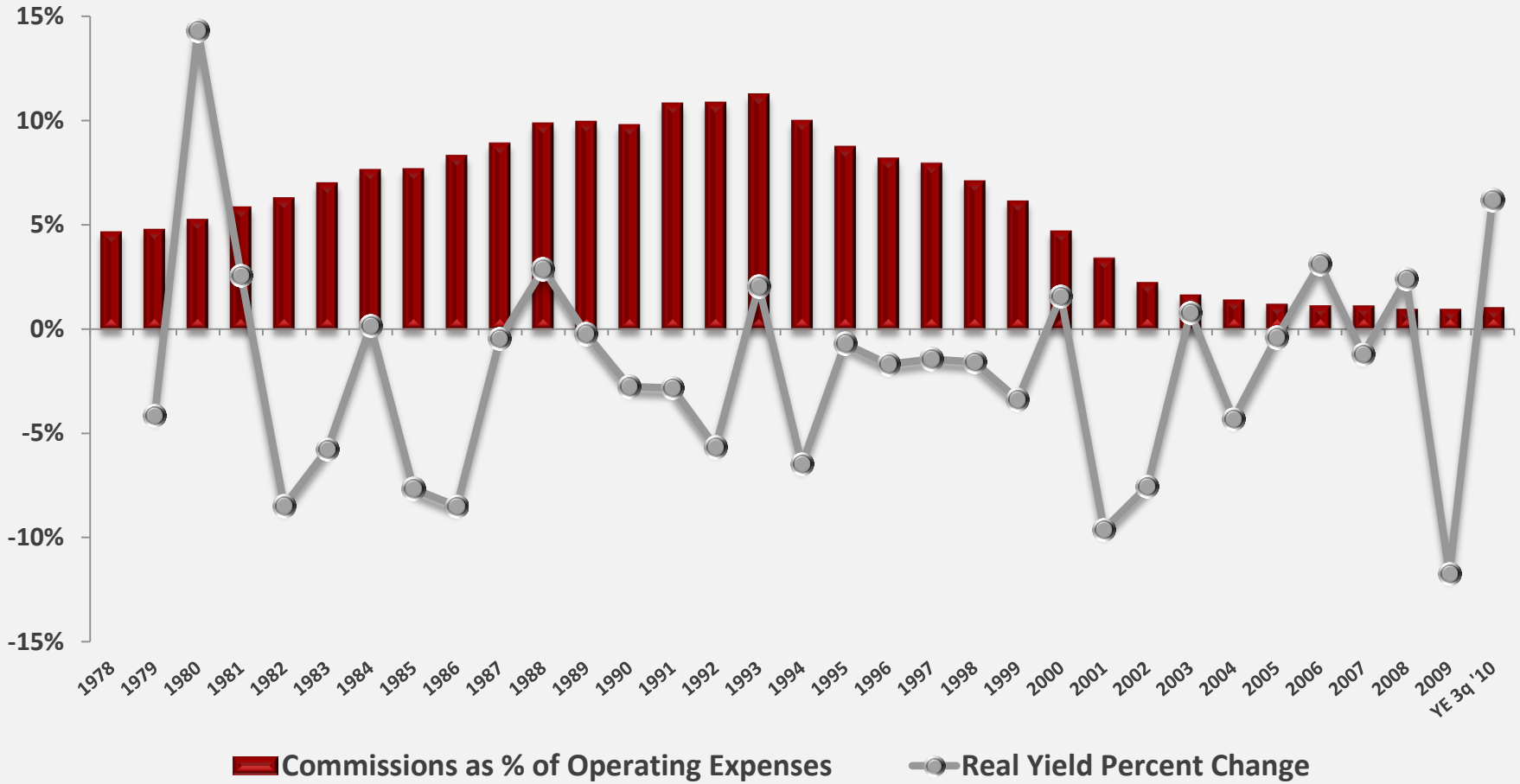


Enabled by Decreasing Real Fares



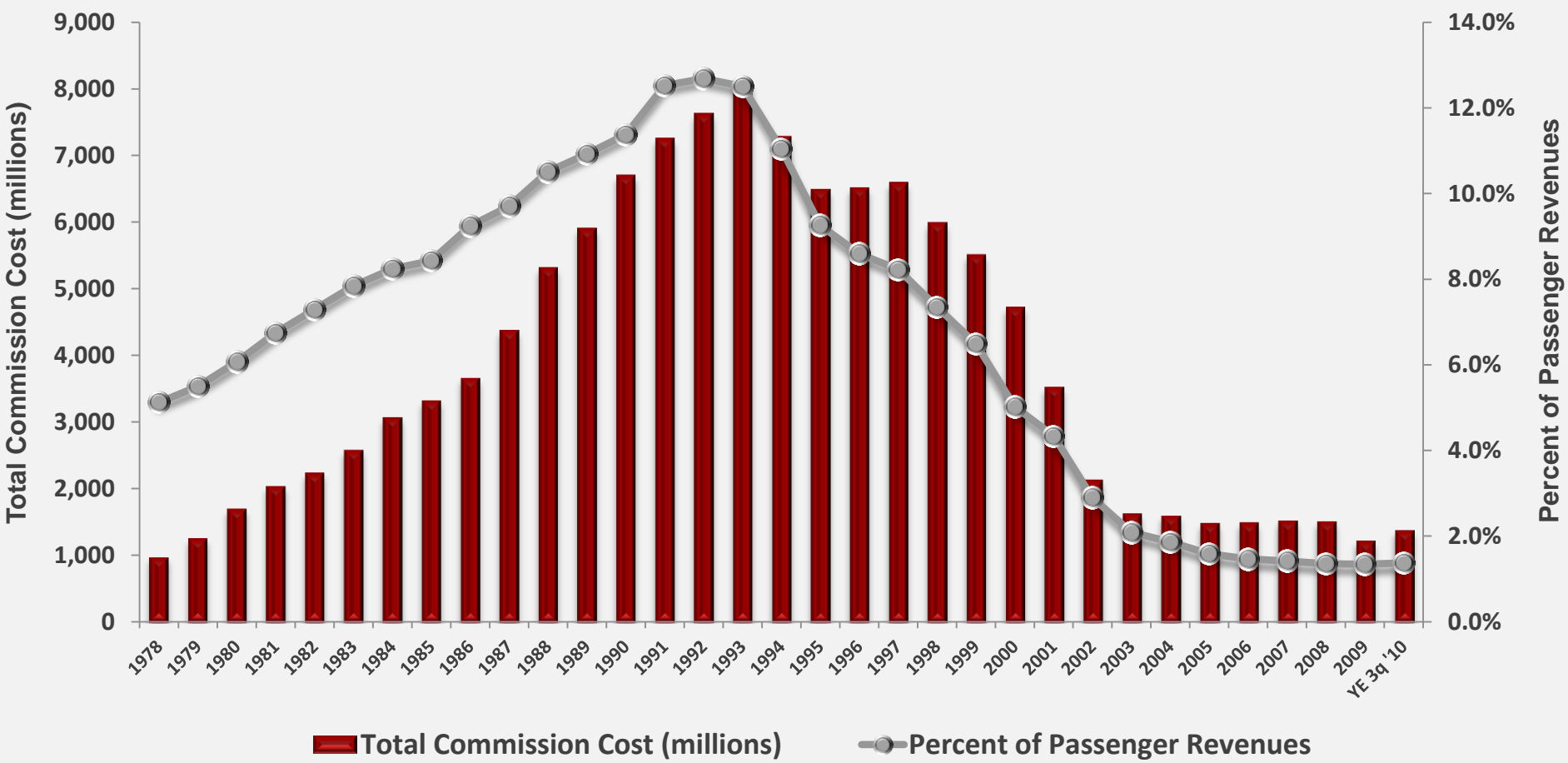


As Real Fares Declined, The Industry Was Paying the Middleman More



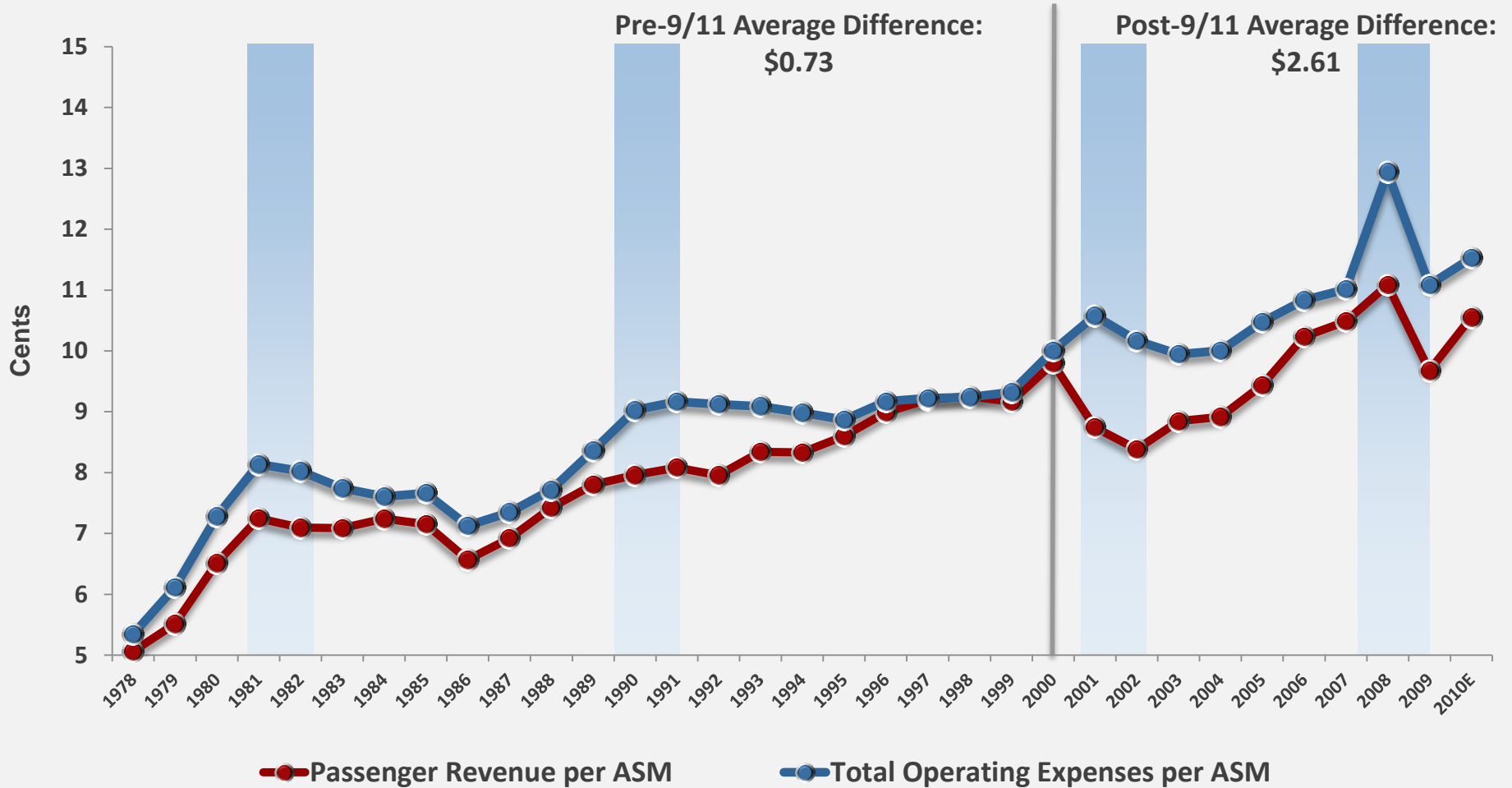


A Classic Example of “Competing Away” the Efficiencies Got Rid of the Middleman, Gave \$6B in Savings to the Consumer





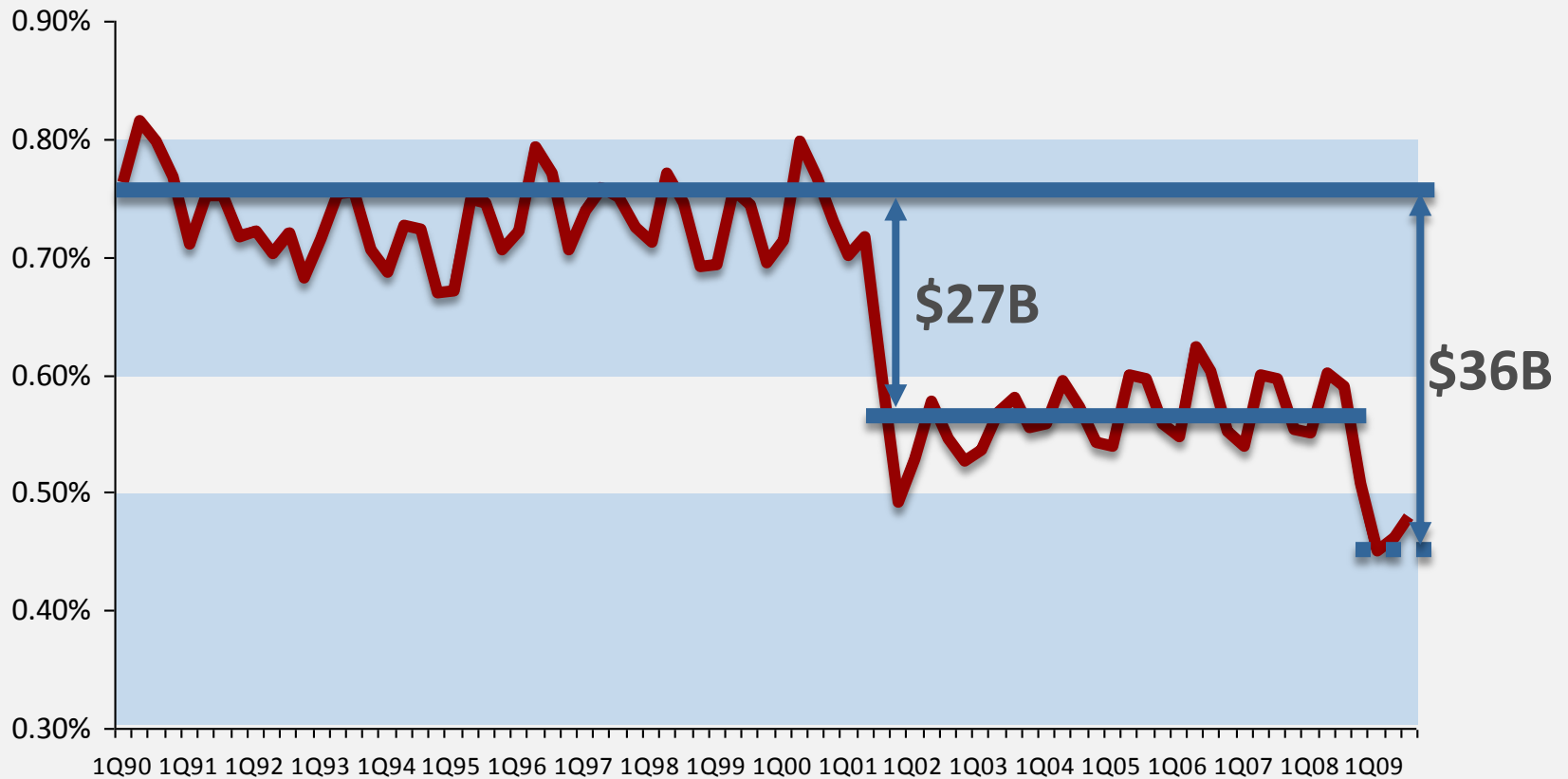
Unit Revenues Began to Drop Dramatically During the Second Half of 2000





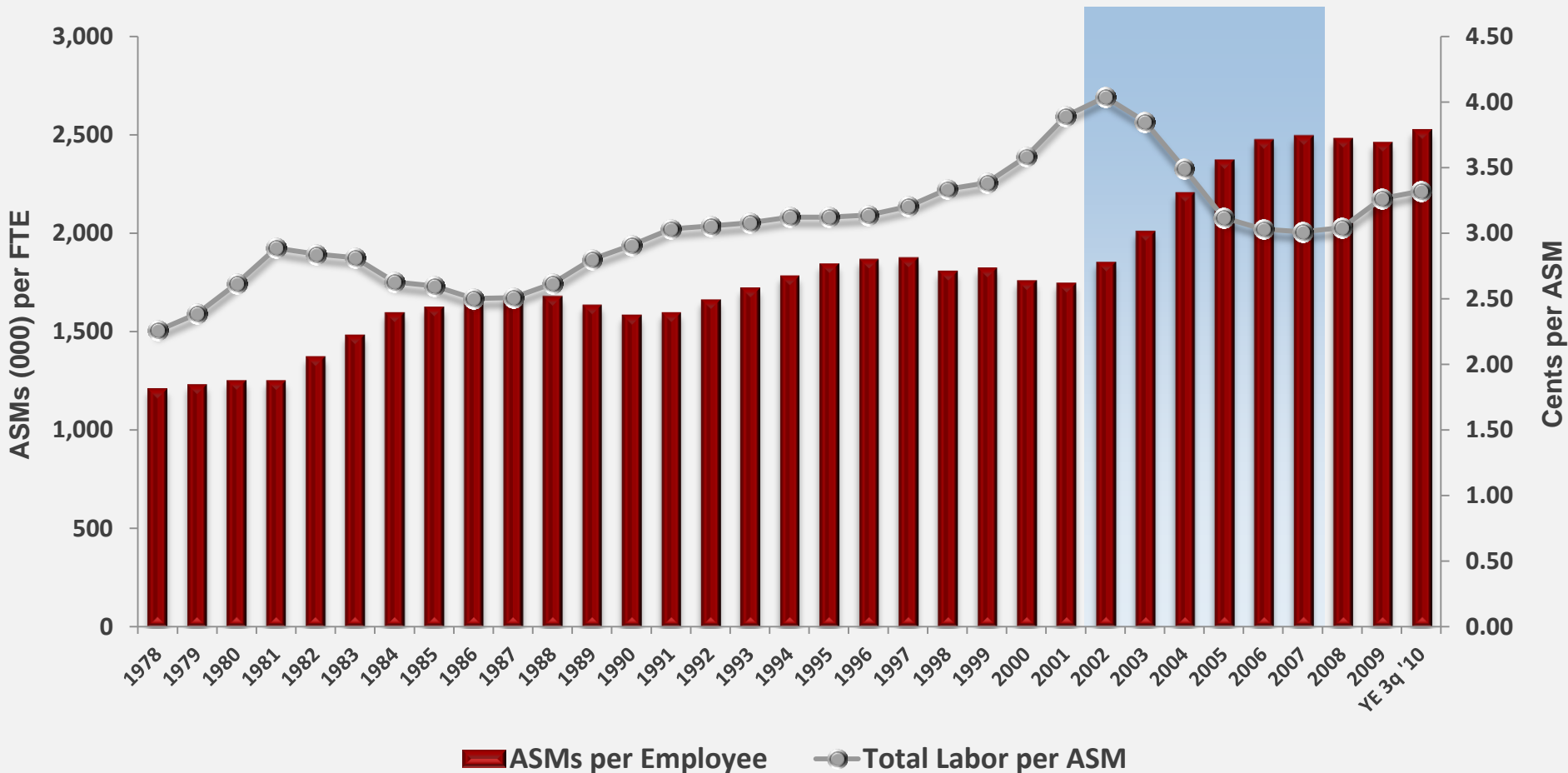
The Relationship of Revenue to GDP

As It Turns Out, That Change Was Structural



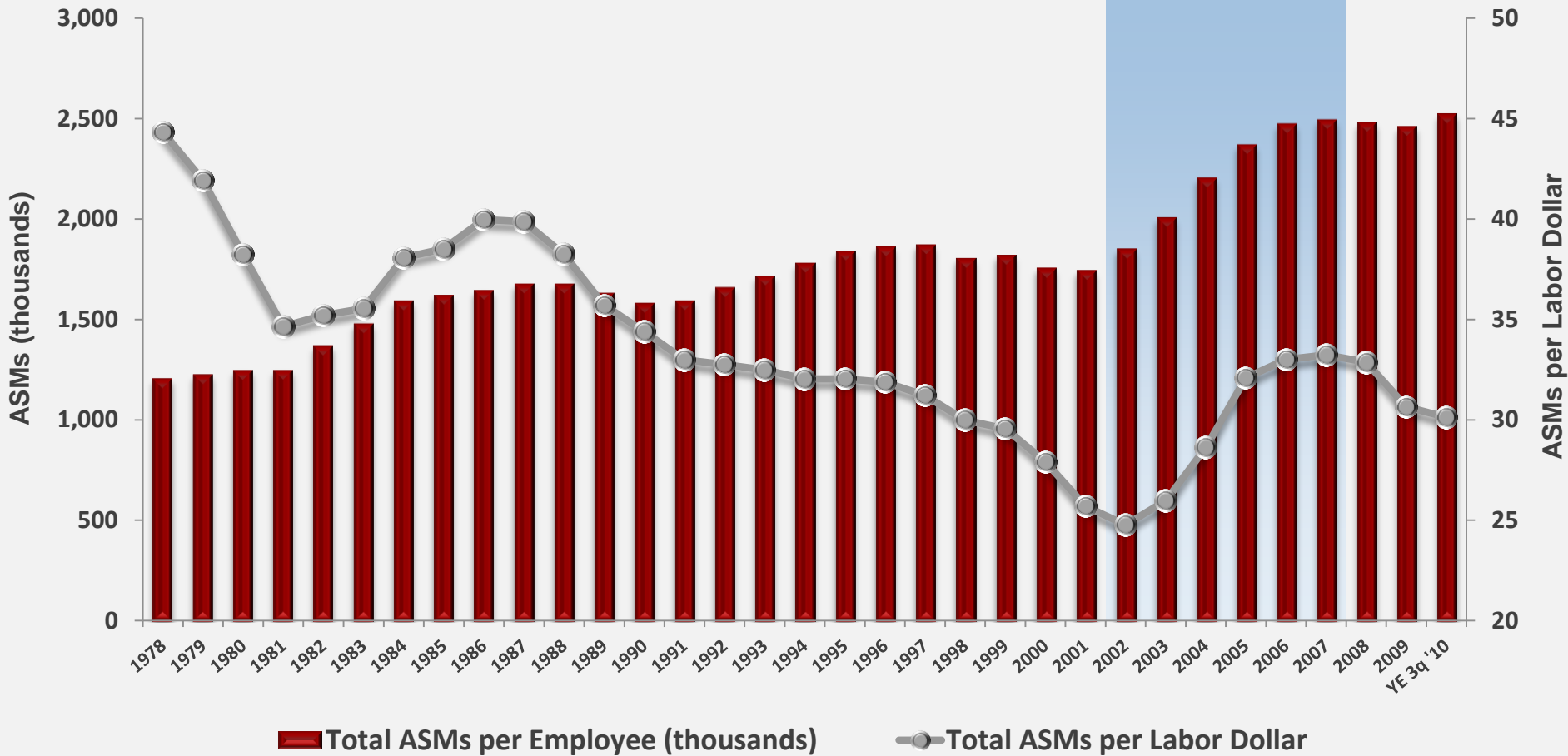


Through 2000, Unit Labor Costs on the Rise As Productivity Remained Relatively Unchanged





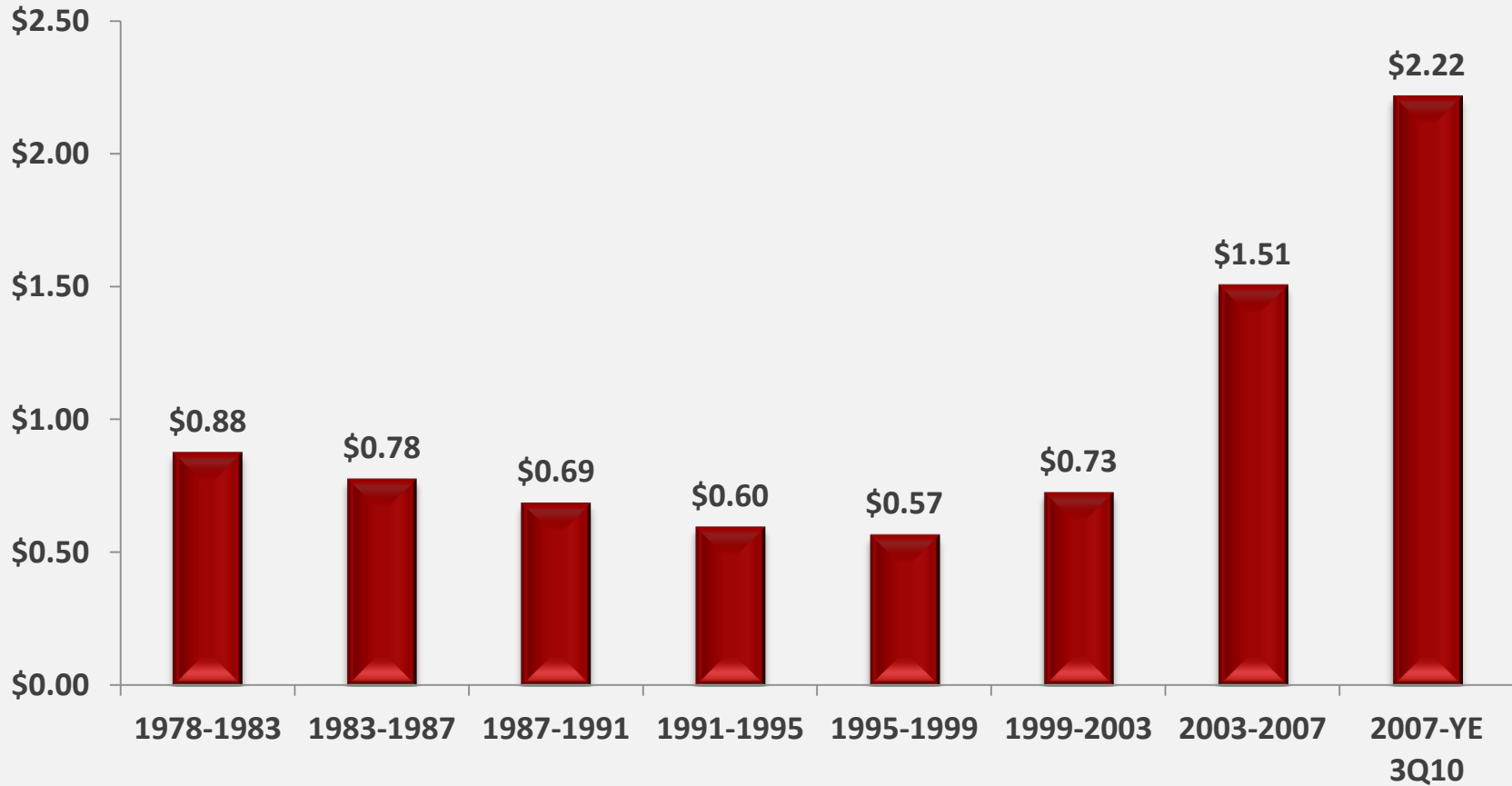
The Restructuring Increased Output, but The Cost Per Unit of Output Going the Wrong Way





An Industry Built on \$30 per Barrel “In the Wing” Oil

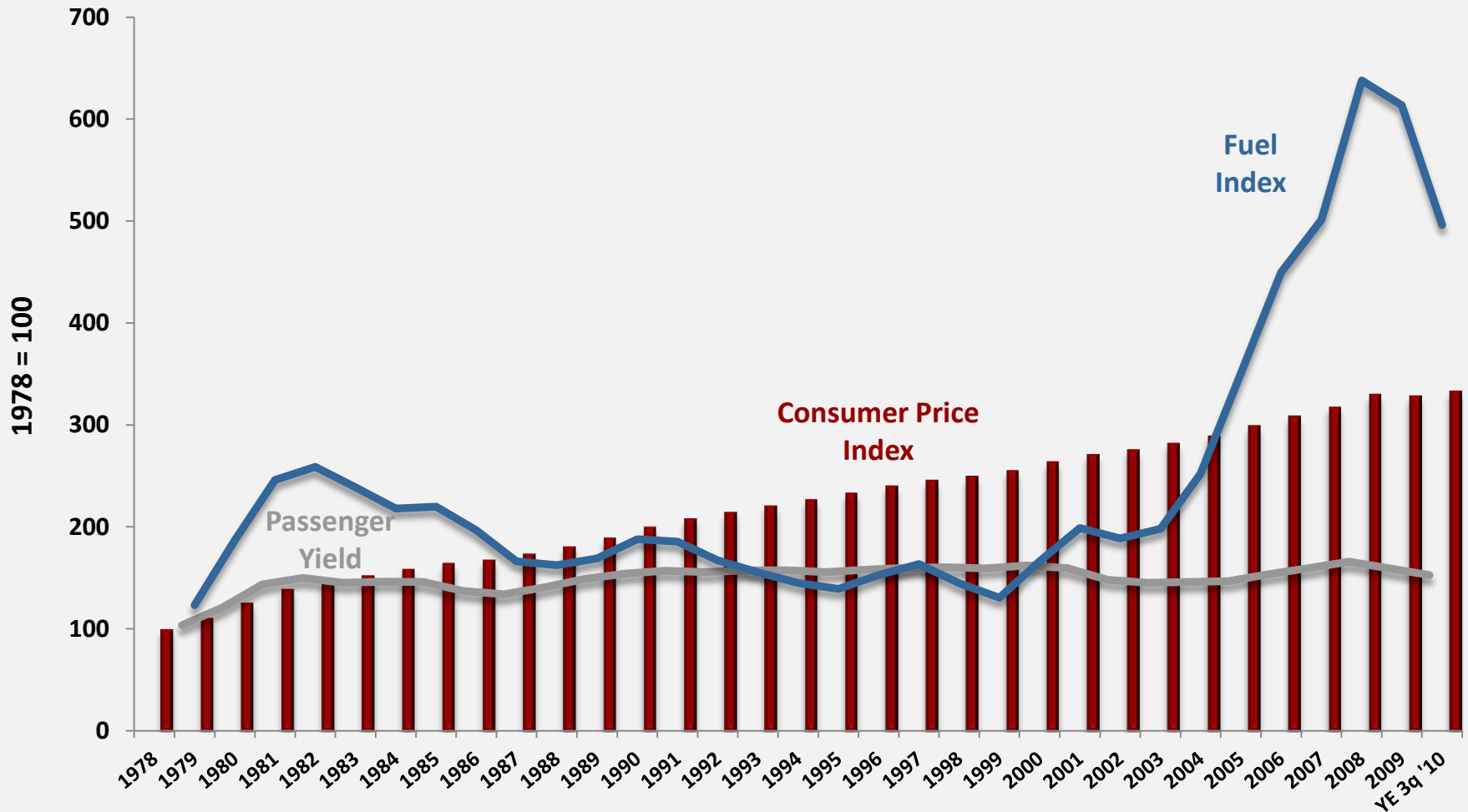
5-Year Average* U.S. Price per Gallon of Jet Fuel



* 3-Year Average for 2007-2010



Fuel Surpasses Labor As Largest Cost Category



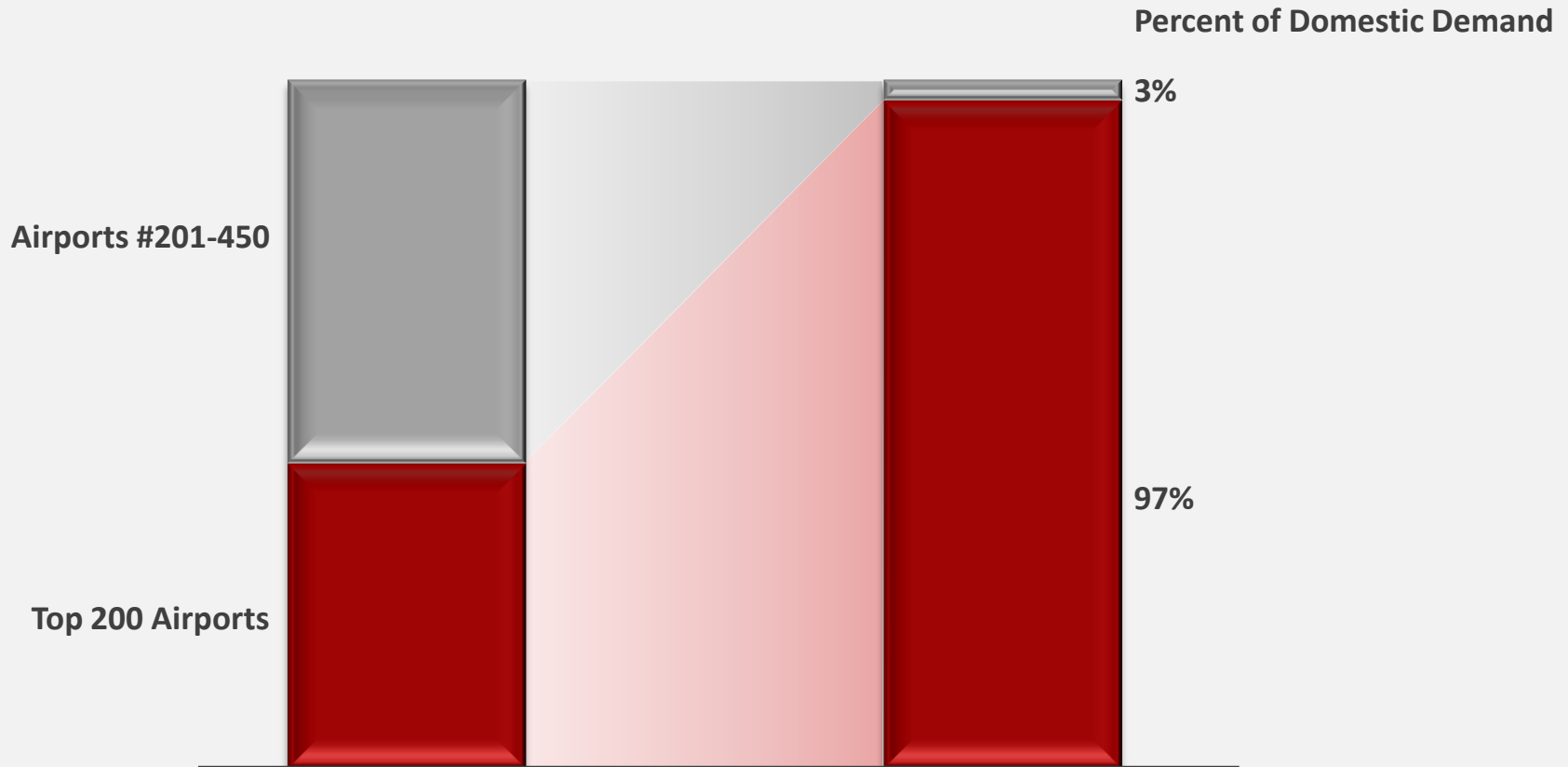


What About the U.S. Airport System?

- ▶ 200 of the roughly 450 mainland U.S. markets comprise 97% of domestic demand
- ▶ Yet the 250 airport markets comprising 3% of domestic demand compete for the same pool of dollars
 - Spending money in all of the wrong places?
- ▶ The market share mentality created a system that competed with itself. Airlines the culprit of fragmenting their own marketplace at home



40 Percent of Mainland Airports Produce 97% of Demand





Per Enplanement Profit and Loss

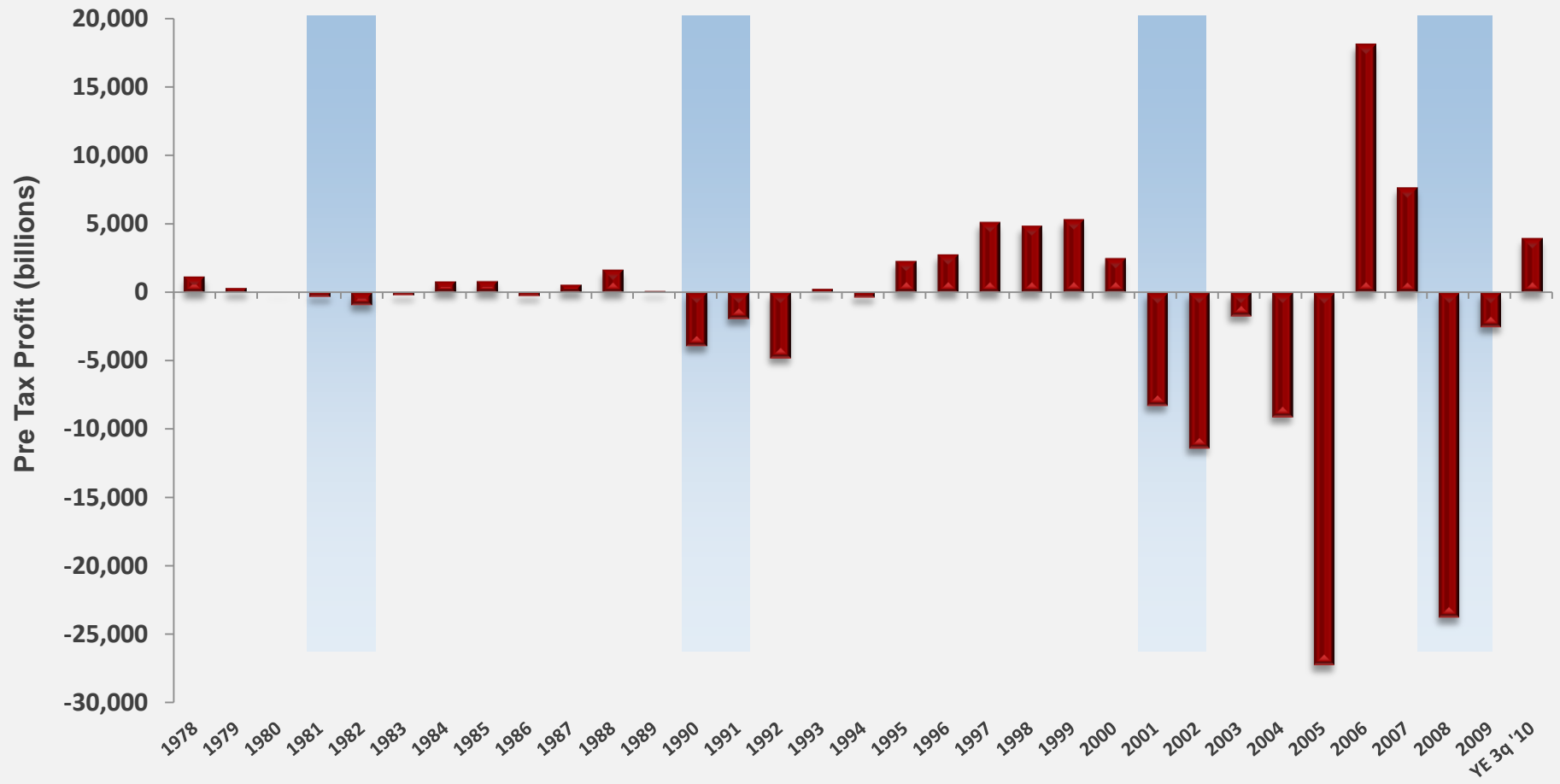
Passenger Revenue Only

	1980 - 1989	1990 - 1999	2000 - 2009	2010E
Passenger Revenue	\$105.16	\$129.44	\$135.91	\$144.81
Labor	\$39.66	\$47.33	\$49.04	\$45.56
Fuel	\$24.94	\$17.64	\$34.21	\$44.30
Commissions	\$8.99	\$12.91	\$3.16	\$1.99
Landing Fees	\$2.03	\$2.90	\$3.46	\$4.05
Aircraft Ownership	\$7.36	\$12.87	\$14.19	\$12.82
All Other	\$30.98	\$44.12	\$48.26	\$49.45
Total Op Expenses ex TR	\$113.96	\$137.77	\$152.33	\$158.17
Passenger Revenue Less Expense	(\$8.80)	(\$8.32)	(\$16.42)	(\$13.35)
Interest	\$3.99	\$3.16	\$4.87	\$6.11
Passenger Revenue Less Expense + Interest	(\$12.80)	(\$11.49)	(\$21.28)	(\$19.47)
Ancillary Fees			\$0.14	\$8.70
Restated With Ancillary Fees	(\$12.80)	(\$11.49)	(\$21.14)	(\$10.76)



Producing Unacceptable Annual Net Profits

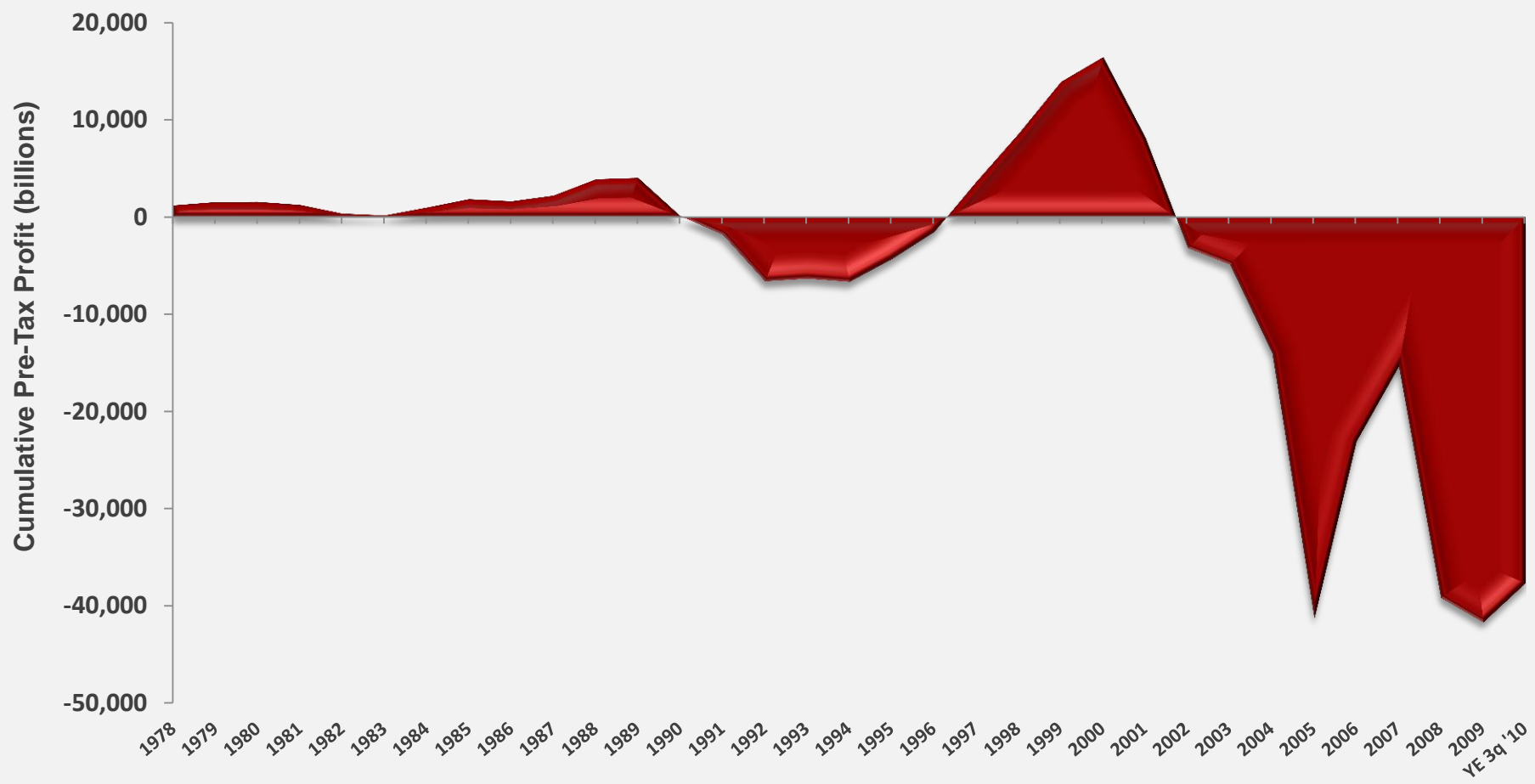
1978 – 2010





Or.... A Cumulative Loss of Over \$40 Billion Since 1978

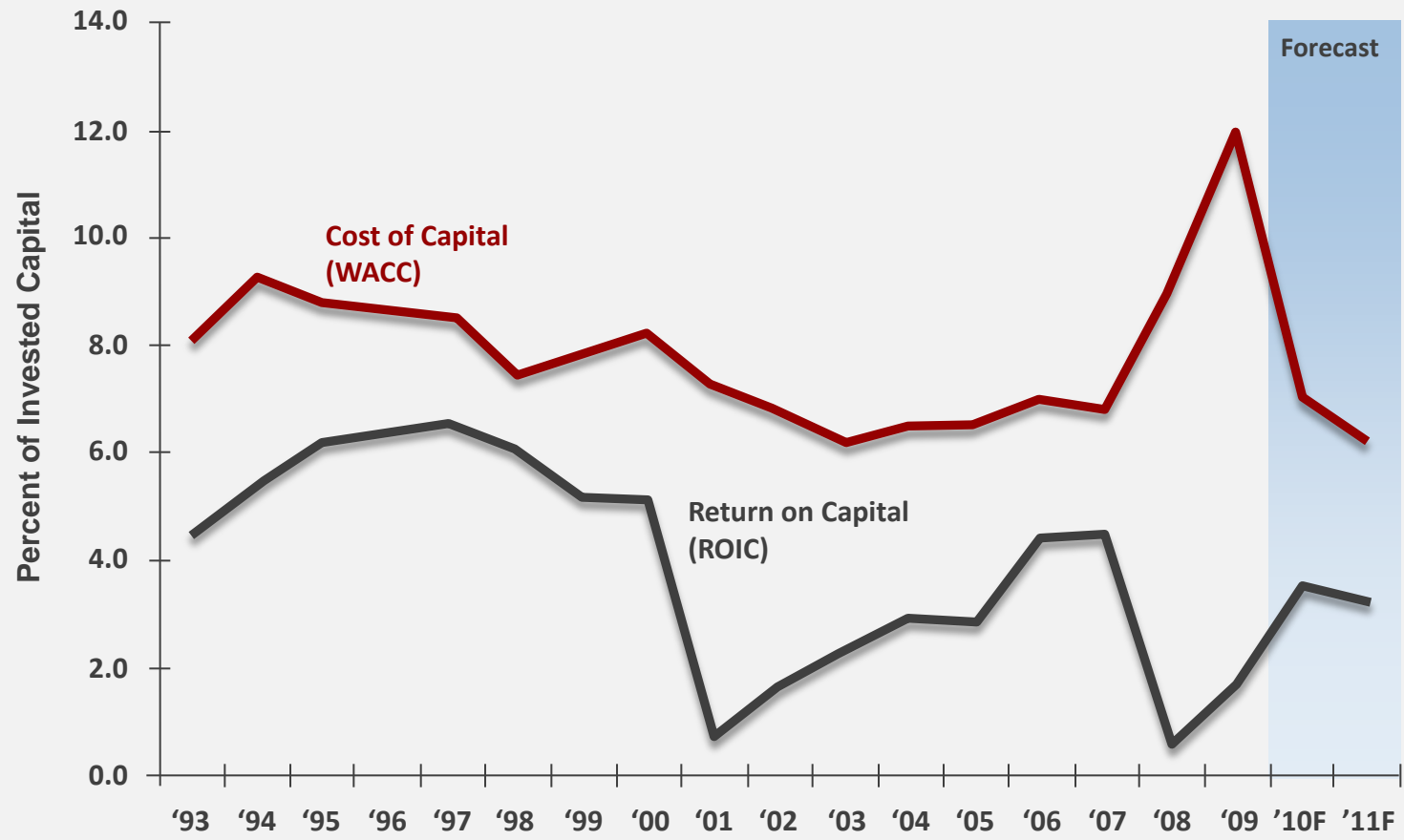
1978 – 2010



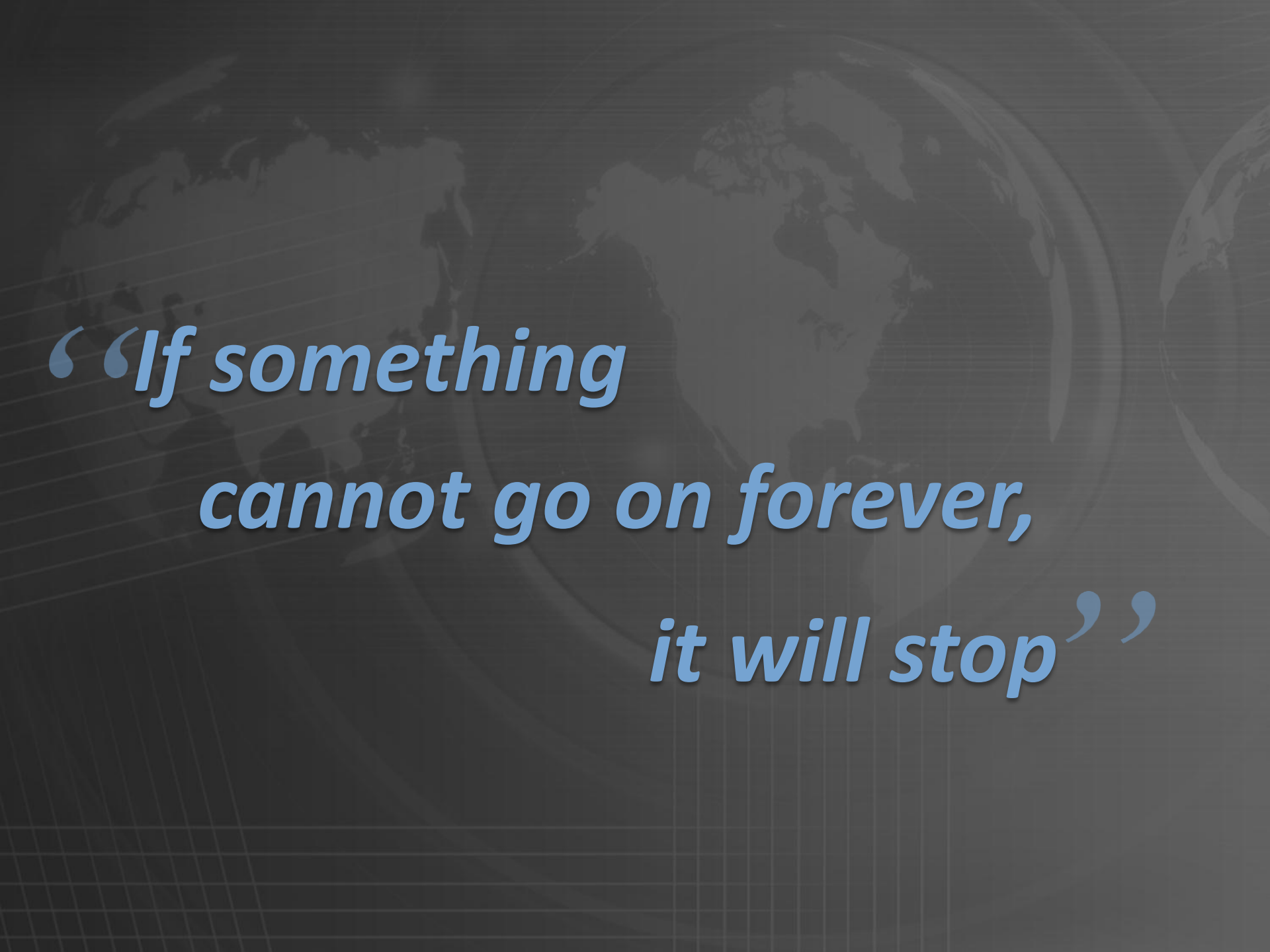


And Not a Chance in Hell that the Industry Could Earn at Least Its Cost of Capital

Return on Invested Capital in the Airline Industry v. the Cost of Capital



Source: IATA



***‘ ‘If something
cannot go on forever,
it will stop’ ’***



Bankruptcies

	BANKRUPTCIES	CUMULATIVE BANKRUPTCIES	SOME HIGHLIGHTED CARRIERS
1978			
1979	2	2	New York Air
1980	4	6	
1981	5	11	
1982	10	21	Braniff
1983	5	26	Continental
1984	17	43	Air Florida, Wien
1985	10	53	PBA, Cascade
1986	6	59	Frontier
1987	9	68	Air Atlanta, Air South
1988	11	79	Mid Pacific
1989	7	86	Eastern, Presidential
1990	6	92	Continental
1991	16	108	Pan Am, Eastern, Bar Harbor, Midway, America West
1992	5	113	TWA
1993	3	116	Hawaiian
1994	2	118	
1995	5	123	TWA
1996	4	127	
1997	4	131	Air South, Western Pacific
1998	2	133	
1999	4	137	
2000	7	144	Tower, Legend
2001	2	146	TWA, Midway
2002	4	150	Vanguard, United, US Airways
2003	2	152	Hawaiian
2004	6	158	US Airways, ATA, Polar
2005	7	165	Delta, Northwest, Independence Air
2006	1	166	
2007	2	168	Maxjet
2008	5	173	Aloha, ATA, Skybus, Frontier, Air Midwest



Airline Industry Restructuring Along the Way

- ▶ Labor was the bank of first resort throughout the 1980's and 1990's (Barrier to Exit)
 - Temporary fixes
 - Labor gives concessions and gets paid back and more time and again
- ▶ Consolidation among regional competitors in the mid 1980's proved key in building national networks
- ▶ Strong carriers buying strategic assets from weak competitors
- ▶ Recession in the early 1990's serves as catalyst to first round of hub closures
- ▶ Poor attempts at building “airlines within airlines” to combat low cost competition still in its infancy



Airline Industry Restructuring Along the Way

- ▶ Travel agent commission structure targeted by the industry
- ▶ Negotiation of Open Skies Agreements becomes goal of US aviation policy
 - Alters carrier thinking regarding international flying
- ▶ International alliances in formative years
- ▶ Significant changes to US Bankruptcy Code
- ▶ The “over exuberant” use of 50-seat regional jet begins
 - Begins process of replacing mainline domestic flying
- ▶ Southwest crosses the Mississippi
- ▶ Industry enjoys most profitable period in its history
- ▶ At the peak of the cycle, the industry tries to buy labor peace and overpays



Airline Industry Restructuring Along the Way

- ▶ First transatlantic alliances immunized
- ▶ Network carrier cost structures exploited by the vigorous incursion of low cost carrier capacity
- ▶ Insurance costs skyrocket after 9/11
- ▶ Five of the seven network carriers file for bankruptcy
- ▶ Nearly \$12 billion in labor savings won
- ▶ 150,000 jobs shed
- ▶ Maintenance outsourcing becomes a more widespread practice
- ▶ First round of meaningful capacity reductions
- ▶ Significant shift of domestic flying from network carriers to their respective regional partners takes place
- ▶ Network carriers shift capacity away from US domestic market and redeploy aircraft to international markets



Airline Industry Restructuring Along the Way

- ▶ As fuel prices increase, various hedging strategies employed with mixed success
- ▶ As fuel prices peak, industry employs a number of strategies to generate ancillary revenue
- ▶ As fuel prices peak, industry announces significant capacity reduction and puts a capacity discipline mantra to work
- ▶ New round of consolidation not limited to network carriers
- ▶ Industry seems intent on not implementing their pattern bargaining sins of the past with labor
- ▶ Pushing the envelope to find new ways to take cost out of the operation
 - Few magic bullets remain

A grayscale world map is centered in the background, showing the continents of North America, South America, Europe, and Africa. The map is overlaid with a grid of latitude and longitude lines. The background has a subtle gradient from dark to light.

A LOOK AT CERTAIN AIRLINE COSTS



The Expense Portion of the Income Statement

- ▶ **Labor:** Expectations far exceed industry's ability to pay
 - Want a restoration of pay without commensurate productivity
 - Hard to restore pay when benefit costs so high

- ▶ **Maintenance:** Outsourcing has slowed as a practice

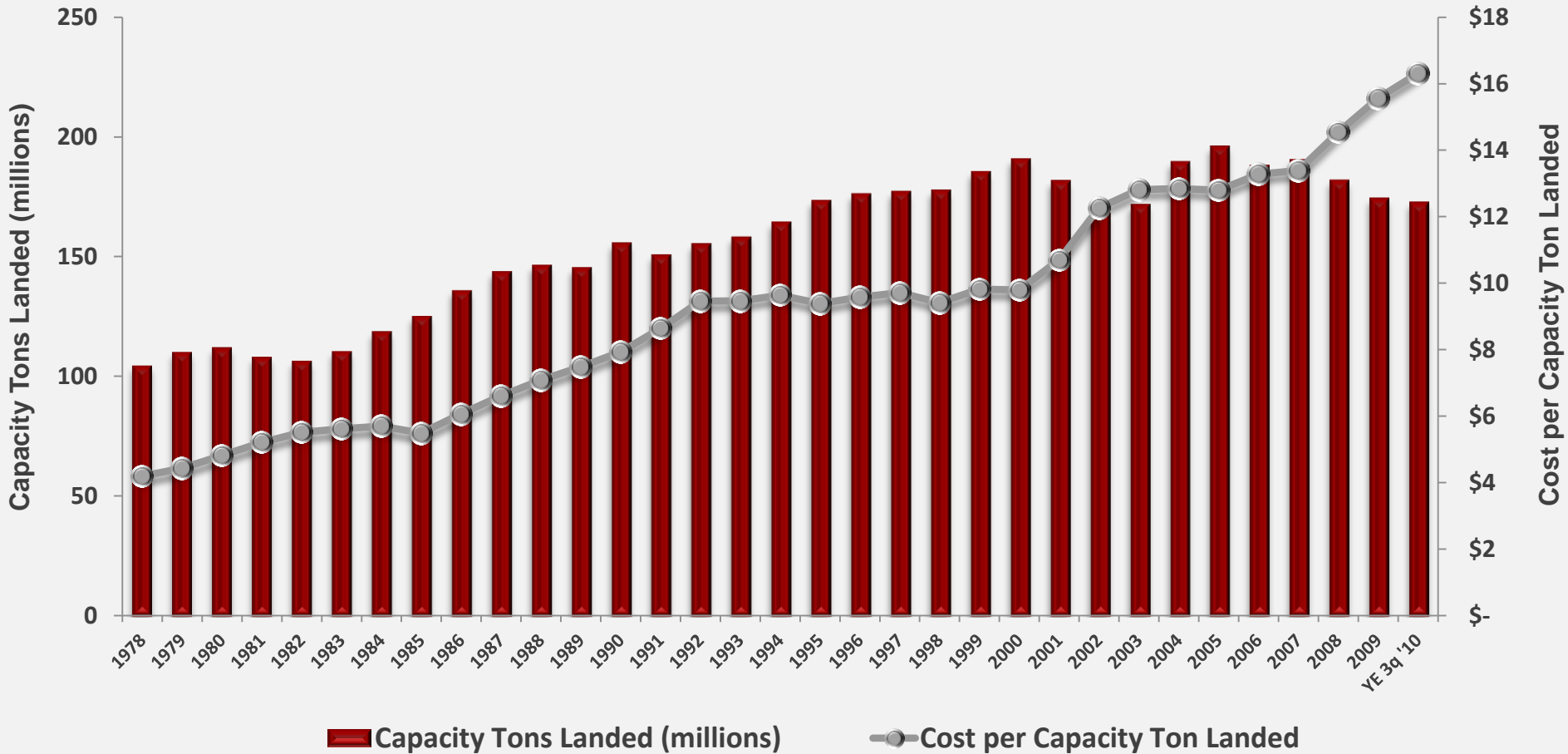
- ▶ **Commissions:** Low hanging fruit has been picked – but American believes the middleman still has too much influence in this area

- ▶ **Airport Costs:** Along with employee benefits and GDS fees, this area promises to be a cost center scrutinized by airlines going forward



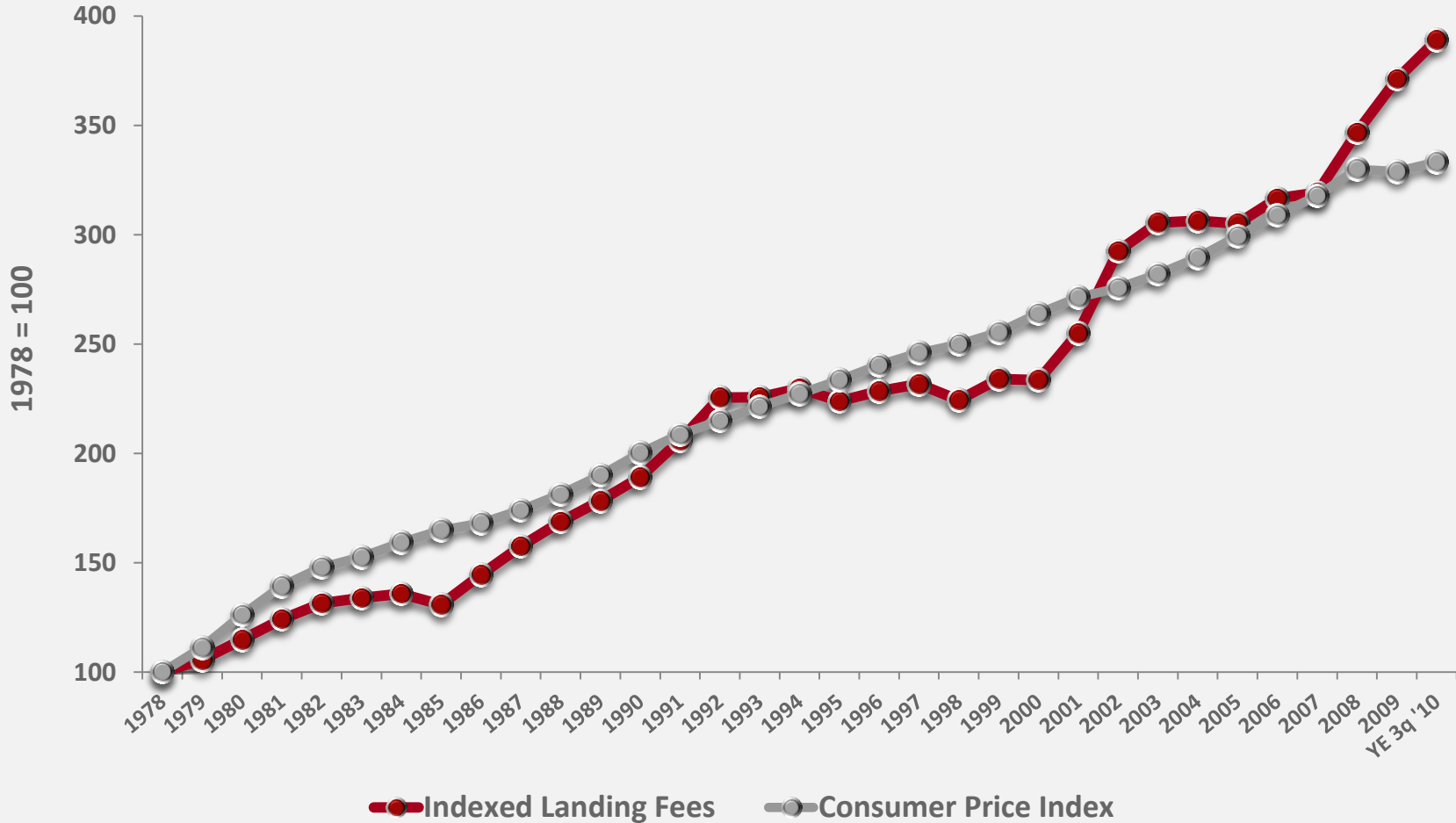
Landing Fees

The “Age Old” Airline v. Airport Conflict





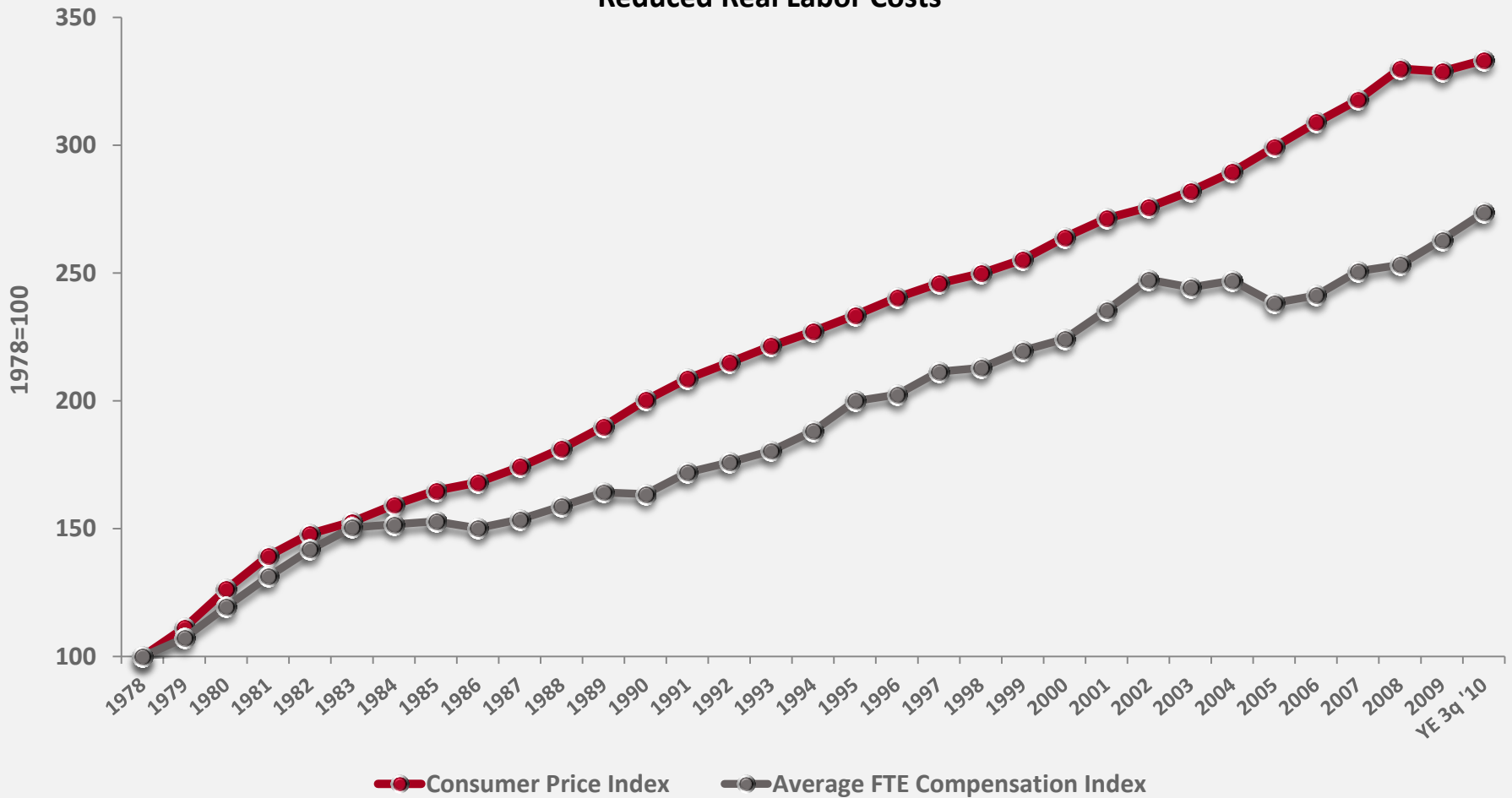
Unit Costs that Grow in Real Terms Have Been Addressed in the Past





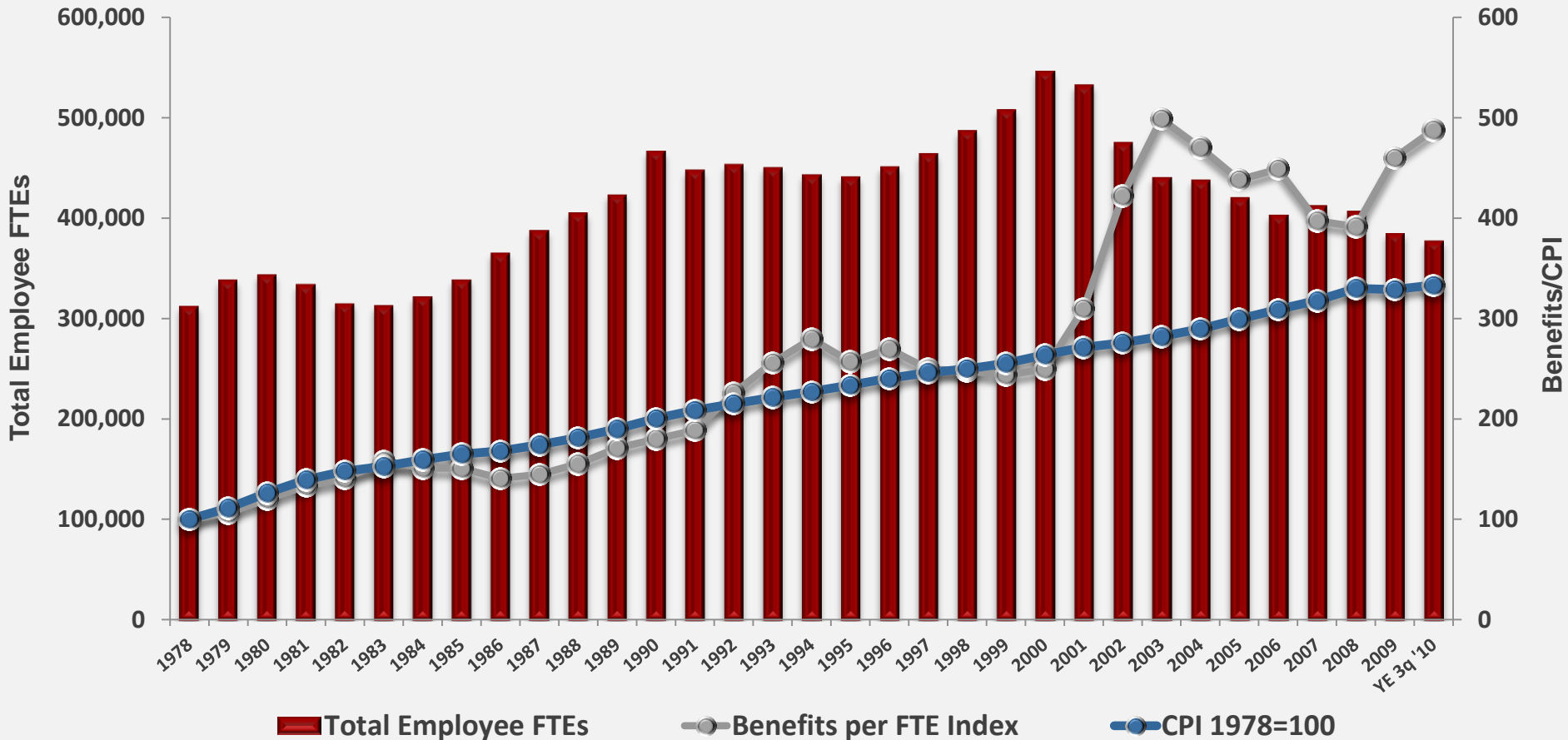
Despite the Boom and Bust Cycles of Labor Negotiations, Labor Compensation has Dropped in Real Terms

Reduced Real Labor Costs





But the Cost of Benefits Are a Concern





**WHAT TO MAKE OF THE LAST
30 YEARS OF THE US
COMMERCIAL AIRLINE BUSINESS**

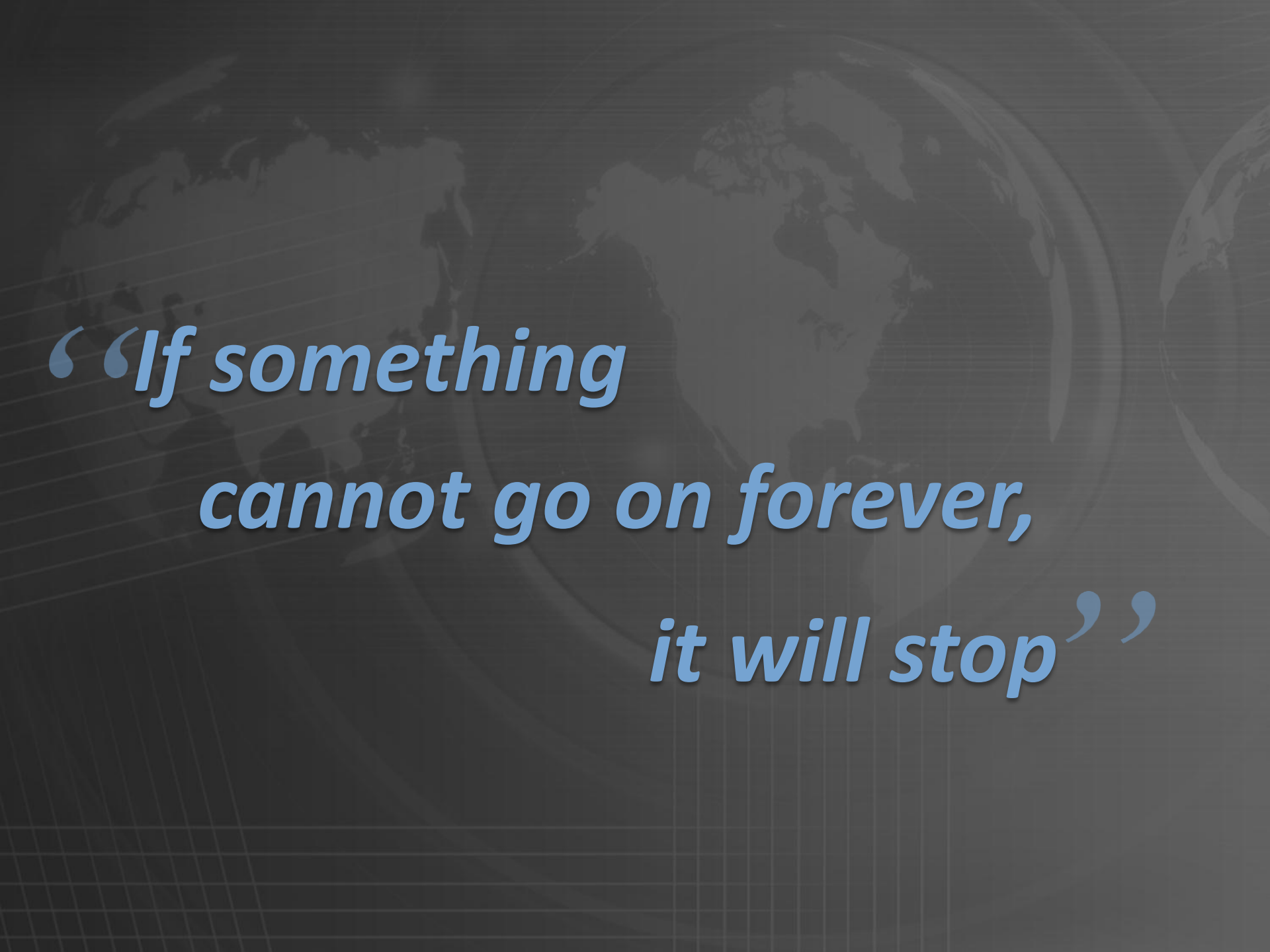


What to Make of the Last 30 Years?

- ▶ **Then: Barriers to entry for new and existing carriers were removed**
Now:
 - Interestingly, fuel costs/volatility proving to be a barrier to entry
 - Fuel costs have limited the growth of the Low Cost sector in a significant way

- ▶ **Then: Barriers to exit for inefficient carriers were erected**
Now:
 - Unlikely that labor is a source of capital this time around
 - Traditional external sources of capital not likely to fund inefficient operators

- ▶ **Then: Finally in the 2000's, cost reductions and efficiency improvements that were expected during the previous two decades began to happen**
Now:
 - Will the industry stand and not give in to destructive pattern bargaining?
 - Will the industry stand and not give in to the urge to add capacity?
 - Along those lines, will the industry stop competing with itself?
 - Will the industry finish the work of removing the middleman where possible?



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cannot go on forever,
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