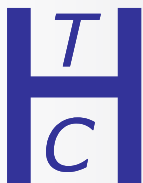


Right-Sizing: The Right Move in the Airline Business

Northwestern University
Icarus Society

December 11, 2012



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Hamlin Transportation Consulting
Fairfax, Virginia
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Fundamental Airline Economics

Which is more important?

- **Unit Costs**
- **Yields**

Two Ways to Make Money

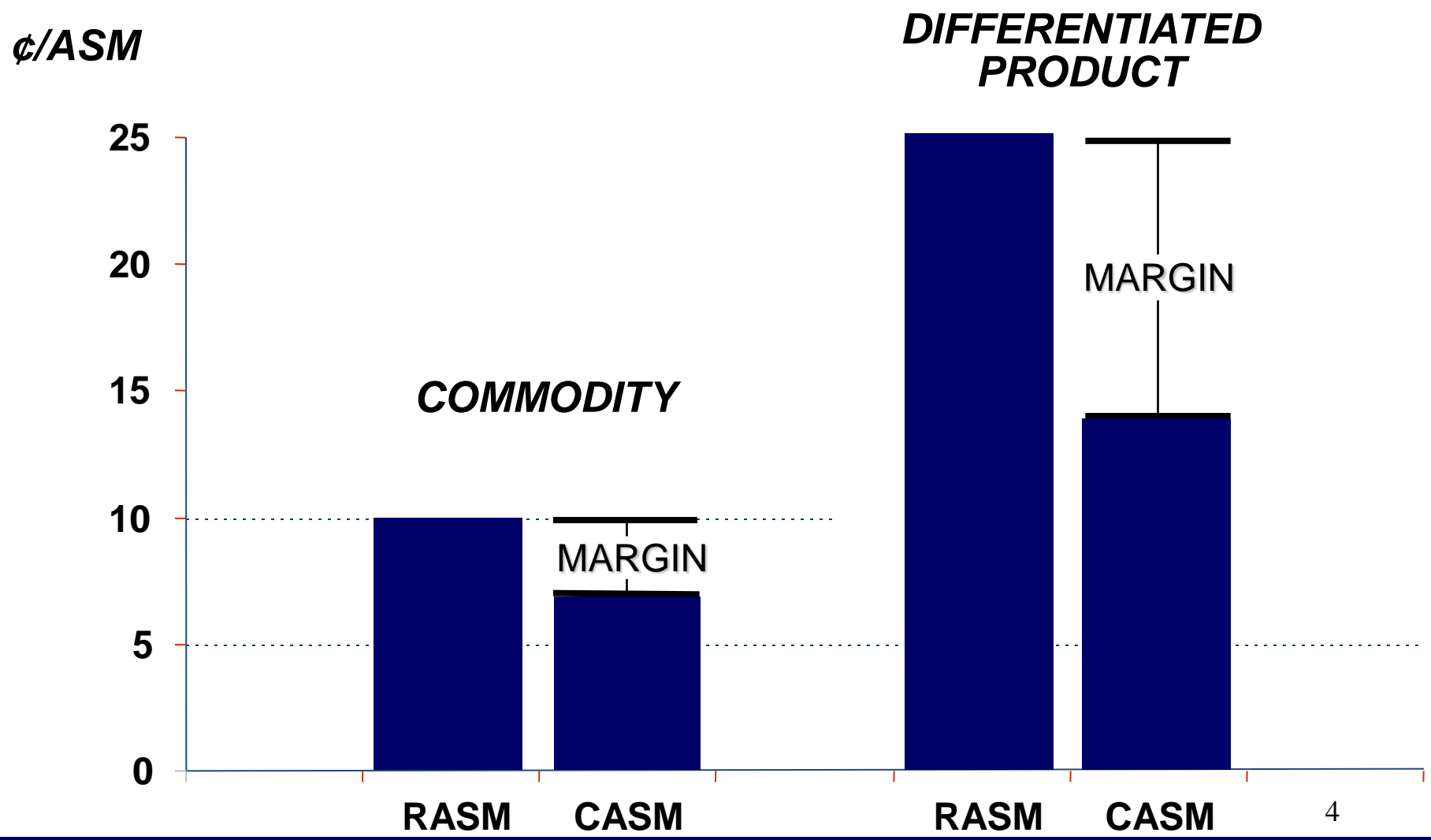
COMMODITY:

Sell a large quantity at a low margin

DIFFERENTIATED PRODUCT:

Sell a small quantity at a high margin

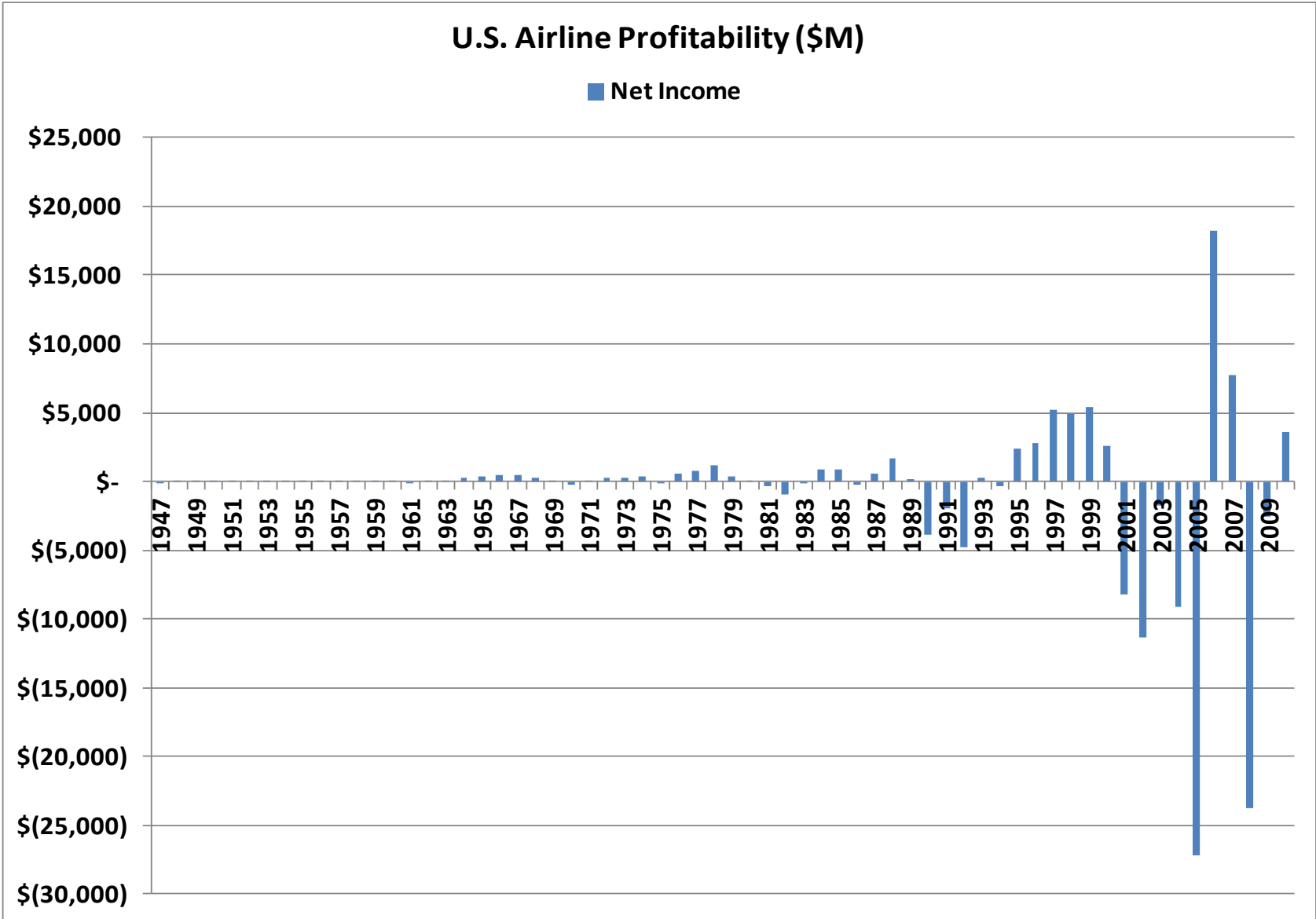
Two Ways to Make Money: Unit Profitability



In the Airline Business

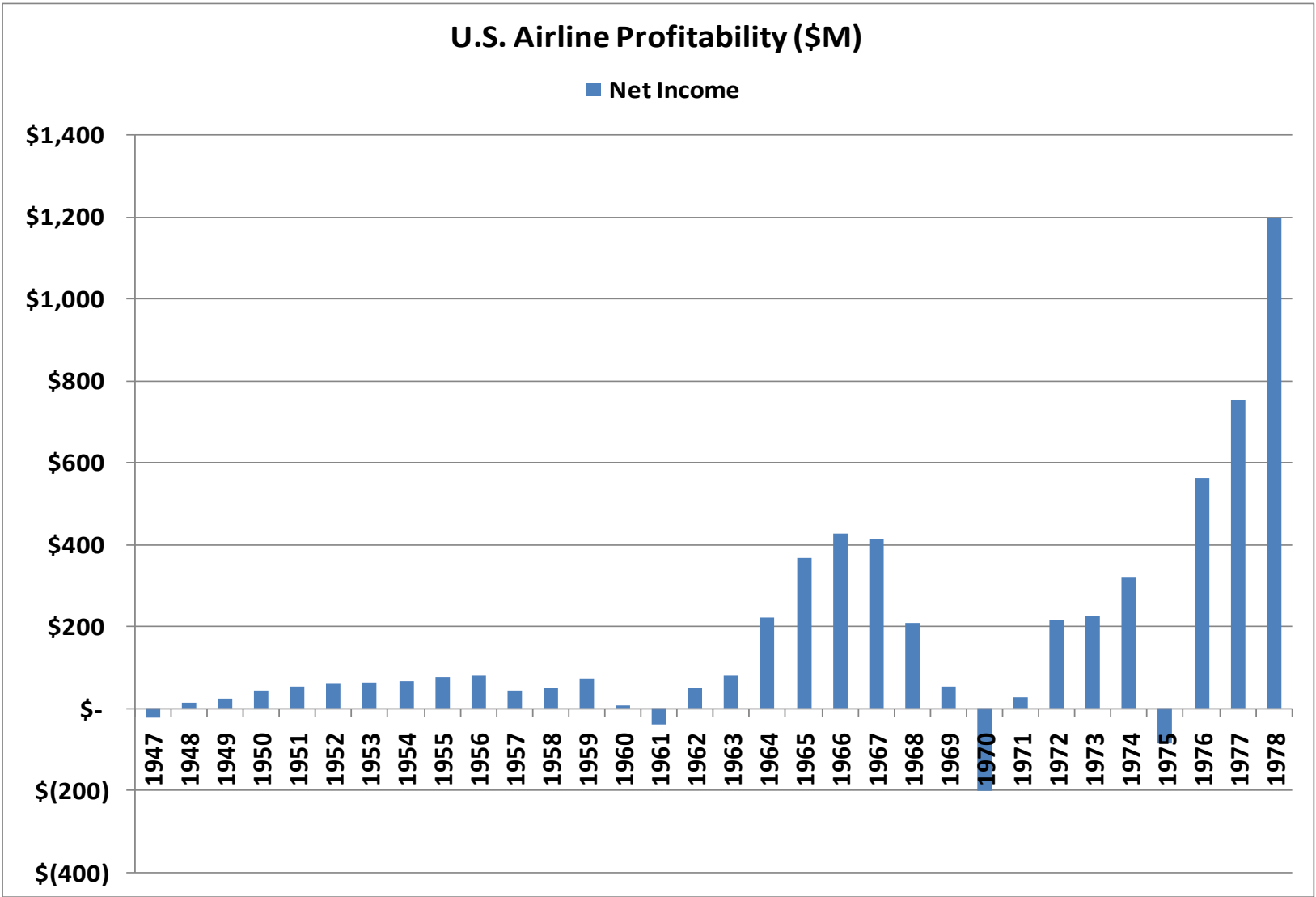
The **Love** of Capacity
Is the Root of All Evil

U.S. Airline Net Profits 1947-2010



Source: ATA Data

U.S. Airline Net Profit: Regulated Era



Source: ATA Data

What Caused the 1970 Losses?



Two Summers
behind the
Ticket
Counter

by
GEORGE
HAMLIN

TWA
AGENT IN TRAINING
TRANS WORLD AIRLINES, INC.

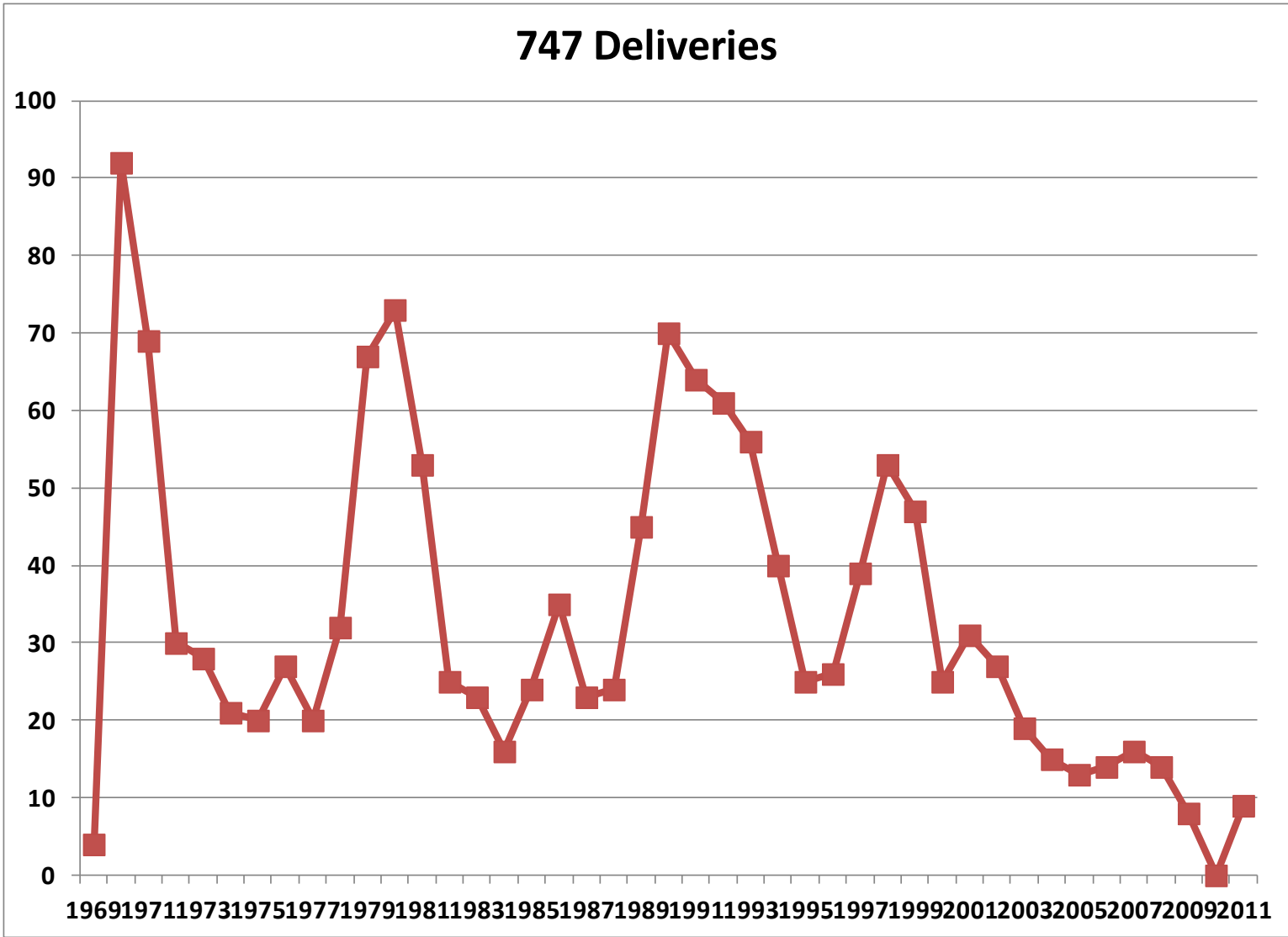
TWA

In summer 1970, I had graduated from college and wanted to work for an airline. As I was living in New York, JFK International Airport was a logical place to look for work. I began with Braniff, having been advised that they had hired for the summer peak in previous years.

The advice was correct, according to Braniff's station manager, but the past tense was appropriate because they were services 'beat the rush' by departing 15 minutes prior to the hour. Probably many of those wearing the devices would have had to stop and think about the message, if asked. Mine came in handy one day, as will be seen later.)

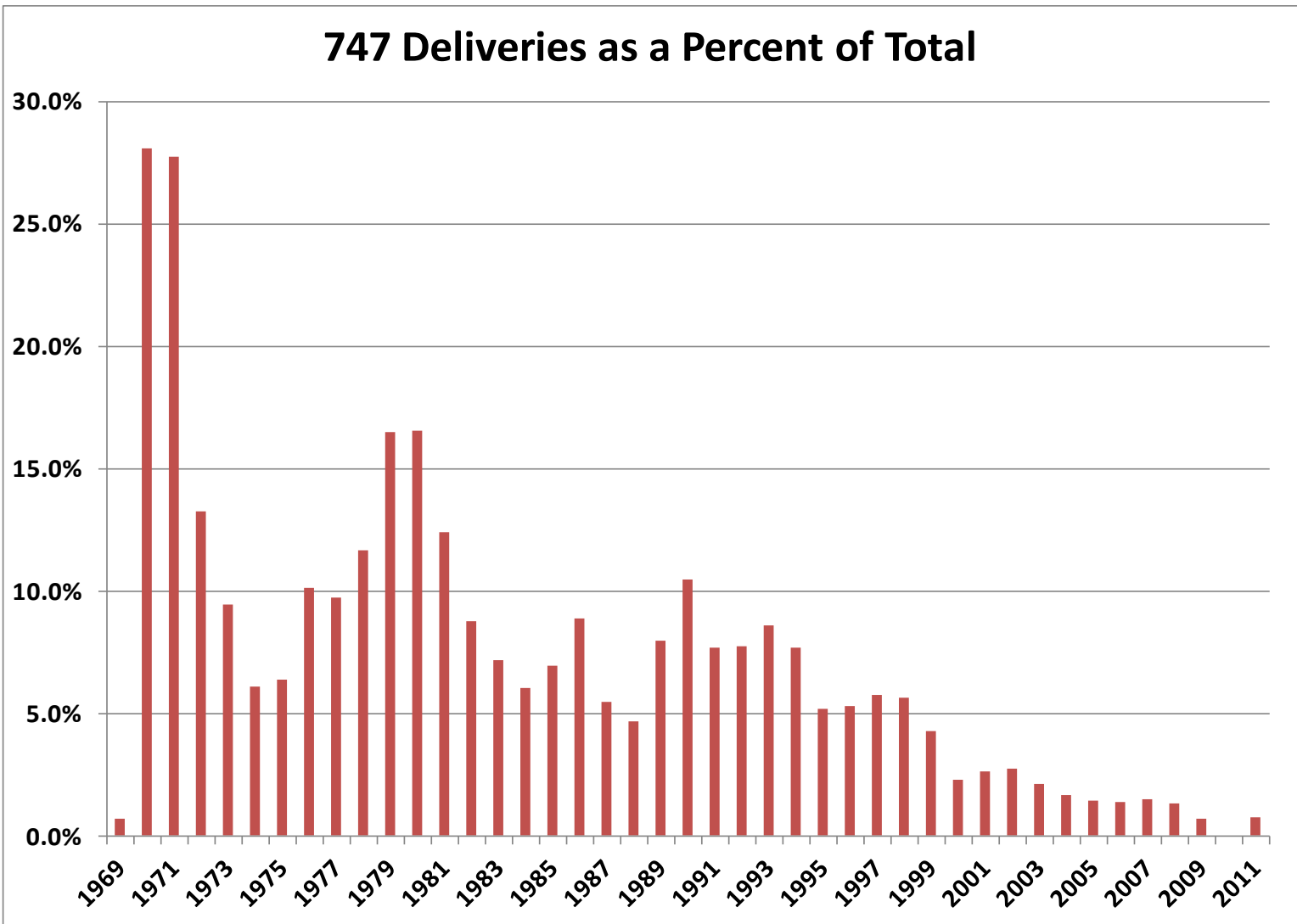
That early coffee break resulted from the day shift's supervisors having to think of what to do with several untrained new-hires. Upon our return, refreshed and suitably caffeinated,

One Thing that Caused the 1970 Losses



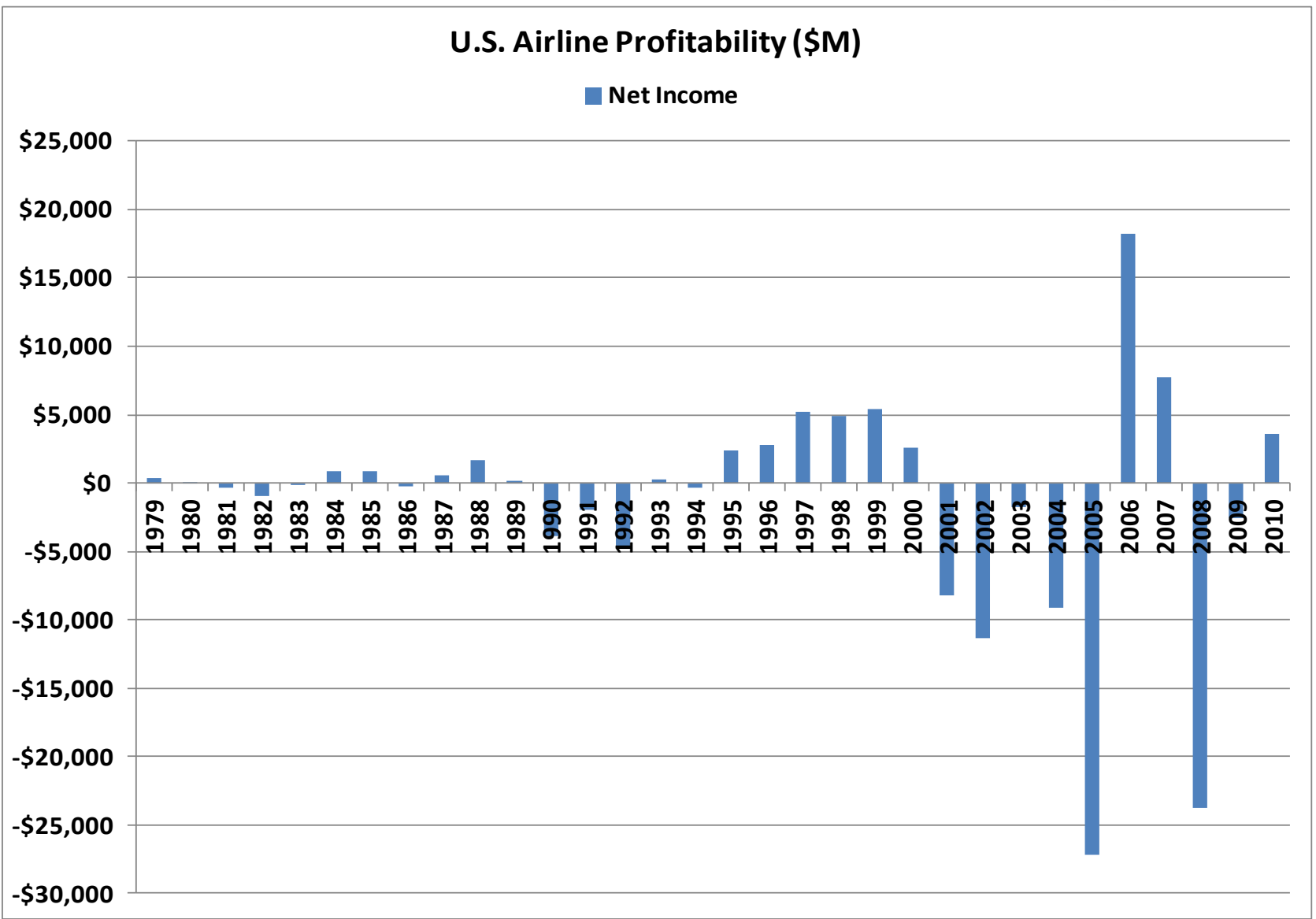
Source: *The Airline Monitor*, May 2012

An Extraordinary Chunk of Capacity



Source: *The Airline Monitor*, May 2012

U.S. Airline Net Profit: Post-Deregulation



Source: ATA Data

1980s Right-Sizing: Problem



1980s Right-Sizing: Solution



Long-Haul, 1980s-Style

Transatlantic



Transpacific



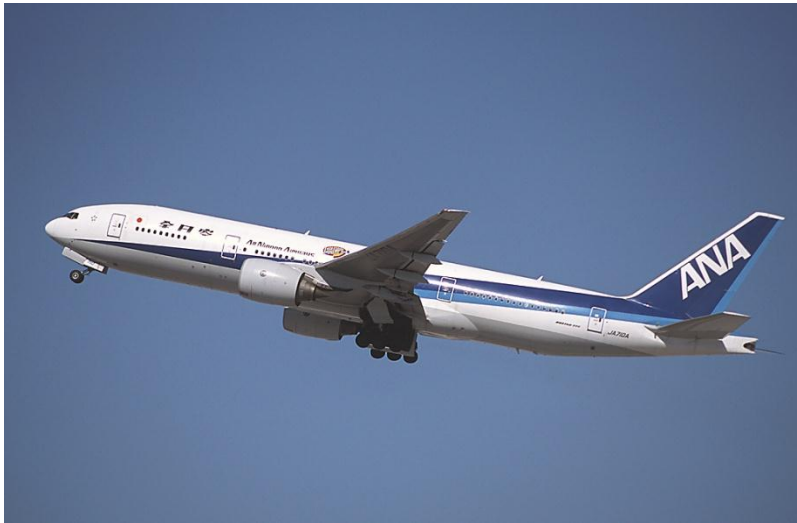
Long-Haul, 1990s-Style



The 1990s: Heyday of the RJ



Long-Haul, 2000s-Style



The Intercontinental A319



And the First of Two Game-Changing Aircraft is Now in Service



Once, Pricing was Fairly Uniform, and was Available in Print

odg OFFICIAL AIRLINE GUIDE
QUICK REFERENCE
NORTH AMERICAN EDITION
A GUIDE TO SCHEDULED AIR CARRIER SERVICES
A Reuben H. Donnelley Publication
\$3.50 PER COPY
JULY 1, 1971

STANDARD REFERENCE OF THE AIR TRAFFIC CONFERENCE OF AMERICA

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In 1971, Fares were More Uniform

<u>Market</u>	<u>Class</u>	<u>Fare</u>	<u>Notes</u>
NYC-LAX	F	\$ 205.00	
	Y	\$ 163.00	
	YN	\$ 130.00	One-stop
	EX	\$ 142.00	Except Fri/Sun; Saturday night stay; 30 day max

<u>Market</u>	<u>Class</u>	<u>Fare</u>	<u>Notes</u>
NYC-LON	F	\$ 782.00	
	Y	\$ 452.00	
	YH	\$ 552.00	
	T	\$ 412.00	One-stop; turboprop
	TH	\$ 502.00	One-stop; turboprop
	EX4	\$ 141.00	17-28 day; low season
	EX5	\$ 191.00	17-28 day; high season
	EX12	\$ 134.00	29-45 day; low season
	EX13	\$ 164.00	29-45 day; high season

Source: July 1971 OAGs

Preparing for the pricing challenge of deregulation

**American
Airlines**

Domestic and international timetable
effective April 3, 1978

**SuperSavers
Everywhere**

Save up to 40-45%
to any
American Airlines
destination
in the
Continental
United States



**American
Airlines**

Domestic and international timetable
effective April 30, 1978

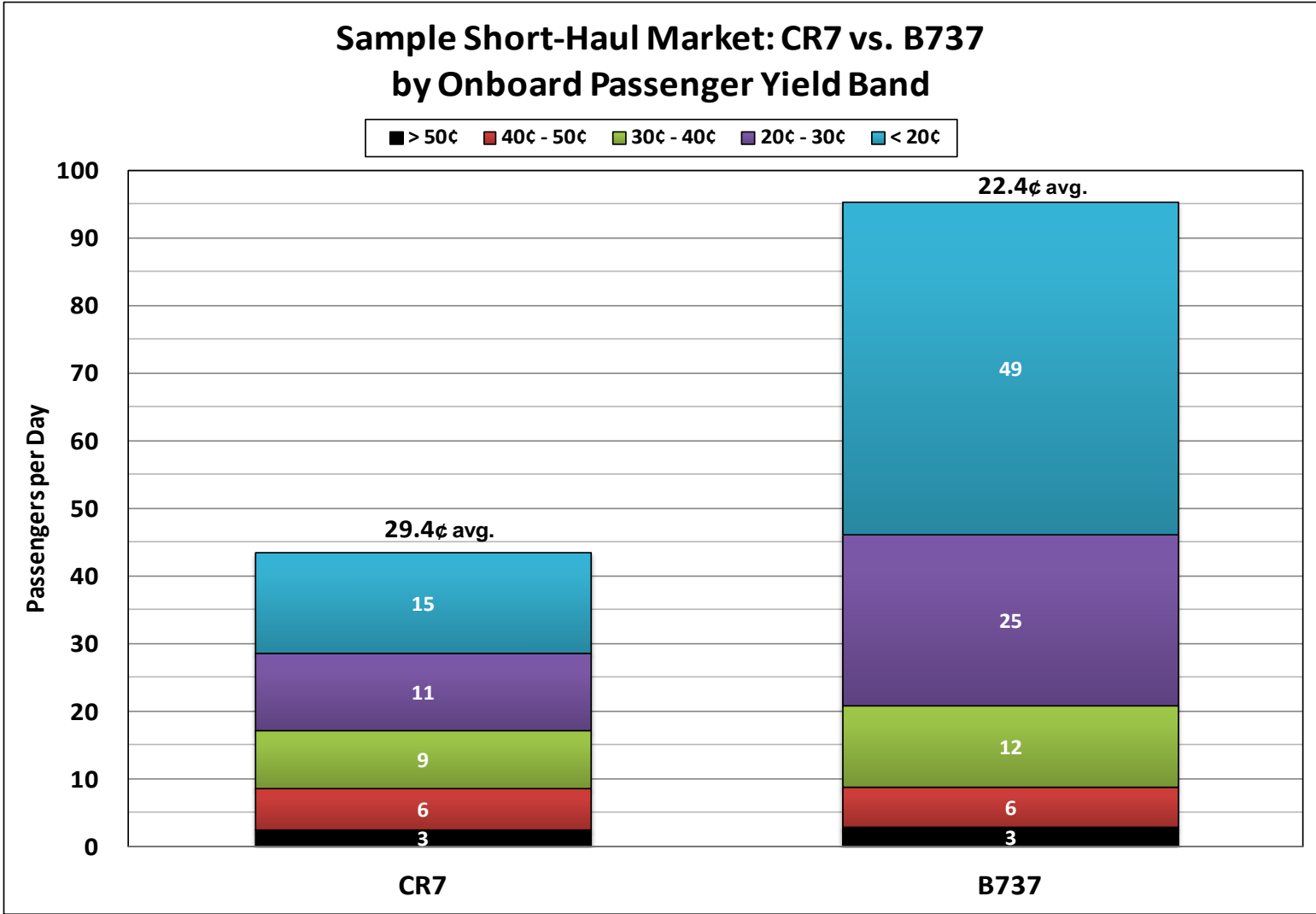
**SuperSavers
Everywhere**

Save up to 40-45%
to any
American Airlines
destination
in the
Continental
United States

**9% of United's passengers
produce 41% of the revenue.**

Source: Gerald Greenwald, Former United CEO, in a speech at
The Washington, D.C. Aero Club May 27, 1999

Effective Yield Management Can Enhance Profitability



Source: Airline data

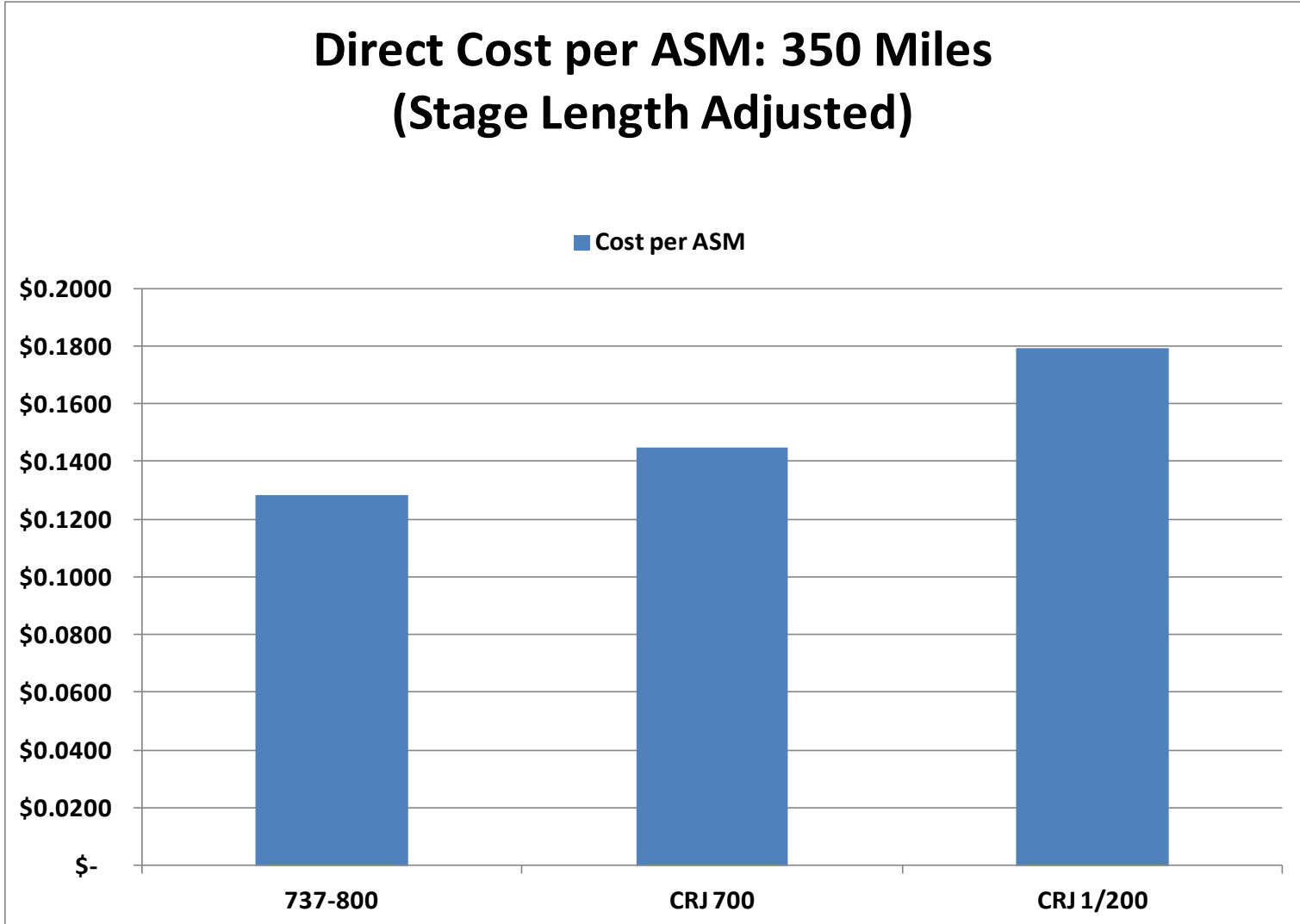
Higher-Yield Passengers are More Valuable than Lower-Yield Traffic

<u>Yield Band</u>	<u>737-800</u>		<u>CRJ 700</u>	
	<u>% of Passengers</u>	<u>% of Revenue</u>	<u>% of Passengers</u>	<u>% of Revenue</u>
< 20¢	51.6%	28.5%	34.1%	14.4%
20¢ - 30¢	26.5%	28.9%	26.4%	22.7%
30¢ - 40¢	12.7%	19.5%	19.7%	22.8%
40¢ - 50¢	6.3%	12.7%	13.9%	21.2%
> 50¢	3.0%	10.4%	6.0%	18.9%
Total	100.0%	100.0%	100.0%	100.0%
Avg Yield		\$ 0.224		\$ 0.294

Sometimes Less (Passengers) is More (Higher Yield)

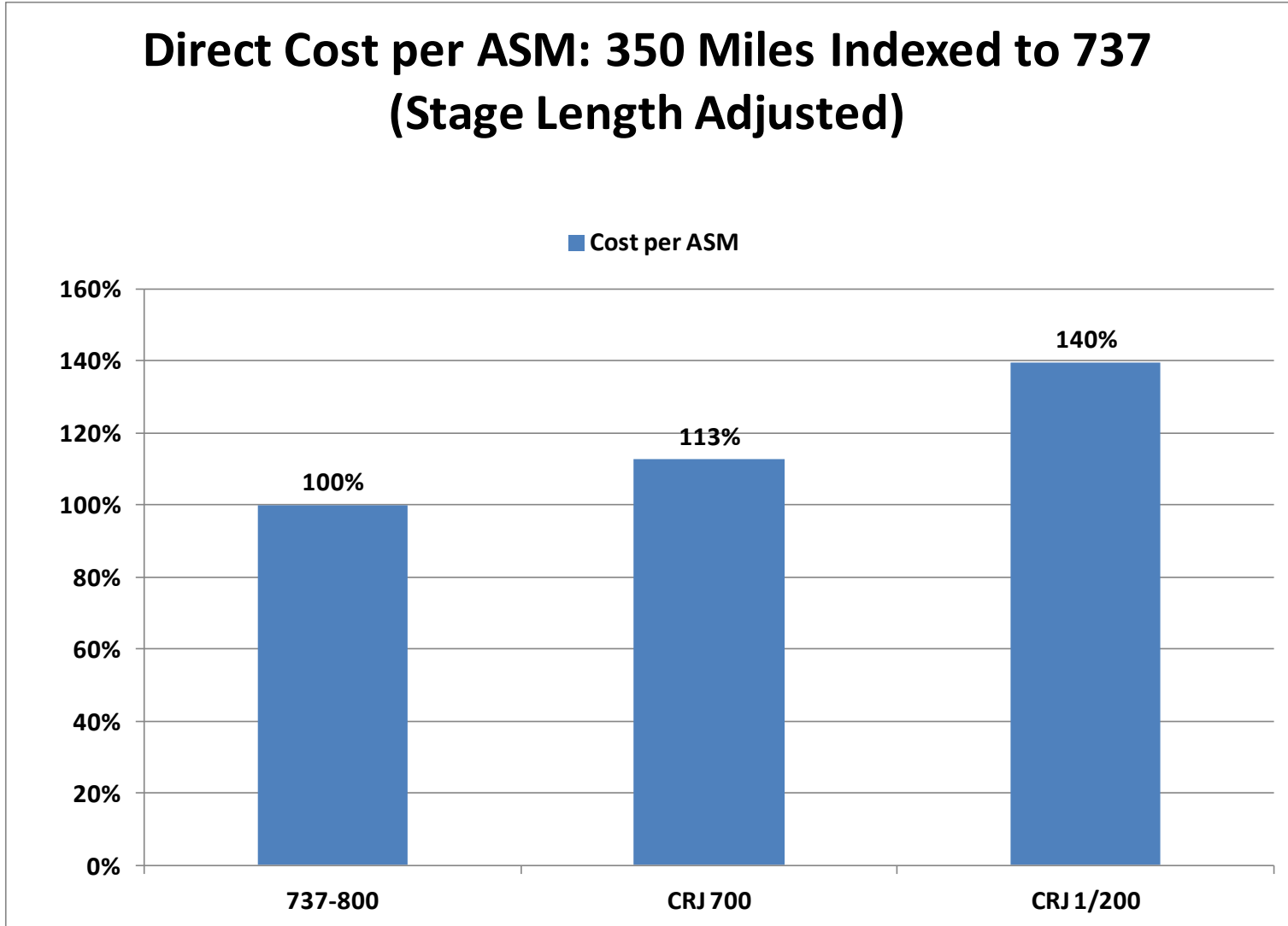
<u>Type</u>	<u>Passengers</u>	<u>Yield</u>
737-800	95	\$ 0.224
CRJ 700	43	\$ 0.294

Direct Operating Cost by Type



Source: *The Airline Monitor*, August 2012

DOC Indexed to the 737

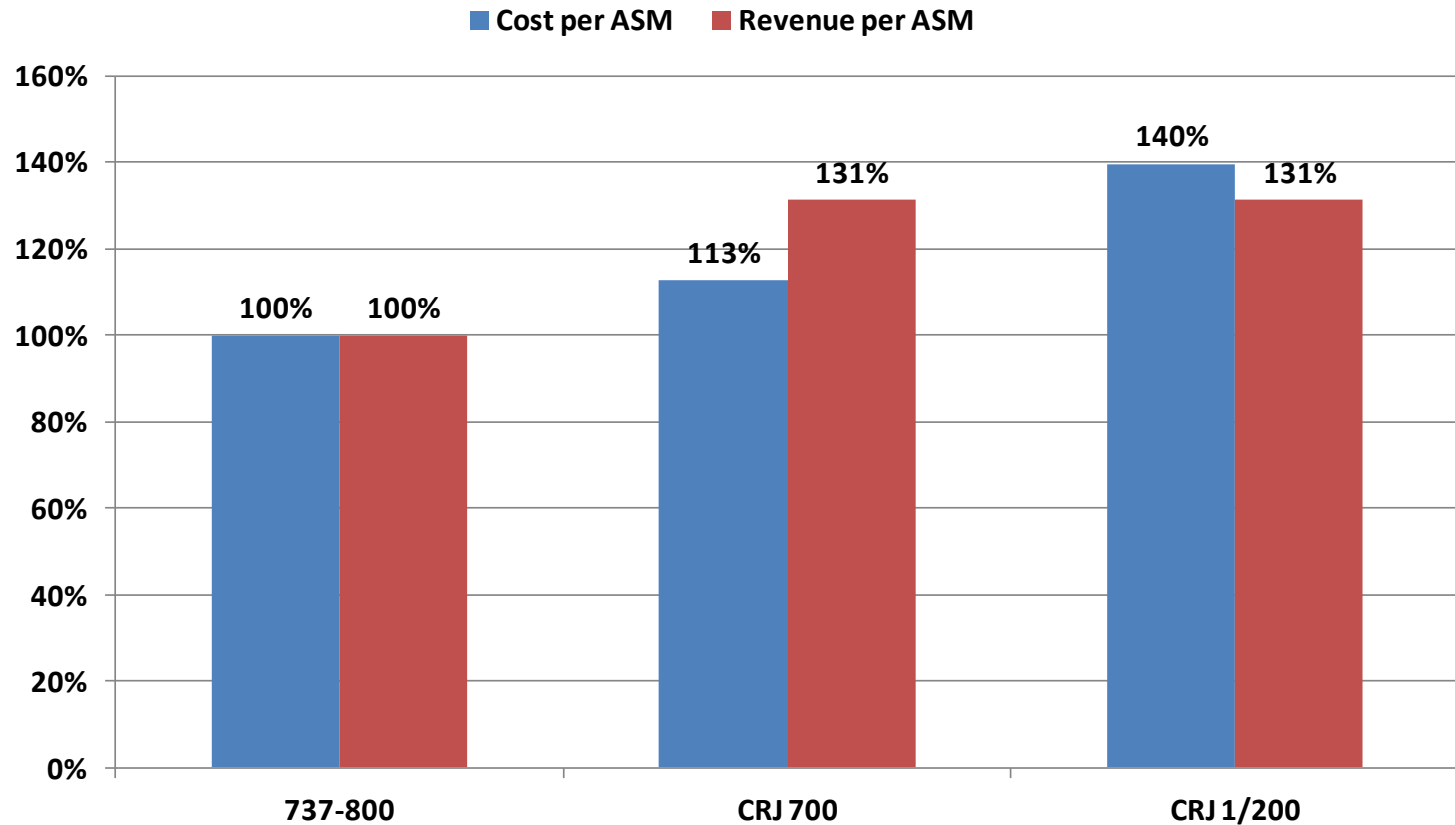


Source: *The Airline Monitor*, August 2012

CRJ 700, Margin Improvement

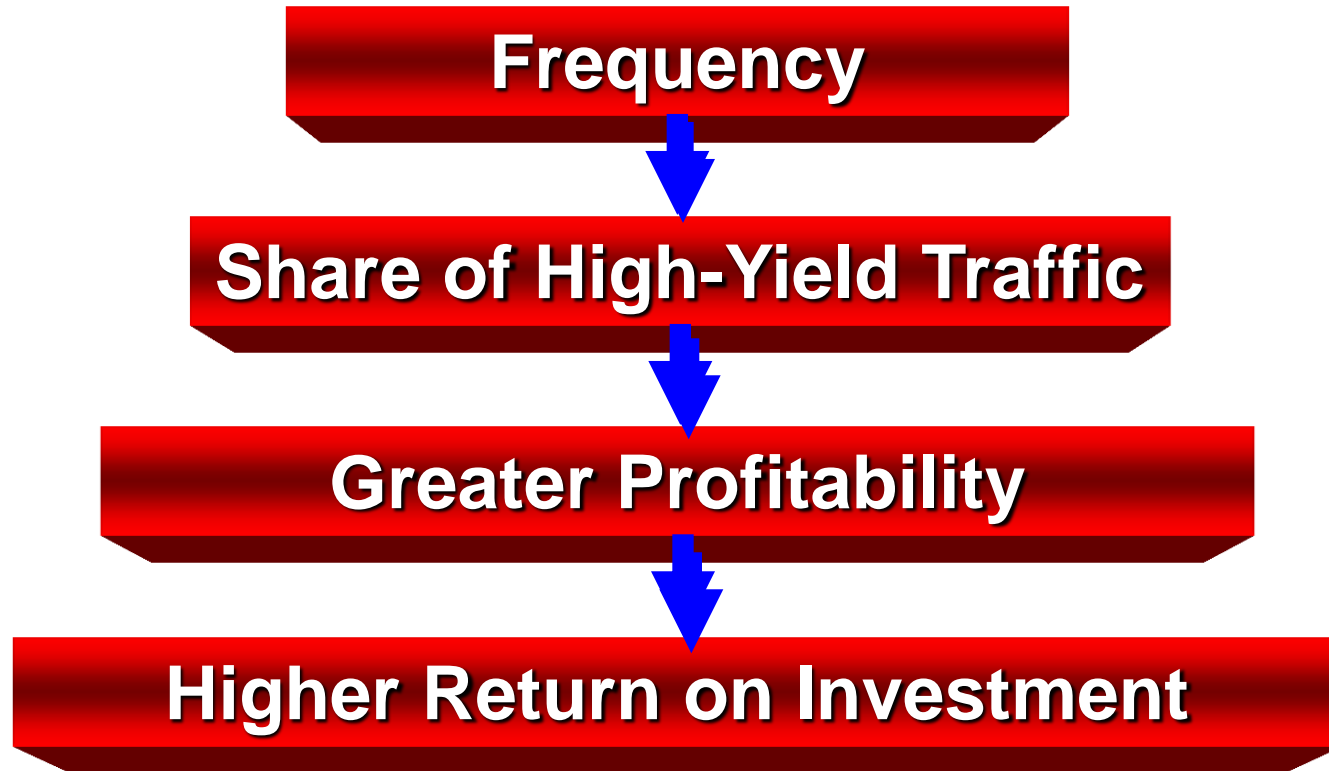
CRJ 1/200, **FAIL**

Revenue & Cost per ASM: 350 Miles Indexed to
737
(Cost Stage Length Adjusted)



**All travelers are not
equal, from a
revenue perspective;
some should get left
behind**

Airline Economics 101



Not Being Able to Right-Size Can Limit Market Opportunities

Size Category (Seats)

Carrier	70/90	125	150	175
AA	LIMITED	NO	YES	YES
DL	YES	YES	YES	YES
UA	YES	YES	YES	YES
US	YES	YES	YES	YES

At the Other End of the Size Spectrum

Body Count vs. Revenue

Class	Seats	Load Factor	Pax	Yield	Rev/ASM	Rev/Mile
Prem	125	70%	88	\$0.40	\$0.28	\$35.00
Econ	430	70%	301	\$0.10	\$0.07	\$30.10
Total	555	70%	389	\$0.168	\$0.117	\$65.10

Body Count vs. Revenue

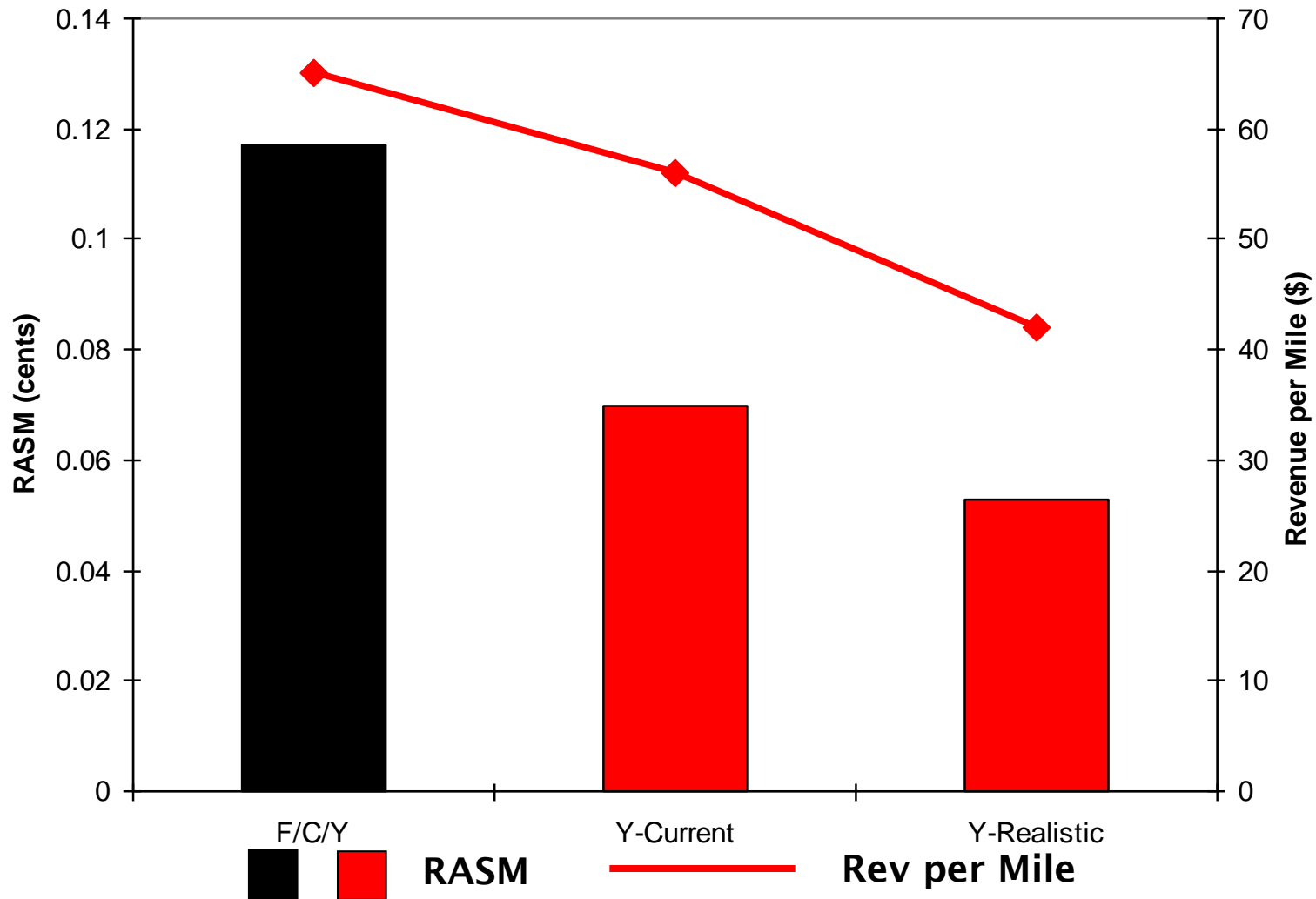
Class	Seats	Load Factor	Pax	Yield	Rev/ASM	Rev/Mile
Prem	0	0%	0	\$0.40	\$0.00	\$ 0.00
Econ	800	70%	560	\$0.10	\$0.07	\$56.00
Total	800	70%	560	\$0.10	\$0.07	\$56.00

Body Count vs. Revenue

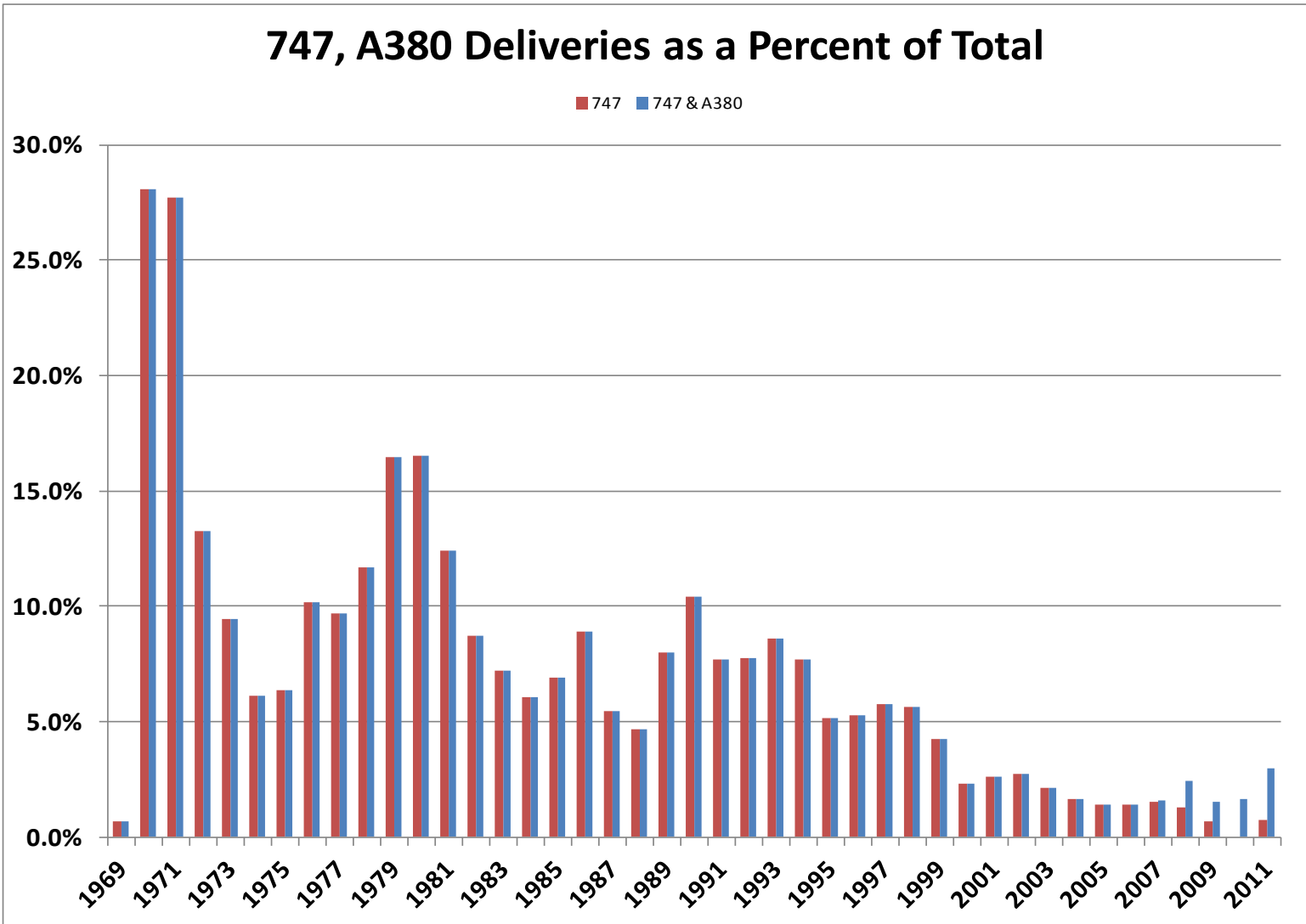
Class	Seats	Load Factor	Pax	Yield	Rev/ASM	Rev/Mile
Econ	400	70%	280	\$0.10	\$0.07	\$28.00
Econ	400	70%	280	\$0.05	\$0.035	\$14.00
Total	800	70%	560	\$0.075	\$0.053	\$42.00

**If it Were a Beer, it Might be Hard to
Sell... (Even a Kellogg Grad Might
Have a Difficult Time with This One)**

More Filling...Less Taste



Very Large is Currently a Small Niche



Source: *The Airline Monitor*, May 2012

**He who dies with the
most market share...**

**He who dies with the
most market share...
Dies**

British Airways “New Strategic Model”

- More capital-efficient aircraft
- Improved mix of traffic
- Short-haul network structured to maximize returns rather than feed
- Profitability, not size

Source: British Airways Presentation at Merrill Lynch Conference, June 8, 1999

Wonder which one has the higher average yield...

Lufthansa's 747-8 Intercontinentals have about the same number of premium seats as on the airline's A380 fleet: eight first class and 80 business, compared to eight and 98 on the Airbus double-decker. However, in LH service the A380 has considerably more economy seats: 420 versus 298 on the 747-8.

More Recently

Turkish Airlines said it's close to ordering 100 planes to provide short-haul links from Istanbul while scrapping plans to buy the biggest jumbo jets in favor of more modestly sized wide-body planes.

Source: Bloomberg November 28, 2012 "Turkish Air Seeks 100 Narrow-Body Jets After Ditching Jumbos"

A Key Consideration

“Our biggest problem is the capacity and the frequency,” the [Turkish] CEO said. “We want to go to higher frequencies. The 777 is big enough.” Possible plans include switching daily services to cities including Chicago and Hong Kong to double-daily, he said.

Fundamental Airline Economics

Which is more important?

- **Unit Costs**
- **Yields**

Fundamental Airline Economics

The Answer:

- **Neither**
- **What is most important:
Maximizing the difference
between total revenues
and total costs.**

Critical Mass Size

Is

BIG

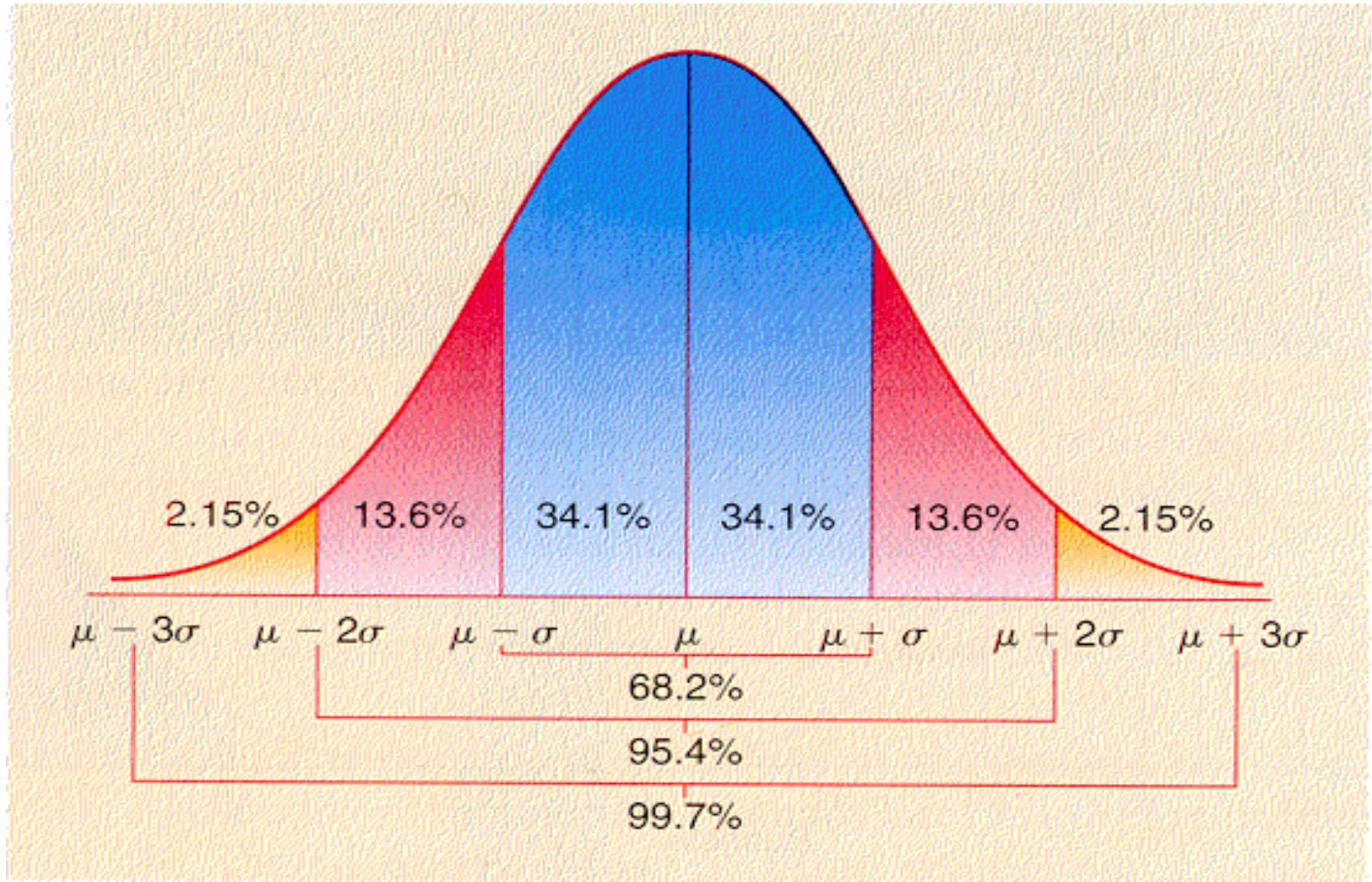
Necessarily Better?

Big is not necessarily better



Photo © George Hamlin

Extremism in the Defense of Market Share is No Virtue...



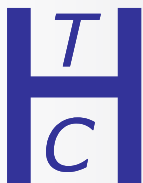
Summary & Conclusions

- Appropriate frequency enhances profits
- Utilize the right aircraft size for the market
 - Too large can reduce yields
 - Too small can increase unit costs
 - Right-sizing benefits are largely independent of competitive response
- Don't follow the herd; optimize carrier

Right-Sizing: The Right Move in the Airline Business

Northwestern University
Icarus Society

December 11, 2012



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Go Cats!
Beat
Mississippi
State

