Airline Capacity Discipline: Where and to What Extent?

Icarus Society, November 29, 2012

Professor Aaron J. Gellman

The Transportation Center 600 Foster Street
Northwestern University
847-491-3050

Cell: 847-274-4320

Background

- U.S. industry largely unprofitable in the 2000s
- Focus on market share
- Excess/uneconomic levels of capacity
- Growth, but not profitable

Recent Developments

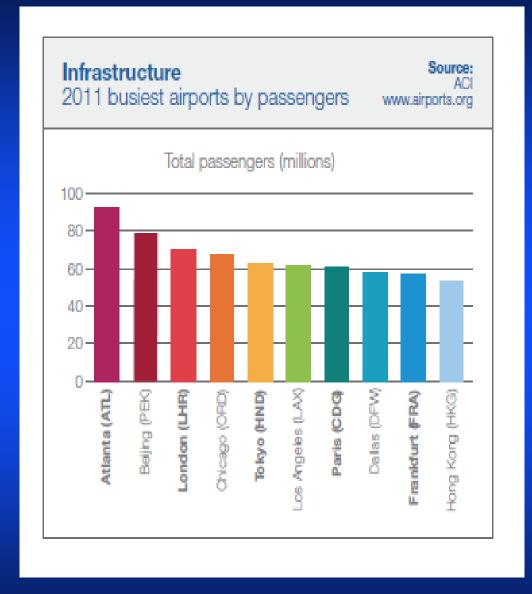
- Significant consolidation
 - Delta-Northwest
 - United-Continental
 - Southwest-AirTran
- Yet another one? (American-US Airways)
- Capacity reduced; hubs downgraded
- Profits improving; Wall Street approving

Is this the Recipe for Continuing Financial Success?

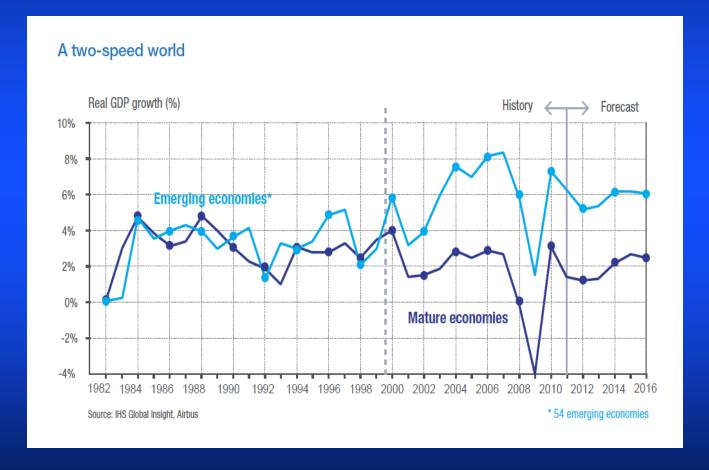
- No
- U.S./North America may be the biggest airline market today, but the world is changing
- There will be other markets that will grow significantly, and profits can be realized

A Related Problem

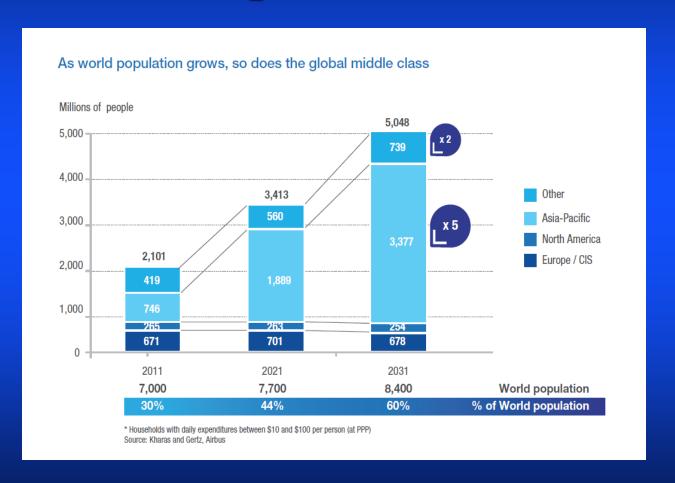
- Focus on short-term profitability may lead to lost long-term opportunities
- Markets outside N. America forecast to grow rapidly
- U.S. carriers need to plan how to benefit
- Once current economic difficulties resolved, U.S. carriers need to be ready to execute



Emerging Economies Growing Faster than Mature Economies



A Growing Middle Class Will Spark Demand



The Top Dozen Economies are Changing



Country ranking by GDP

1991

2011



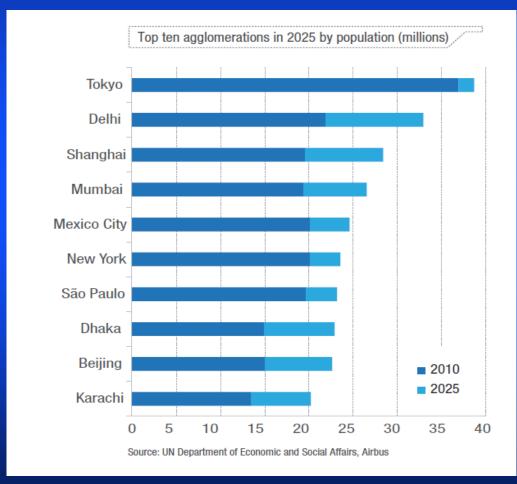
- 1 US
- 2 Japan
- 3 Germany
- 4 France
- 5 UK
- 6 Italy
- 7 Russia
- 8 Spain
- 9 Canada
- 10 Brazil
- 11- Mexico
- 12 China

Source: IHS Global Insight, Airbus

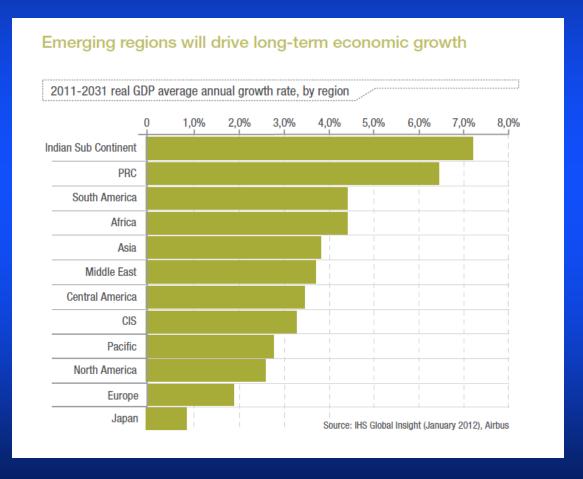
- 1 US
- 2 Japan
- 3 China
- 4 Germany
- 5 UK
- 6 France
- 7 Italy
- 8 India
- 9 Canada
- 10 Spain
- 11 Brazil
- 12 South Korea

- 1 US
- 2 China
- 3 India
- 4 Japan
- 5 Germany
- 6 UK
- 7 France
- 8 Brazil
- 9 Italy
- 10 Canada
- 11 Mexico
- 12 South Korea

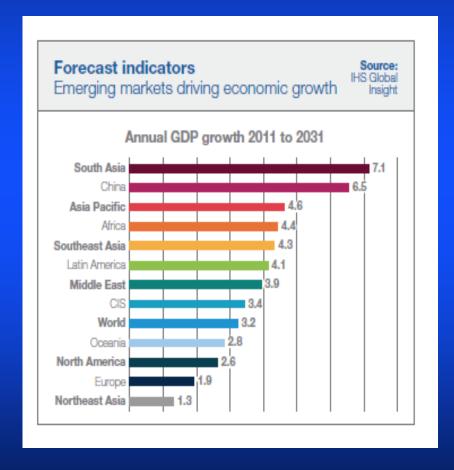
Asia is Expected to have the Most Large Cities in 20 Years



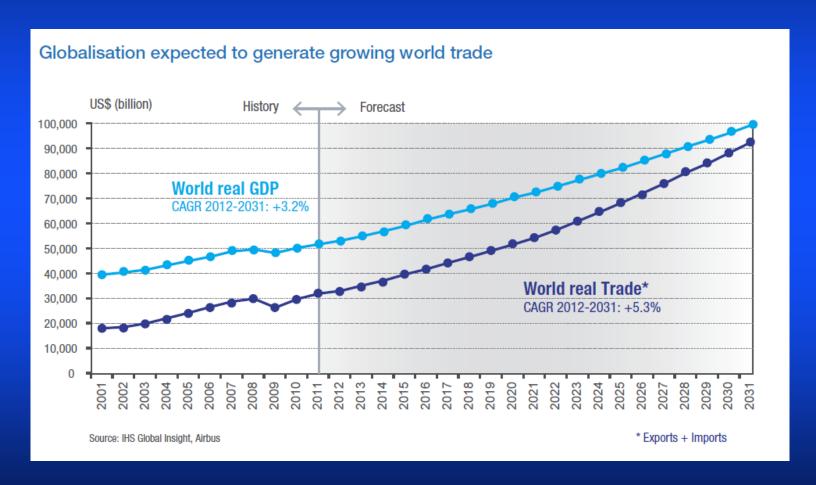
GDP Growth Rates will be Greatest in "Non-Traditional" Markets



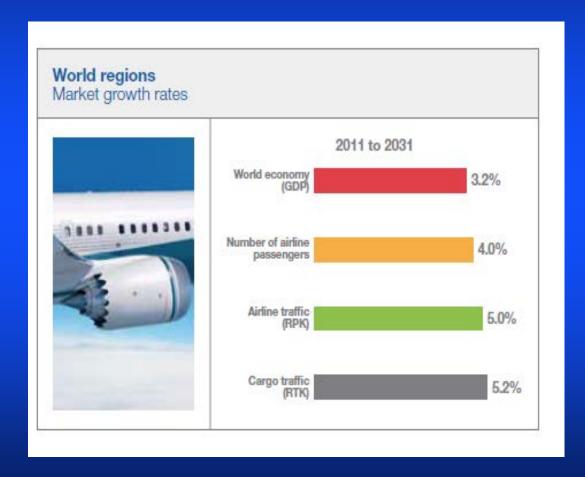
High Growth is Outside the U.S., Europe and Japan



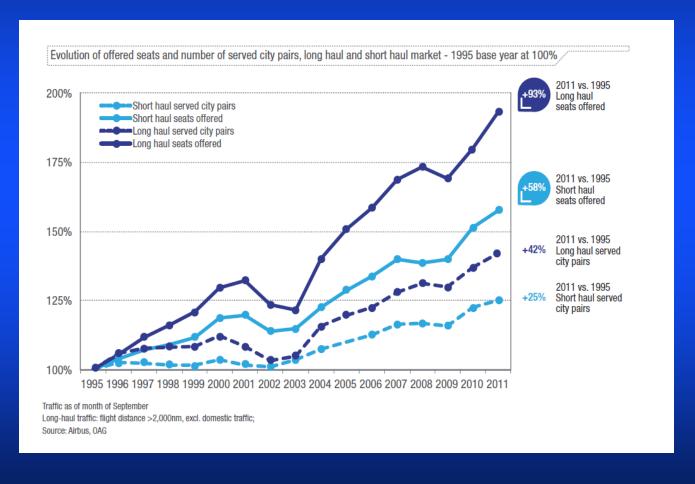
Trade Will Grow Faster than GDP



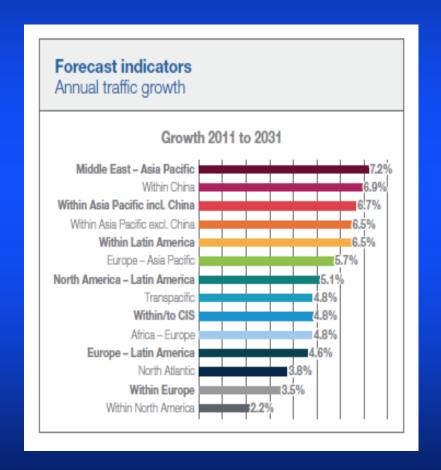
Airline Traffic Growth Outstrips GDP Growth



Long-Haul Has Grown More Rapidly Than Short-Haul



The "Action" is Shifting



Asia-Pacific: A key Factor in the Airline Industry Future

Asia Pacific

Key indicators and new airplane markets

Growth measures

Economy (GDP) 4.6% Traffic (RPK) 6.4% Cargo (RTK) 5.9% Airplane fleet 5.5%

Market size

Deliveries 12,030
Market value \$1,700B
Average value \$140M

ai	New rplanes	Share by size
Large	320	3%
Twin aisle	3,230	27%
Single aisle	7,990	66%
Regional jets	490	4%
Total	12,030	

	2011	2031
	Fleet	Fleet
_arge	340	460
win aisle	1,080	3,490
Single aisle	3,170	9,230
Regional jets	120	490
Total	4,710	13,670

on J. Gellman

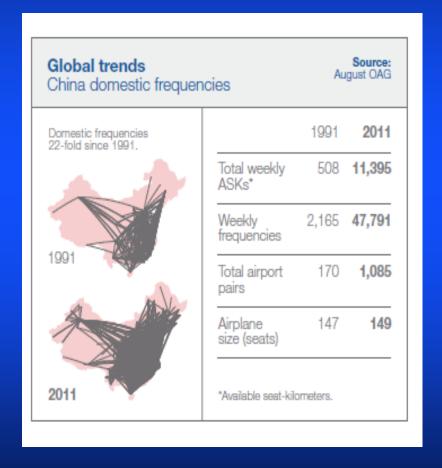
China: The Gold Red Star of Asia-Pacific

China

Key indicators and new airplane markets

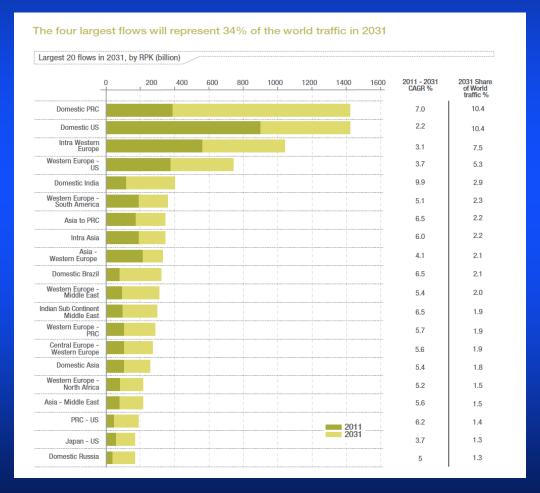
Growth measures		air	New planes	Share by size
Economy (GDP)	6.5%	Large	110	2%
Traffic (RPK)	7.0%	Twin aisle	1,190	23%
Cargo (RTK)	6.2%	Single aisle	3,650	69%
Airplane fleet	5.9%	Regional jets	310	6%
		Total	5,260	
			2011	2031
Market			Fleet	Fleet
size		Large	80	140
Deliveries	5,260	Twin aisle	280	1,310
		0	4 400	4.000
Market value	\$670B	Single aisle	1,490	4,220
Market value Average value	\$670B \$130M	Single aisle Regional jets	1,490	310

Dramatic Growth Within China: Past is Prologue



Asron I Gellman

The PRC Domestic Market Will Become the Largest in the World



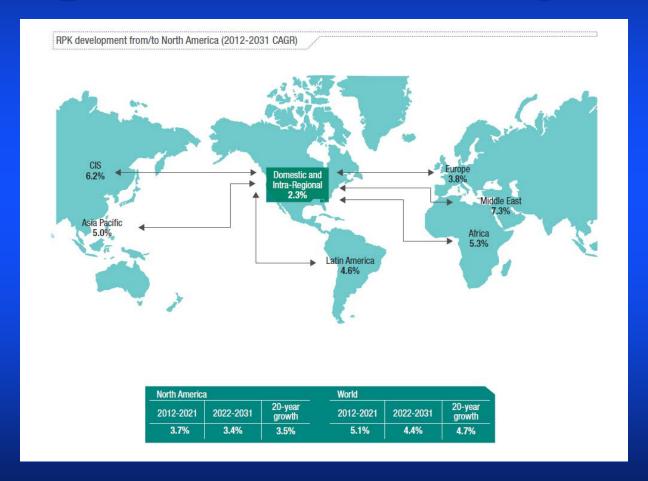
- Emphasizes the dramatic changes coming in the global market
- Domestic PRC feed will provide a significant competitive lever for Chinese carriers
- U.S. carriers need to have a competitive strategy, including service between hubs and interior points, using 787/A350

Asron J. Gellms

Regional Forecast Growth Rates

2011 to 2031						
	Africa	Latin America	Middle East	Europe	North America	
Asia Pacific	7.4%	5.4%	7.2%	5.7%	4.8%	6.7%
North America	6.0%	5.1%	6.4%	3.8%	2.2%	
Europe	4.8%	4.6%	5.1%	3.5%		
Middle East	6.9%	-	5.1%			
Latin America	8.3%	6.5%				
Africa	6.2%					

N. American Airline Growth Depends on Other Regions



Focus on Latin America

- American the dominant U.S. carrier
- Recent/announced service expansions:
 - Miami-Manaus; also separate Salvador/Recife
 - Miami-Asuncion, Paraguay
 - Miami-Rotan (Honduras)
 - DFW-Lima
 - Second JFK-Sao Paulo
 - Second MIA-Rio de Janeiro

aron J. Gellma

COPA-Unexpected Innovation in the Latin American Market

- Successful use of Panama as a North-South hub
- Strategy: single-aisle aircraft & frequency
- Single-stop connections between North & South America
- Economic efficiency
- A "Black Swan"

Connecting Asia & Latin America via the U.S.: not a New Idea!



Connecting Asia & Latin America via the U.S

- Many Asia-Latin markets too long for nonstops
- New aircraft (787, A350) can address these opportunities
 - Appropriate size
 - Adequate range
- Example: Japan-Brazil via Miami

Alliances: The Whole is Greater than the Sum of the Parts



- Pan Am pioneered service between the U.S. and west and southern Africa
- However, a decade ago, no U.S. carrier served sub-Saharan Africa
- Extensive Chinese presence in Africa: drawn by natural resource abundance
- Delta now serving West/South Africa
- United flying Houston-Lagos

And African Carriers Serve U.S. Markets





Capacity Discipline: Where & How Much?

- Quarterly earnings vs. investment for longterm
- Capacity discipline and 'right-sizing' still important in mature N. American markets
- International markets: a different story
- *Not* unbridled expansion but focus on positioning to benefit from global growth

Summary & Conclusions

- Capacity growth restraint continues to be important in the short run in mature markets
- Future airline growth will be largely outside the U.S., Europe and Japan
- Many potentially profitable opportunities, even in the near term
- The Challenge: assure growth reflects market opportunity