Observations on Airline Alliances and Joint Ventures

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Perry's Helpful Distinctions

- Unaligned carriers (Virgin Atlantic)
- Branded Alliances
 - Star (Core UA-AC-CO-LH, total 28)
 - Pacific SQ, NH, OZ, CA
 - Latin TAM
 - Skyteam (Core DL-KL-AF, total 13)
 - Pacific KE, China East, China Southern
 - One World (Core AA-BA-IB, total 13)
 - Pacific JL, CX.

Difference Between Branded Alliances and JV's

- Example: Star. AC-UA-CO-LH are JV on the Atlantic. Just approved UA-CO-NH on the Pacific
 - Many Star carriers are not part of JV's, including SK, OS, LX, Brussels, Turkish, Egypt
 - On the Pacific, SQ, OZ, and CA are not part of a Star JV

Benefits to Airlines

- Perry's Presentation Makes the Case
- Alliances Raise Revenues
 - Double hubs create funnel routes (AMS-DTW, FRA-ORD)
 - Passengers attracted from non-aligned carriers (Virgin Atlantic cannot compete on Kansas City to Hannover)

The Issues Raised by Today's Topic: Benefits of Alliances vs. JV's

- Benefits to Airlines
 - Collusion on pricing on routes dominated by the JV (JFK-LHR, ATL-CDG, ORD-FRA)
 - Economies of scale in marketing, creating corporate deals (are these paid for by raising the base price to allow these discounts?)
 - Joint sourcing, cost reduction. This is a transfer from suppliers to the airline industry, economists can't object to this.

Benefits to Consumers?

- Benefits to Consumers of Alliances
 - Clear benefits to elite flyers
 - Unclear benefits to infrequent flyers
- What are Benefits to Frequent Flyers?
 - Elite FF benefits, lounges
 - Key distinction: ANYONE flying business class gets lounge access, doesn't require alliances.
 - The value of this perk due to Alliances is for FF's who are flying economy yet gain access to partner lounges if their elite status is high enough
 - RJG story: 100K hurdle to be an elite with Star for 12 straight years (UA)
 - Receive FF and elite-qualifying credit from intra-Europe on LH, LX, SK, TP, OS
 - I've never been in a European airport that didn't offer some kind of lounge
- Attraction to consumers occurs with branded alliances, doesn't require JV's

Benefits of Alliances to Non-Frequent Flyers

- Two benefits:
 - Added capacity on funnel routes (DTW-AMS, ORD-FRA)
 - boarding passes issued for connecting flights, not just initial flight
 - Flying DEN-ORD-FRA-BUD just as easy as DEN-ORD-ROC
- Typical non-FF's are students and casual travelers making that one trip every year or two to Europe
- They care about price, not Alliances
- Have the Alliances helped or hurt them?

The Basic Pricing Model Introduced by Alliances

- Connecting across alliances is more expensive, the so-called "double marginalization" penalty
 - If I fly AA ORD-FRA and then LH FRA-BUD, I pay more than flying UA/LH ORD-FRA-BUD
- Thus studies of airline pricing show that alliances reduce prices
- But compared to what?
 - Did alliances reduce fares or were fares on nonpartner connections increased?

The Lost World of Transatlantic "Roaming"

- Pure mileage based fares, valid on any IATA airline. Here's my itinerary in 1970 on a "M115" fare, that is, any flight keeping within 115% of the allowable mileage was OK
- Contemplate how you could do this kind of trip today? You'd have to buy separate fares – transatlantic, then local within Europe. No wonder Ryanair thrives

Here's What College Students Would Like to Do Today

15	54	00JUL69	JFK	ORY	JFKORY	TW	800
15	55	00AUG69	ORY	LHR	ORYLHR	BA	237
15	6	00AUG69	LHR	ORY	LHRORY	BA	354
15	57	00AUG69	ORY	LHR	ORYLHR	AF	824
15	8	00AUG69	LHR	CPH	LHRCPH	SK	504
15	59	00AUG69	CPH	STR	CPHSTR	SK	831
16	0	00AUG69	STR	ATH	STRATH	SK	831
16	31	00AUG69	ATH	RHO	ATHRHO	OA	960
16	62	00AUG69	RHO	ATH	RHOATH	OA	961
16	3	00AUG69	ATH	IST	ATHIST	AF	614
16	64	00AUG69	IST	TLV	ISTTLV	TK	996
16	35	00SEP69	TLV	NCE	TLVNCE	AF	161
16	6	00SEP69	NCE	ORY	NCEORY	AF	412
16	67	00SEP69	ORY	BOS	ORYBOS	TW	801

What do JV's Add to Branded Alliances?

- For consumers, they add nothing
 - Airlines struggle to find consumer benefits
 - AA-BA half-hourly service JFK-LHR
 - Skyteam may have increased schedule coordination, but for Star this was done at least a decade ago
 - LH 430 FRA-ORD has departed at ~10am for decades (same flight number since 1957!)
 - UA 941 FRA-ORD has departed at 12:45pm for two decades
- Is price competition choked off?

The Leading Advocate That Alliances and JV's are Anti-Competitive: Hubert Horan

- His case refers only to the Atlantic:
 - After 2003 price (i.e. revenue/pax) rose much faster on the Atlantic than U. S. domestic or other regions (Latin/Pacific)
 - The reason prices rose so much was collusion among alliance partners
- The outcome "overturned the laws of supply and demand"
 - Why? Because not just price but capacity increased on the Atlantic compared to other regions

History of Airline Antitrust Immunity

One brief period when ATI created Consumer Benefits

■ Thousands of markets got online service, discount fares for the first time



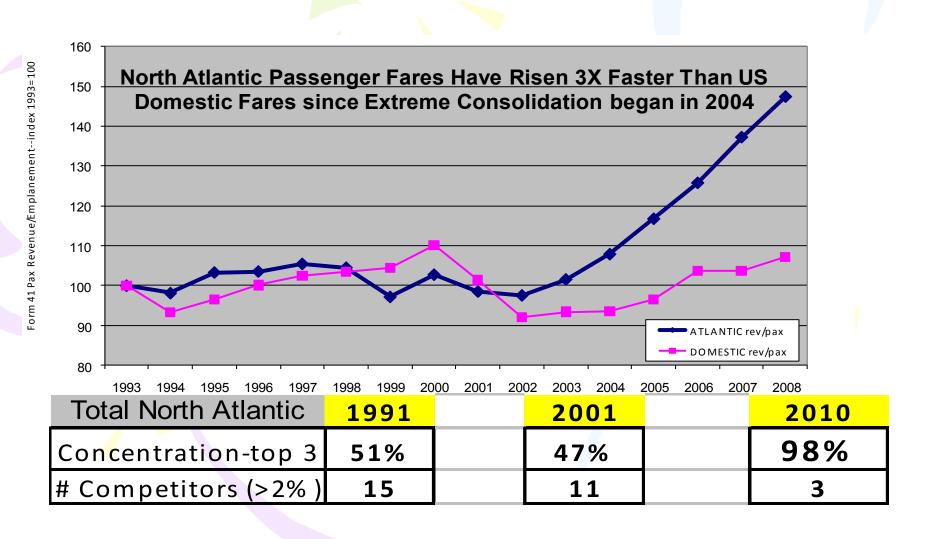
Benefits only possible on the North Atlantic

No similar network opportunities Trans-Pacific or Europe-Asia

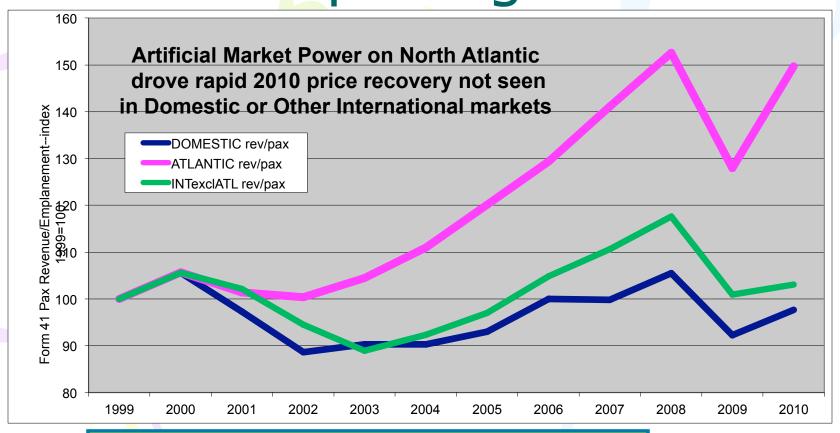
Original Alliances thrived in competitive market

	1991	1993	1995	1997	1999	2001				
Concentration-total North Atlantic market (55 million annual pax)										
top 3 share	35%	42%	42%	45%	47%	47%				
number of US-EU competitors with minimum departure share of 2%										
	15	15	13	13	11	11				

Post-2004 Consolidation has created market power



Anti-competitive impacts confirmed by preliminary 2010 pricing data



post 2004 market power defied laws of supply and demand

<u>Domestic</u> fares +15% <u>because</u> seats only + 1%

<u>Atlantic</u> fares +46% <u>despite</u> seats +45%

The Big Question: How To Interpret Big Price Increase on the Atlantic

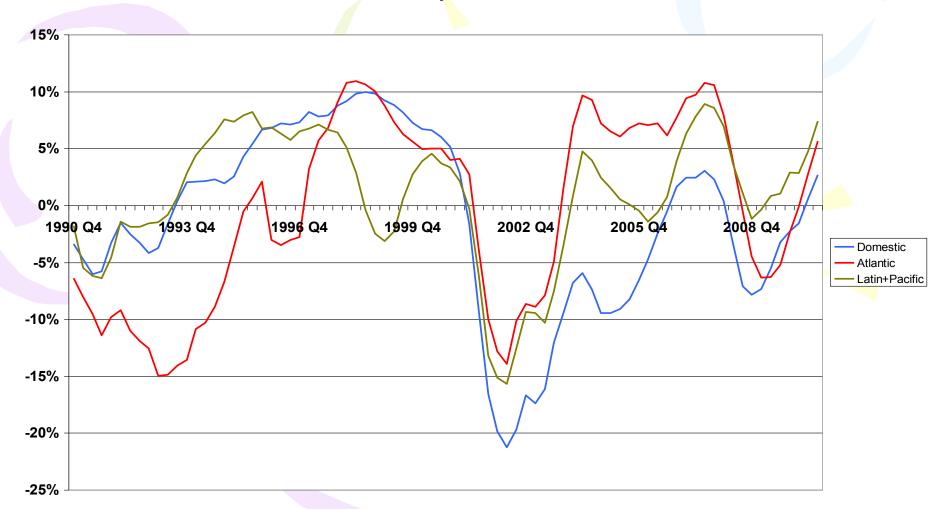
- Horan says this "overturns supply and demand"
- Yet when economists see big increase in output and price together, they automatically (econ 101) conclude that the demand curve has shifted rightwards more than the supply curve
- Thus another interpretation is that rising Atlantic demand outstripped increase in supply (i..e., ASMs)

The Dog That Did Not Bark: Operating Margins

- Collusive pricing should have raised margins on Atlantic compared to other regions
- The period this is supposed to have occurred in 2003-2008 (pre-recession)
- Yet what do we find in the DoT data?

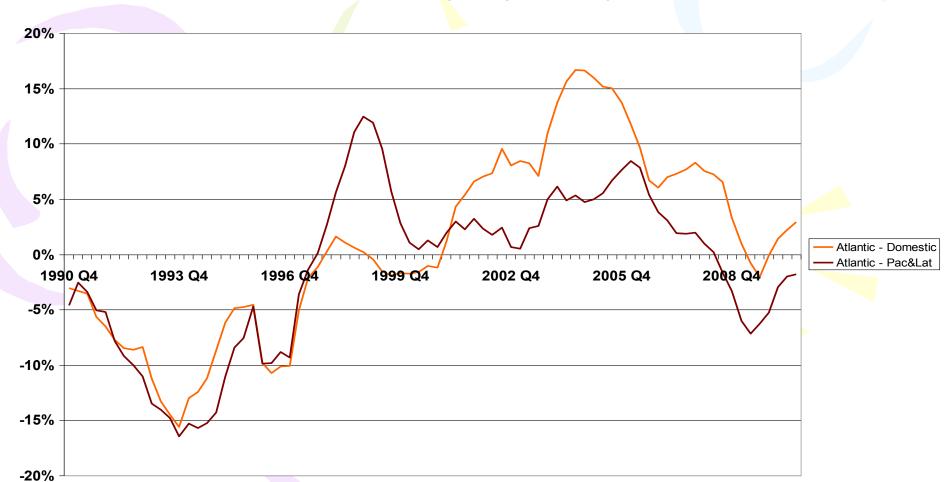
Operating Margins by Division, US Legacy Airlines, 1990-2010

Figure 1. Operating Profit Margins by Division, U. S. Airlines, Four-Quarter Moving Average of Quarterly Data, 1990-2010



Airline Profits, Ratio Atlantic to Other Regions, 1990-2010

Figure 2. Operating Profit Margins, U. S. Airlines, Atlantic Division minus Latin and Pacific Divisions, Four Quarter Moving Average of Quarterly Data, 1990-2010



Brueckner's Economic Evidence

- Alliances Lower Fares
 - Compared to What?
 - Compared to Connecting Fares of Non-Aligned Carriers
- This Entire Line of Research is Vulnerable to the Accusation that the non-aligned internet passenger is not the right baseline

Brueckner Findings

- The data include only point-to-point fares, e.g., Kansas
 City to Budapest, where the traveler returns on the same
 route (BUD-MCI)
- Hamlet without the Prince
 - Nonstop point-to-point service on foreign or domestic carriers, e.g., JFK-NYC or FRA-ORD
 - Regional feeder service, e.g., LNK-ORD-FRA
- The results tell us what we already know, that in today's environment you pay extra to connect across alliances, e.g., AA ORD-FRA and then LH FRA-BUD
- None of this evidence denies that the current pricing structure which forces mark-ups across non-alliance fares is optimal or desirable.

The Bottom Line for the Non-FF Consumer

- Starting in 2003, the low-price leader, the "Southwest of the Atlantic", the KL-NW joint venture, was stifled by the merger between KL and AF.
- Price competition has gradually been suppressed.
- Here's an example, my own trip ORD-NUE in June
 - Expedia, round trip, Wed 6/15 to Sun 6/19
 - Only fares available on any airlines range from \$1600 to \$1750. No competition left.

Conclusion

- Branded Alliances
 - They are great for frequent flyers
 - Lounge access even when flying economy
 - Help to accrue elite status
 - Benefits are marginal for non-FF's
 - Connecting flight seat assignments typically not available in advance
 - Boarding passes are issued
- Joint ventures
 - No benefits for consumers
 - Opens the way for price collusion
 - May make airlines more efficient, with possibility of reduced costs being passed on to consumer