

Local Route Strategy Department
Hartford Division

Attention: Chief Game Theorist
Re: Pricing reaction to low-cost carriers; review marketing proposals

Dear Game Theorist,

As you are well aware, the entry of low-cost carriers into many of our primary routes has changed the direction of our pricing policy in recent years. Further, over the last four years, we have noted that consumers are substantially more price sensitive and discount our greater quality of service relative to these discount carriers, making competition almost wholly on price. This has diminished our capacity to maintain higher prices. In the Hartford market, for example, we have attempted to signal an end to the spiral by announcing price increases, only to see capacity utilization decline when Frontier and Southwest failed to reciprocate. In turn, we are forced to reduce prices, and the cycle repeats. We have been collecting data on average load given different price points for the Hartford–Tampa route, for which we fly a similar schedule to Southwest on a Boeing 767-200ER craft with 179 coach seats. Southwest utilizes Boeing 737 jets with 137 seats in Coach. As you can see in the attached figures, a price of \$100 (per leg) guarantees for each of us that we fill our planes. Currently, Southwest charges a base price of \$150 for this leg and we charge \$200 (These are average prices. Actual prices fluctuate somewhat.) As the figures indicate, we are currently at about 80% capacity while Southwest is closer to 90%.

We cannot continue to compete with Southwest or similar airlines on price. While we have a cost of \$50 per passenger on the above route, we estimate Southwest's costs at only \$20 (these are our variable costs per actual passenger aboard, not per seat). Thus, the marketing division has suggested that we again attempt to differentiate our flights to capture higher-valued consumers. Specifically, they have suggested expanding leg room by removing 25% of our seats in coach (to 135) – which will result in more leg space in coach than any other domestic carrier. Our own marketing studies, however, suggest that while consumers will appreciate greater space, price will remain the paramount concern.

While our data in your market is for a single route, Yield Management assures me that a careful analysis of this route along with others in key cities will be sufficient to formulate a national pricing policy. Specifically, I need you to address three questions given the capacity utilization data enclosed and the per-passenger costs referenced above. First, are the current prices stable, in the long term, at current capacities? That is, can we expect further price erosion, or, on the other hand, is it possible to raise our prices and expect a sustainable increase from Southwest? Second, under the worst case scenario (in which customers attribute no greater value to leg room), what is the likely long-term result of removing 25% of our seats? We can assume here that Southwest will not change its capacity given the discount carriers' affinity for plane uniformity. I need a precise number here for how much profit erosion you expect if we implement the marketing proposal. Lastly, and this is not necessary, but perhaps we can work this problem backwards. If customers do not attribute any value to leg room, then all we do is lower our capacity and thus the number of passengers we carry. What amount of extra value would customers, on average, have to assign to the extra space to offset these losses?

Sincerely,



David M. Davis
Vice President, FP&A
United Airlines

Enclosure (1)
cc: D. B. Amalito
csx/vc/10.02

Table I
Average number of passengers on Southwest Airlines flights

		Price Charged by United Airlines								
		100	150	200	250	300	350	400	450	500
Price Charged by Southwest Airlines	100	137	137	137	137	137	137	137	137	137
	150	73	90	120	132	134	137	137	137	137
	200	24	35	78	117	130	134	136	137	137
	250	2	5	18	77	113	119	129	131	132
	300	0	1	4	11	75	106	113	122	126
	350	0	0	1	3	9	47	84	99	118
	400	0	0	0	0	1	2	19	65	98
	450	0	0	0	0	0	0	0	9	55
	500	0	0	0	0	0	0	0	0	17

Table II
Average number of passengers on United Airlines flights

		Price Charged by Southwest Airlines								
		100	150	200	250	300	350	400	450	500
Price Charged by United Airlines	100	179	179	179	179	179	179	179	179	179
	150	155	173	179	179	179	179	179	179	179
	200	128	148	172	179	179	179	179	179	179
	250	87	99	115	169	179	179	179	179	179
	300	60	84	96	114	167	178	179	179	179
	350	15	15	16	17	25	166	177	179	179
	400	13	13	14	15	16	19	140	175	179
	450	12	12	12	13	14	14	17	89	135
	500	10	10	10	10	11	12	13	15	39