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Ancillary Revenue and Price Fairness: An Exploratory Study Pre & Post Flight

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Abstract: The growing impact of Ancillary Revenue on consumer choice and shopping behavior continues to be a highly debated issue. In the US, the Department of Transportation (DOT) has stepped into the debate and is investigating the possibility of new rules on how airlines must report and display such ancillary offerings. While the DOT collects data, reports on the amount of ancillary revenue earned by the airlines continue to rise. Examining past research on price fairness from the marketing literature and the impact of revenue management on price fairness from the aviation literature, this article joins new research appearing on the impact of a la carte pricing and ancillary revenue on perceptions of price fairness. This study focuses on the issue of price fairness pre and post flight and how ancillary price offerings are communicated to consumers when purchasing airline services.

Keywords: ancillary revenue, a la carte pricing, price fairness

Little doubt exists about the importance the role of ancillary revenue now plays in the global airline industry in driving profitability for many airlines. With each new announcement from various consulting firms or reports by government agencies across the globe where figures are available, ancillary revenue totals continue to increase. One estimate of the total value of global ancillary revenues states the estimated value of such income at \$32.5 billion (USD) for 2011, an increase from \$22.6 billion (USD) in 2010, representing growth of 43.8% in one calendar year (Amadeus, 2012). Recent reports (Mayeroritz, 2013) from the US Bureau of Transportation Statistics states the value of all fees collected by the 15 largest U.S. carriers for baggage at \$3.5 billion (USD) and reservation changes fees at \$2.6 billion (USD) for 2012. With the growth in revenue from the various sources included in ancillary revenue both government agencies and consumer interest groups are now focusing their reporting of business practices that potentially increase the sources of ancillary revenue (Lowy, 2012; Rosenbloom, 2012). Regulators and consumer watchdogs are tracking the various pricing schemes for both bundled and unbundled a la carte services utilized to generate ancillary revenue that increase the final

price paid often much higher than the price shown for the base fare and taxes paid by passenger.

Ancillary Revenue: Defined & Common Sources

Ancillary Revenue has been defined as “revenue generated from non-ticket sources or services that differ from or enhance the main services or product lines of an airline such as baggage fees and onboard food and services” but has expanded even beyond those options (Vasigh, et al.; 2012). At first uniquely identified with Low Cost Carriers (Gillen & Lall, 2004; O’Toole, 2004; McDonald, 2009; Shaw, 2011) the range of items and services now included as possible ancillary revenue opportunities has grown beyond just additional flight services added to the base airline fare for just the opportunity to board the aircraft but includes cross-selling possibilities the airline is able to offer a shopper to purchase including items such as rental car and hotel bookings, or other shopping items (ex: show tickets at a destination) a visitor to an airline web site can buy through the portal or purchase onboard the aircraft that allow the airline to earn sales commissions on the items offered.

A recent Amadeus report (2011) on the growth of ancillary revenues identified four categories of ancillary services:

1) **a la carte** – a variety of service features, mainly trip related, that passengers may select and pay extra for including onboard food and beverage; check baggage, assigned seats / seat upgrades; lounge access; priority check-in, screening and boarding; onboard entertainment access; and WiFi access.

2) **Commission based** – cross selling opportunities airlines can offer including hotel accommodations; car rental sales; travel insurance; and destination events

3) **Frequent Flier point / miles sales** – offering to the business marketplace the opportunity for other firms to purchase airline miles or points as incentives to be used in the purchasing firms promotional or loyalty based marketing activities

4) **Advertising** – revenue generated from the inflight magazine; advertising sold in or on the aircraft or in the airline lounge; or fee based product placement samples.

While many articles about trends on ancillary revenue tend to focus on a la carte issues (Elliot, 2013; Rosenbloom 2012) the Amadeus report breaks down the three main components of ancillary revenue for major US major carriers as 30% from services (a la carte offerings and commission based sales) 20% from baggage fees and 50% from frequent flyer sales.

US DOT Involvement

With the growth in the sources of ancillary revenues and the accompanying complaints by consumers and public interest groups (Gelles, 2013; Lowy, 2012) the U.S. Department of Transportation (DOT) has begun to investigate the various sources of ancillary revenue and the impact on consumer choice and buying behavior. In 2011 the DOT issued a Notice of Proposed Rulemaking (Federal Register; 14 CFP Parts 234 and 214; 2011) with the expressed intent to get both better information on the various sources of ancillary revenue and determine how the information is presented to consumers during the purchasing process. To the DOT this is just a continuation of their ongoing overview of the airline industry and trying to offer what the agency considers protection for consumers from past actions by the airlines that were not in consumers' best interest. This process continues the actions the agency began with the "Tarmac Rule" (Waguespack; 2012) and the recent pricing-fare display rules now in place that mandate US airline web sites and online travel agencies must show ticket prices including not only the base fare, but any taxes and airport fees included with the service to be purchased.

The proposed rule has sparked controversy due to the nature of the manner in which the DOT wants the information reported. As is currently required, only two ancillary revenue sources are clearly presented in the Bureau of Transportation Statistics database: (1) baggage fees and (2) cancellation charges / reservation changes. The rule proposes that 19 separate categories of ancillary services and the associated revenue received be reported, with baggage fees being further broken down by baggage number and type of baggage. In total that leads to 25 different reporting items airlines must provide under the new rule. While the DOT has held a follow-up meeting on the proposed rule (Federal Register, 14 CFR Parts 234 and 241; 2012) and discussions continue with the airlines and various airline interest groups, no final rule or policy has yet to be announced for further review.

Ancillary Revenue Research in the Aviation Field

While the trade and popular press focusing on the growth in ancillary revenues and the means by which airlines have attempted to find new methods of earning ancillary revenue, the research on the subject in aviation journals has investigated two broad areas: (1) ancillary revenue and the practice of revenue management and (2) issues related to the distribution of a la carte fare products that drive ancillary revenue opportunities.

With the growth of the Low Cost Carrier (LCC) segment, revenue management (RM) scholars and practitioners began to examine how LCC carriers operationalized RM while integrating ancillary revenue tactics. Michaels and Fletcher (2009) examined how the LCCs priced their fare products and utilized RM in comparison to traditional legacy carriers and noted the extent to which LCCs utilized ancillary revenue options to increase sales. Noting the economic conditions that occurred through much of the early 2000's that helped to fuel the growth of the LCC, and the simplified information technology and web engines that made both RM easier and aided the growth in ancillary revenue opportunities, the authors recommended that legacy carriers in some manner adopt the RM and merchandising processes of the LCCs' to compete in the aviation marketplace going forward.

Further research by Vinrod and Moore (2009) examined the trend of promoting branded fare families and ancillary services and the impact of the fares and services on RM processes through the travel value chain. The research noted that while unbundling had become a common LCC practice and many U.S. legacy airlines as a means of competing had also moved to unbundle many ancillary services, others carriers had begun offering re-bundled fare and service products with some ancillary services offered in branded bundled fare products. These new branded bundles were seen as a competitive response to the LCCs and offered the buyer some additional ancillary services as *privileges* (italics in original) beyond the basic fare promise of carriage as a means of allowing customers to segment themselves by the service package purchased. The authors outlined the sales process of the branded fare products with additional ancillary services through the travel value chain and distribution channels while demonstrating RM inventory control mechanisms. For the airline to benefit from the incremental revenue opportunities of the branded fare products the airline had to improve communication and revenue accounting processes to assure customer fulfillment with the right branded fare product available to the customer when purchasing.

Investigating the *decommoditization hypothesis* (italics in original) that by allowing the a la carte pricing option in comparison to fixed bundled opportunities at purchasing would increase sales and help the airline regain channel control, Granados et al.; (2011) investigated booking data supplied by an airline to examine how ticket buyers utilized the a la carte channel in comparison to the traditional sales channel to purchase additional services and provide ancillary revenues. The research focused on the sales channel where

the purchasing of ancillary services occurred via the a la carte option and delved into how business and leisure passengers purchased ancillaries in the a la carte channel. While many purchasers in the a la carte channel started with the deeply discounted fare product, many bought additional ancillary services utilizing the a la carte channel allowing the ticket buyer to decommo-ditize the product being bought and provide additional revenue to the airline. The research further supports Vinrod and Moore (2009) in that the offering of a branded fare product with selected service ancillaries in the a la carte channel does increase airline revenue in comparison to the bundled product sold in the traditional airline channel.

Price Fairness / Unfairness in the Marketing Literature

Fairness is the evaluation of whether an outcome or the process is reasonable, acceptable, or just (Bolton, et al., 2003; Chung, 2010; Xia, et al., 2004). Price fairness is “a consumer’s assessment and associated emotions of whether the difference or lack of difference between seller’s price and the price of a comparative other party is reasonable, acceptable, or justifiable” (Chung, 2010 p. 7; Xia, et al., 2004, p. 3). Price fairness is based on the evaluation either of the actual price or the perception to the reference price. The reference point could include the price previously paid, a competitor’s price, or the expected price based on the perceived cost as well as the consumer’s psychological aspect. Price fairness / unfairness as a concept has been gaining attention in the marketing literature due to recent global economic conditions and the increasing influence of technology and concerns about consumer opinion now being shared may hasten the negative outcomes when pricing unfairness is perceived. Recent articles have looked at the possible consequences of pricing unfairness in multiple product areas and countries in an attempt to implement to investigate earlier proposed models.

Much of the recent research traces the development of models and the possible impact of pricing unfairness to two different sources. Campbell (1999a; 1999b) reported on a series of experimental manipulations investigating the inferred motives for possible price increases that would lead to perceptions of price unfairness and the possible role of the reputation of the firm played in the inferences made by customers. The experiments brought forth evidence that consumers do make inferences for why price increases occur especially in the absence of any information and that firms with poor reputations do not get any ‘benefit of the doubt’ that the increase is for anything but profit maintenance or

profit seeking. Furthermore, inferring that firms with poor reputations are unfairly pricing will lead consumers to state negative attitudinal and behavioral intentions toward the firms with perceived poor reputations.

Xia, et al., (2004) presents a conceptual model of the factors that lead to price unfairness along with the role of moderating influences such as transaction similarity, trust, attributes of responsibility, consumer knowledge, and beliefs and social norms of the purchase process during the purchasing process. Building upon the work of Campbell (1999) and Bolton et al., (2003) the research integrates the principles of distributive justice and Equity Theory along with cognitive processes and the impact of affect (emotions) on the formation of price unfairness perceptions. Besides building the conceptual foundation that may lead to price unfairness, the model proposes how lesser perceived notions of value and negative emotions that accompany price unfairness can lead to actions from the customer including “revenge” (page 7) that consumers may take against the firm in the form of negative word of mouth and / or legal actions. Many of the articles that are emerging from the marketing literature and investigating the role of price fairness are often addressing some aspect of the overall conceptual model put forth in this article as no model verification was presented.

Price Fairness / Unfairness and Revenue Management

Price fairness / unfairness has been investigated in the aviation literature more commonly when examining the impact of the Revenue Management (RM) process on variable pricing on consumer’s perception of whether the RM process is perceived as fair to consumers. Mathies and Gurdergan (2007) investigated the impact of RM on what the authors termed ‘customer centric marketing.’ Utilizing focus group research to gather opinions of both airline passengers and hotel customers, the research investigated the interactions between utilizing RM for pricing while at the same time practicing customer centric marketing, also known as customer relationship management. The research investigated if airlines are sending out conflicting messages to the airlines best customers. While trying to utilize loyalty programs and other inducements and rewards to build lifetime value, airlines also use RM to control possible rewards (frequent flier redemptions) and segment demand thus creating feelings of unfairness in the customer. The comments from the focus groups with frequent flier members did in fact reveal that members were well aware of RM practices and the potential impact of RM while not

always understanding the rationale for the practice which did lead to some unfairness perceptions. Many frequent flier members felt the programs at times could be ‘one-way streets’ where the airline benefits from the fliers continuing purchases while controlling rewards and seat availability for redemptions which lessens the value of the program.

McMahon-Beattie (2011) continues the investigation into the issues of RM and fairness and trust noting there is the sense that “RM is something that is done *to* customers rather than something that is done *for* the customer (page 44; italics in original). Arguing that more research needs to be done in the area of pricing policies and perceptions of trust and fairness, the research also indicates that variable pricing in itself does not cause mistrust, but customers’ level of knowledge of the ‘rules’ of variable pricing that influences the trust /distrust perception and therefore fairness. Proposing that a construct of “Rule Familiarity” needs to be operationalized to determine the knowledge level of customers in the buyer-seller relationship when variable pricing occurs may determine the impact on trust and fairness perceptions.

Chapuis (2013) continues the investigation in pricing variations brought on by RM and the impact on trust and fairness utilizing a cross-cultural approach. The research concludes for international passengers, home country cultural orientation does not influence the perceptions of dynamic pricing. However, findings across all groups are consistent in that RM practices do provide a negative influence on perceptions of fairness and trust and ultimately lowers overall customer satisfaction.

Ancillary Revenue and Price Fairness

Within the past year research has appeared that has begun to link the growing offerings involved in ancillary revenue and the issue of price fairness. Wittmer, et al.; (2012) while not directly addressing price fairness, examined fliers’ price attitudes towards a variety of possible a la carte ancillary offerings. Investigating the attitudes of German speaking passengers in Switzerland to possible ancillary offerings when either flying a Full Service Carrier or a Low Cost Carrier the research asked about the fliers’ willingness to use and willingness to pay for a series of a la carte ancillary services. Respondents in the study were directly asked to provide a price range they would be willing to pay for the service and then a price that would be the upper limit for the service creating a price fairness limit for the respondents. While the exact monetary units or amounts are not presented, the percentages are presented on when an offering would exceed the *relative*

price surcharge willing to pay and then the *absolute* price surcharge beyond which the respondents believe an ancillary charge becomes potentially unfair.

One stream of research has begun directly incorporating the concept of price fairness with the purchasing of ancillary services (Chung, 2010; Chung & Petrick, 2012) derived from the conceptual model of Xia, et al (2004). In this research utilizing scales developed through the marketing literature, a model is derived that attempts to operationalize the antecedents of price fairness and the potential impacts on behavior when prices are perceived as unfair. Further providing evidence supporting the work of Campbell (1999a; 1999b), the model finds that issue of controllability and locus of causality (the firm controls the reason for the price changes) does impact perceptions of price fairness / unfairness. When fliers perceived the extra fees to be unacceptable and an attempt by the airline to get additional revenue / profits because the airline can and not due to any external factor, the fees are considered unfair. While the research notes investigating the purchasing of ancillary services and therefore the fees charged, the survey shown does not specifically question what ancillary items may have been bought, but asks the respondent about the difference in the airfare paid compared to the additional fees charged. Therefore while respondents are given the chance to express their views on the additional fees for ancillary services, the actual services utilized and the dollar amount paid for the ancillary services selected are not presented.

THIS STUDY

The main goal of this study is to examine perceptions of price fairness in regards to the offering of ancillary services and the accompanying fees in the U.S. domestic market. More specifically, this study focuses on differences in consumer perception of ancillary fees between two groups of passengers: those who have recently completed a commercial flight and those who will be traveling in the future.

H0: There are differences in the perception of price fairness between passengers who have recently traveled, and passengers with an upcoming intent to travel.

Methodology

The survey instrument was composed of four main sections. The first section included questions about flight check-in, baggage check-in and a presentation of a la carte services the respondents could have or planned to purchase. The second section of 10

items measured two constructs: (1) an 8 item scale on price fairness based on the Chung (2010) dissertation instrument and (2) a two item scale on information availability about the charges for the ancillary offerings. The third section contained additional questions about the respondents' general flight experience, preferred method for purchasing tickets, airline selection and frequent flight status. The last section inquired about the socio-demographic profiles of the respondents. There were two versions of the survey: the first version surveyed respondents who recently completed a commercial flight, whereas the second version was sculpted for respondents who intended to fly in the near future.

Data was collected face-to-face during the spring of 2013 both before the regularly scheduled "Spring Break" and as the students began summer term courses. The timing was selected in an attempt to get more students who had booked ahead of Spring Break as respondents or possible summer trips upon the conclusion of the first of two possible summer academic terms. Participants included students taking classes at a private university located in the southeast section of the United States. The survey participants were asked first whether they had flown recently or intended to fly in the near future. Based on the answer, the researchers distributed the appropriate version of the survey, either in the past or future tense. Respondents were then asked to complete the survey in relation to their personal experience either in regards to their most recent commercial flight, or in regards to their experience with the anticipated flight. A total of 233 paper-and-pencil surveys were completed as the survey was conducted during class. The SPSS 19 software package was utilized for the statistical analysis.

Data Analysis

Due to the nature of the university environment, the majority of survey respondents were young males, and the largest group was with articulated household income of \$100,000 or more (see Table 1).

Table 1 - Demographic Profiles of Respondents (n=233)

Age	Mean = 23	Min = 18	Max = 60
Gender	Male	No. 197	Percentage 84.5%
	Female	36	15.50
Household income	Less than \$20,000	15	6.4%
	\$20,001-\$40,000	26	11.2%

\$40,001-\$60,000	32	13.70%
\$60,001-\$80,000	23	9.90%
\$80,001-\$100,000	24	10.30%
\$100,000 and more	47	20.20%
Decline to respond	66	28.30%

The most common airlines that respondents had either flown or planned to fly were Delta Air Lines: 26.6% had flown - 9.9% planned to fly; Southwest: 7.7% had flown – 2.6% planned to fly; and JetBlue: 6.4% had flown – 3.4% planned to fly. When checking-in with the airlines, the clear preference is to utilize online check-in options with 78 past fliers (33.5% of the total respondents) utilizing the online option, while 49 future fliers (21% of the respondents) noting online as the likely check-in method. The majority respondents, 42.5% indicated that they did not belong to any Frequent Flyer Programs (FFP), while 17.2% indicated that they belong to multiple plans. The most frequent airline FFP memberships acknowledge were Delta’s Skymiles at 10% and Jet Blue’s TrueBlue at 4.3% of all respondents.

As checked baggage is one of the main sources of ancillary revenue a series of questions about baggage check-in were immediately asked. Table 2 presents the breakdown of the number of bags checked by past versus future passengers and the average amount spent when checking baggage.

Table 2 – Baggage Checked (n = 233)

	Past		Future	
	No.	%	No.	%
Number of Bags Checked: 0	28	12%	21	9%
1	84	36.1%	48	20.6%
2	33	14.2%	12	5.2%
3 or More	4	1.8%	3	1.3%
	Past (n= 57)		Future (n=37)	
Avg Amount Spent Checking Bags:	\$48.25		\$54.05	

When examining Table Two one can see that 121 of the past fliers had checked a bag, but only 57 reported having to pay a baggage fee. When asking the past fliers who did not pay extra for checked baggage if they knew why they did not pay the main reasons given was that the baggage service was still bundled with the price of the airfare (n=38) while many selected ‘other’ as could not recall a specific reason. When asking future fliers why they

did not expect to pay for a checked bag the leading response given was also the belief the baggage service would be included in the ticket price (n=18). Only a few respondents in either group indicated the fee was dismissed due to either credit card benefit or frequent flyer status.

An additional attempt to examine if the baggage service fees now in place are impacting fliers asked if the presence of additional baggage charges discourage the flier from checking or planning to check bags. The question was asked in a nominal yes / no response format. Conducting a Chi-Square cross tabulation on the data, a significant impact is found that the presence of baggage fees discourages the checking of bags. The data for the Chi-Square analysis is presented below in Table Three.

Table Three: Do additional charges discourage you from checking bags?

		Flier	
		Past (n=149)	Future (n=84)
Do Bags Fee Discourage You from Checking Bags	No	70	21
	Yes	79	63

Pearson Chi-Square Value: 10.93* sig. 001
 *0 cells less than 5 count; minimum expected is 32.81

After enquiring about baggage check-in and fees, a list of possible a la carte ancillary services were presented to the respondents. Appendix One presents a table of the items and the number of respondents between the two groups studied, past versus future fliers and the pattern of responses. For none of the items asked did a majority of passengers pay for the ancillary service. Examining the mean dollar amount spent or planning to spend for the items we find:

Seat Selection: Fourteen past passengers did pay for seat selection with the average price of \$25.71, whereas 6 future passengers anticipate the fee will be little less and priced around \$22.50.

Seat Upgrade: The average fee was \$37.50 for 24 passengers who did purchase a seat upgrade, whereas 15 future passengers anticipate the fee will be little less and priced around \$32.

Priority Boarding: The average fee for 13 passengers who did pay was \$26.15. In regards to the future passengers only 3 plan to pay and the average fee for the anticipated service is priced at \$20.

Carry-on Bags: Fourteen passengers reported paying for carry-on bags with the average price of \$27.50. In regards to future passengers 7 fliers anticipate the average fee for the purchase will be around \$16.43.

Special Bag Item: Six passengers indicated that paid an average fee of \$26.67 for a special bag. The average fee for the 6 anticipated purchasers was reported to be the same cost at \$26.67. Most likely those passengers have already prior experience with the special bag item and know the exact price of the item.

Lounge Access: Six past passengers paid with the average fee of \$33.33. The average fee anticipated for the 4 future fliers is \$22.50.

In-Flight Food/Beverage: Twenty past passengers paid extra with an average cost of \$9.20. The 10 future travelers intend to pay on average for food/beverages \$8.50.

In-Flight Entertainment: Six passengers paid extra for IFE at an average price of \$10. The anticipated average fee for the 4 future fliers is \$7.50.

WiFi: Seventeen passengers purchased WiFi access with an average price of \$15.88. The average fee for the 12 anticipated purchasers is expected to be \$13.33.

Lastly, while not an a la carte service, but also another reported source of ancillary revenues in the U.S., passengers were asked about “changes to your flight schedule after purchasing your ticket” that might result in change fees. The majority of past passengers did not make any changes to their itinerary. However, for the 25 fliers who did make changes the reported on average charge was \$161.

Price Fairness

To investigate the issue of price fairness, the scale for price fairness as developed by Chung (2010) was used in conjunction with 2 additional items the researchers developed on “information availability”. While not the conceptualization of “rule familiarity” that McMahon-Beattie (2011) discussed, the research makes abundant that

knowledge for the and about pricing issues can impact price fairness perceptions. The two items the authors created were intermingled in the section of the survey where the items on price fairness were presented. Examining the reliability of the scales utilized, the price fairness scale has a reported Cronbach's alpha of .864 and the information availability scale has reported Cronbach's alpha of .801, well within acceptable values for exploratory research (Field, 2009).

Independent *t*-test were then conducted on the overall scores obtained on the price fairness and information availability scales to test the hypothesis put forth that there are differences in the perception of price fairness between passengers who have recently traveled, and passengers with an upcoming intent to travel. For the price fairness *t*-test a *t*-value of -1.736 is found with significance (2-tailed) of .084. Examining the mean scores for the two groups, those who flew in the past did have a slightly lower mean score of 23.99 to a mean score of 25.18 for future passengers. Those who flew in the past did have a lower mean price fairness score but the difference between the groups is not statistically significant.

Due to the role of information availability on price changes that has discussed in past research a *t*-test was also conducted on the information availability scores of the two groups. For this *t*-test a *t*-value of -2.043 is found with significance (2 tailed) of .042 supporting there exist some degree of information availability difference between the two groups. An examination of the mean scores of the groups found the past fliers with a lower mean score of 6.18 to the future fliers mean score of 6.67 on information availability. While statistical significance was not found for the price fairness scores, the finding that the future fliers perceived more availability of information may lead to the reason for the future fliers' higher price fairness scores. In general, future passengers had more positive expectations of price fairness in regards to ancillary fees than recent travelers and perceived more availability of information.

To investigate further, *t*-test were conducted on the scores on each of the individual items. Appendix Two presents the individual item mean scores by group analysis and the *t*-values and significance levels found. In general, future passengers had more positive expectations of price fairness in regards to ancillary fees than recent travelers when examining the statements individually. Only one statement; "All passengers were treated equally by the airline's pricing policy," had a slightly higher mean after the actual flight experience. The individual *t*-test results indicate that two-tailed *p*-value is greater than 0.05

for the price fairness statements with the exemption of "The additional charges were acceptable." Therefore, we can conclude that there was no statistical significant difference between the means of the two samples for seven of the eight price fairness items. Price fairness is perceived equally by both passengers with recent flight experience as well as passengers with the intent to travel in the near future in this case. Based on the independent *t*-test results we can conclude the following:

1. *The additional charges were clearly understandable.*

On average, the future passengers experienced greater agreement with this statement (M=3.20, SE=0.089) than the passengers with actual experience, majority of whom were neutral about this statement (M=3.00, SE=0.080). However, this difference was not significant $t(231) = -1.604$, $p > 0.05$.

2. *The airline's pricing decision procedures were fair.*

On average, the future passengers experienced greater agreement with this statement (M=3.15, SE=0.084) than the passengers with actual experience (M=2.98, SE=0.074). However, this difference was not significant $t(231) = -1.495$, $p > 0.05$.

3. *I think the additional charges were based on cost.*

On average, the future passengers experienced greater agreement with this statement (M=3.17, SE=0.081) than the passengers with actual experience (M=3.05, SE=0.076). However, this difference was not significant $t(231) = -1.010$, $p > 0.05$.

4. *The additional charges were fair.*

On average, the future passengers disagreed slightly less with this statement (M=2.89, SE=0.091) than the passengers with actual experience (M=2.70, SE=0.095). However, this difference was not significant $t(185) = -1.652$, $p > 0.05$.

5. *The airline's pricing procedures were reasonable.*

On average, the future passengers experienced greater agreement with this statement (M=3.23, SE=0.085) than the passengers with actual experience (M=3.05, SE=0.075). However, this was not significant $t(231) = -1.456$, $p > 0.05$.

6. *The additional charges were acceptable.*

On average, the future passengers experienced greater agreement with this statement ($M=3.04$, $SE=0.093$) than the passengers with actual experience, majority of whom disagree with this statement ($M=2.78$, $SE=0.071$). This difference was significant $t(231) = -2.181$, $p < 0.05$.

7. *The airline's pricing procedures were acceptable.*

On average, the future passengers experienced greater agreement with this statement ($M=3.23$, $SE=0.087$) than the passengers with actual experience ($M=3.09$, $SE=0.071$). However, this difference was not significant $t(231) = -1.214$, $p > 0.05$.

8. *All passengers were treated equally by the airline's pricing policy.*

This is the only price fairness statement out of 10 that on average, the passengers with actual flight experience indicated greater agreement with this statement ($M=3.34$, $SE=0.078$) than the future passengers ($M=3.27$, $SE=0.098$). However, this difference was not significant $t(231) = .536$, $p > 0.05$.

For the two items that composed the information availability scale the individual t -test find:

1. *Information about additional airline charges was easily accessible.*

On average, the future passengers experienced greater agreement with this statement ($M=3.35$, $SE=0.099$) than the passengers with actual experience ($M=3.13$, $SE=0.081$). However, this difference was not significant $t(231) = -1.660$, $p > 0.05$.

2. *It was easy to find information on additional charges before purchasing my ticket.*

On average, the future passengers experienced greater agreement with this statement ($M=3.32$, $SE=0.093$) than the passengers with actual experience ($M=3.05$, $SE=0.082$). This difference was significant $t(231) = -2.068$, $p < 0.05$.

CONCLUSIONS & IMPLICATIONS

This research investigated if there exist different levels of price fairness / unfairness between past and future airline passengers. By focusing in on a variety of well-known ancillary revenue generating offerings by the airlines and questioning the respondents on their past or future use of the ancillary services provided the opportunity to examine if such ancillary service purchasing brought about perceptions of price unfairness. While this study did not find statistical significance between the past and future passengers on price fairness, some support for differences in information availability between past and future fliers concerning knowledge of airline ancillary offerings was found and is believed to have increased the potential price fairness perceptions of future passengers and impacted the findings of this study.

The results of this study though must be reviewed in light of the limitations. Due to the sample group utilized, the overwhelmingly majority of fliers are young, college age, leisure fliers. In reviewing the results with some of the participants, one of the researchers found it was not uncommon for the respondent to not have been the one who actually purchased the ticket. That while providing the information needed to derive the itinerary (date and times) the actual purchaser may have been made by parent or other relatives. As recipients of a 'gift' trip the respondents had to accept the ticket as is and therefore not likely to add ancillary services as those would either have to come out of the recipients limited funds or as the trip of a short duration (time of flight and /or time away from the university) why bother with any additional services.

One aspect of the findings though lead to some speculation and perhaps evidence of unintended consequences by the researchers. The US airlines and supporting interest groups fought a recent DOT rule, also known as the 'Total Price Rule' (Richey, 2013) that now make it a requirement to have all taxes and fees included in any ticket prices shown to the public through various promotional, communication and sales channels. However, having to meet this rule and the additional focus airlines have brought to pricing elements during the shopping process in an attempt to provide better pricing knowledge to hold off more possible regulation may have had an unintended side effect of lessening perceptions of price unfairness. This study does support that future fliers had higher perceptions of information availability than past fliers. Has the Total Price Rule actually aided the airlines in some manner the industry would rather not admit as the rule was forced upon the industry by government regulation?

With the ongoing DOT investigation into ancillary pricing activities, the current scrutiny on the airline industry being brought to bear by the latest merger occurring among legacy US carriers and now combined with discussions on IATA's New Distribution Capability (Gelles, 2013) and the potential impact on airline distribution systems, the issue of ancillary revenue and the ongoing bundling and unbundling of ancillary offerings is not likely to soon fade away. With consumer and trade groups use of social media and savvy grass roots communication strategies being utilized to get a message of consumer discontent into the public realm, the role and use of ancillary revenue options by the airlines will continue to be focused upon in the news and researched by many stakeholders in the industry.

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Appendix One: A La Carte Ancillary Services

As checked baggage fees were asked about immediately at the beginning of the survey and reported earlier, that ancillary offering is not repeated below. As more airlines have added charges for carry-on bags and special items (ex: golf clubs) and the DOT has listed these as separate reporting items in the proposed ancillary reporting regulations, those services were asked about separately in the survey and listed here. The dollar amount shown underneath the number who purchased is the average amount spent or expected to be spent for the ancillary item.

	Past n=149			Future n=84		
	Included	Did Not Buy	Purchased	Included	Did Not Buy	Purchased
Seat Selection	64	71	14 \$25.71	46	32	6 \$22.50
Seat Upgrade	7	117	24 \$37.50	4	65	15 \$32.00
Priority Boarding	18	118	13 \$26.15	11	70	13 \$20.00
Carry-on Bag	89	46	14 \$27.50	61	16	7 \$16.43
Special Bag Item	29	114	6 \$26.67	9	69	6 \$27.67
Lounge Access	11	132	6 \$33.33	9	71	4 \$22.50
In-Flight Food & Beverage	73	56	20 \$9.20	45	29	10 \$8.50
In-Flight Entertainment	49	94	6 \$10.00	33	47	4 \$7.50
WiFi	11	121	17 \$15.88	12	59	12 \$13.33

Appendix Two: Price Fairness & Information Availability *t*-Test

Item / Variable Name - Scale Statement

Price Fairness

ChargeUnder	The additional charges were clearly understandable.
PriceProdFair	The airline's pricing decision procedures were fair.
Cost	I think the additional charges were based on cost.
AddFair	The additional charges were fair.
PriceProdReas	The airline's pricing procedures were reasonable.
AddAcc	The additional charges were acceptable.
PriceProdAcc	The airline's pricing procedures were acceptable.
Equally	All passengers were treated equally by the airline's pricing policy.

Information Availability

Find	It was easy to find information on additional charges before purchasing my ticket.
Access	Information about additional airline charges was easily accessible

Group Statistics

	Version Code	N	Mean	Std. Deviation	Std. Error Mean
ChargeUnder	0	149	3.00	.980	.080
	1	84	3.20	.818	.089
PriceProdFair	0	149	2.98	.904	.074
	1	84	3.15	.768	.084
Cost	0	149	3.05	.932	.076
	1	84	3.17	.742	.081
AddFair	0	149	2.70	.913	.075
	1	84	2.89	.836	.091
Access (Info Avail)	0	149	3.13	.988	.081
	1	84	3.35	.912	.099
PriceProdReas	0	149	3.05	.914	.075
	1	84	3.23	.782	.085
AddAcc	0	149	2.78	.869	.071
	1	84	3.04	.857	.093
PriceProdAcc	0	149	3.09	.862	.071
	1	84	3.23	.797	.087
Equally	0	149	3.34	.957	.078
	1	84	3.27	.896	.098
Find (Info Avail)	0	149	3.05	.999	.082
	1	84	3.32	.853	.093

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		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
ChargeUnder	Equal variances assumed	-.202	.175	-1.604	231	.110	-.202	.126	-.451	.046
	Equal variances not assumed	-.202		-1.686	198.606	.093	-.202	.120	-.439	.034
PriceProdFair	Equal variances assumed	-.175	.406	-1.495	231	.136	-.175	.117	-.405	.056
	Equal variances not assumed	-.175		-1.564	196.125	.120	-.175	.112	-.395	.046
Cost	Equal variances assumed	-.120	.109	-1.010	231	.314	-.120	.119	-.353	.114
	Equal variances not assumed	-.120		-1.075	205.352	.283	-.120	.111	-.339	.100
AddFair	Equal variances assumed	-.195	.016	-1.612	231	.108	-.195	.121	-.433	.043
	Equal variances not assumed	-.195		-1.652	185.178	.100	-.195	.118	-.428	.038
Access	Equal variances assumed	-.218	.635	-1.660	231	.098	-.218	.131	-.476	.041
	Equal variances not assumed	-.218		-1.697	184.100	.091	-.218	.128	-.471	.035
PriceProdReas	Equal variances assumed	-.172	.082	-1.456	231	.147	-.172	.119	-.406	.061
	Equal variances not assumed	-.172		-1.520	195.195	.130	-.172	.113	-.396	.051
AddAcc	Equal variances assumed	-.257	.097	-2.181	231	.030	-.257	.118	-.490	-.025
	Equal variances not assumed	-.257		-2.189	174.304	.030	-.257	.117	-.489	-.025
PriceProdAcc	Equal variances assumed	-.139	.919	-1.214	231	.226	-.139	.114	-.364	.087
	Equal variances not assumed	-.139		-1.241	183.709	.216	-.139	.112	-.360	.082
Equally	Equal variances assumed	.068	.286	.536	231	.592	.068	.128	-.183	.320
	Equal variances not assumed	.068		.546	181.820	.586	.068	.125	-.179	.316
Find	Equal variances assumed	-.268	.261	-2.068	231	.040	-.268	.129	-.523	-.013
	Equal variances not assumed	-.268		-2.161	195.469	.032	-.268	.124	-.512	-.023