

# UPDATE: U.S. DOMESTIC AVIATION TICKET TAXES

Joakim Karlsson

MIT Global Airline Industry Program  
Industry Advisory Board/Airline Industry Consortium Joint Meeting  
November 6, 2008





# OBJECTIVES

- Update previous work to include 2006 and 2007
- Quantify the portion of U.S. domestic tickets spent on taxes
- Provide insights into the nature of these taxes

# MOTIVATION

- **Concerns about aviation infrastructure costs**
  - Appr. \$25 billion are spent on infrastructure each year by U.S. airlines and their customers
  - AAAE is calling for \$1 billion increase in AIP funding
- **Concerns about aviation taxes**
  - Domestic ticket taxes accounted for \$7.4 billion in FY2006 (67% of Airport and Airway Trust Fund receipts)
  - Ongoing and contentious debate over reauthorization of U.S. trust fund taxes
  - New taxes: France (solidarity tax), UK (doubling of air passenger duty), Netherlands (passenger departure tax)

# BATTLE OF THE USER GROUPS

- **ATA**  **smarts skies**  
a blueprint for the future
  - Fair, equitable, and simple user charges
  - Link system use with system costs
  - Charges should be based on level of infrastructure use

- **AOPA/EAA/NBAA/HAI/Etc.**  **ALLIANCE FOR AVIATION ACROSS AMERICA**
  - Time-proven aviation tax system works
  - A user fee on any segment of aviation will inevitably lead to user fees for all
  - Airlines drive cost of the ATC system



# PERCEPTIONS ABOUT TICKET TAXES

- **“Taxes and fees already make up 26% of the total cost of an airline ticket”**

Sen. John McCain, (R-Ariz.), 2003

- **Taxes levied on [U.S.] aviation exceeded \$14 billion in 2004, corresponding to 25% of a typical airfare”**

International Air Transport Association, 2005

- **“A \$200 out-the-door airline ticket...has a whopping 25% of the total price heading to the government and airports”**

Rick Seaney, CEO, FareCompare.com, 2007

# U.S. DOMESTIC TICKET TAXES AND FEES

Tax/Fee	Symbol	Rate	Recipient
Federal ticket tax	FTT	7.5%	Airport and Airway Trust Fund
Federal segment tax	FST	\$3.50 per segment	
Passenger facility charge	PFC	\$3 or \$4.50 per enpl.	Collecting airport
Federal security service fee	FSSF	\$2.50 per enpl.	TSA

## Notes:

- Rates effective 2008
- Only includes domestic taxes and fees added directly to the price of tickets
- PFC and FSSF collection limited to first 2 enplanements per one-way trip
- Rural airports exempt from some taxes
- Special rules exist for Alaska and Hawaii
- FSSF was temporarily suspended from June 1 to September 30, 2003

# METHODOLOGY

- **DB1A: DOT *Origin and Destination Data Bank 1A Ticket Dollar Value* database**
  - 254,415,615 records from 1993Q1 through 2007Q4
- **Includes all tickets ending with “0” (10% sample)**
- **Note: DB1A only reports total fare – individual taxes have to be computed retroactively:**

**PFC =  $f$ (airports in itinerary)**

**FSSF = \$2.50 x number of segments**

**FST = \$3.20 x number of segments**

**FTT = 0.075 x BF**

**BF = Total – (FTT + PFC + FSSF + FST)**

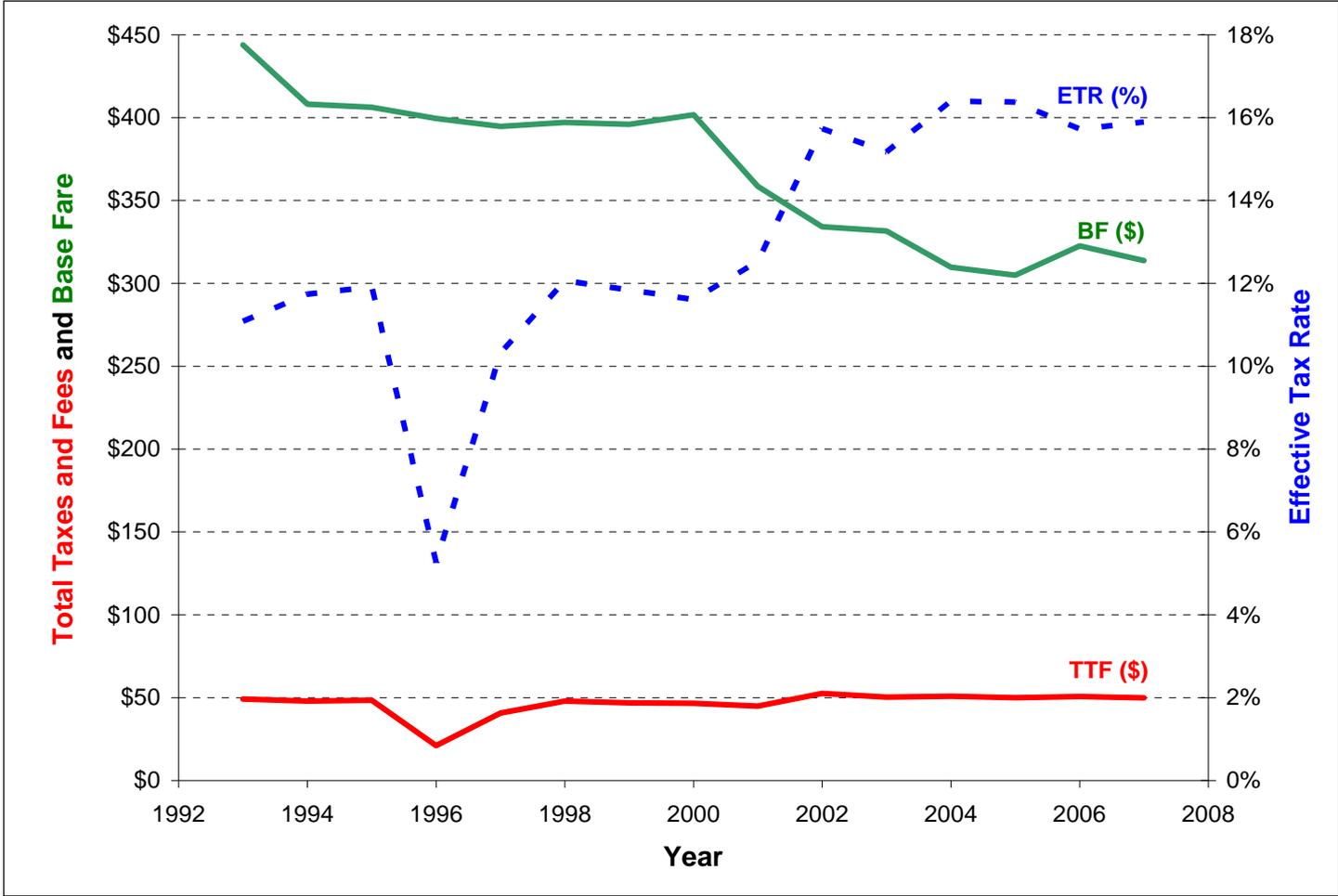
# RESULTS: CURRENT DOLLARS

Year	Federal Ticket Tax	Flight Segment Tax	PFC	Federal Security Fee	Total Taxes and Fees	Total Fare	ETR	Segments
1993	\$30.93	\$0.00	\$3.35	\$0.00	\$34.27	\$343.53	11.1%	2.83
1994	\$29.17	\$0.00	\$5.07	\$0.00	\$34.25	\$326.00	11.7%	2.81
1995	\$29.86	\$0.00	\$5.71	\$0.00	\$35.57	\$334.16	11.9%	2.78
1996	\$10.31	\$0.00	\$5.58	\$0.00	\$15.89	\$318.07	5.3%	2.76
1997	\$24.60	\$0.70	\$6.22	\$0.00	\$31.52	\$337.04	10.3%	2.77
1998	\$27.31	\$3.48	\$6.87	\$0.00	\$37.66	\$349.82	12.1%	2.77
1999	\$25.04	\$5.70	\$6.92	\$0.00	\$37.66	\$355.72	11.8%	2.76
2000	\$25.03	\$6.86	\$6.85	\$0.00	\$38.74	\$372.41	11.6%	2.74
2001	\$22.97	\$7.59	\$7.80	\$0.00	\$38.37	\$344.59	12.5%	2.76
2002	\$21.73	\$8.35	\$9.19	\$6.30	\$45.58	\$335.37	15.7%	2.78
2003	\$22.06	\$8.32	\$9.74	\$4.48	\$44.60	\$338.73	15.2%	2.77
2004	\$21.16	\$8.46	\$9.93	\$6.70	\$46.25	\$328.33	16.4%	2.73
2005	\$21.53	\$8.64	\$10.20	\$6.64	\$47.01	\$334.13	16.4%	2.70
2006	\$23.52	\$8.82	\$10.41	\$6.57	\$49.33	\$362.96	15.7%	2.67
2007	\$23.52	\$9.07	\$10.70	\$6.55	\$49.85	\$363.47	15.9%	2.67

# RESULTS: 2007 DOLLARS

Year	Federal Ticket Tax	Flight Segment Tax	PFC	Federal Security Fee	Total Taxes and Fees	Total Fare	ETR	Segments
1993	\$44.38	\$0.00	\$4.81	\$0.00	\$49.19	\$493.01	11.1%	2.83
1994	\$40.81	\$0.00	\$7.10	\$0.00	\$47.91	\$456.01	11.7%	2.81
1995	\$40.63	\$0.00	\$7.78	\$0.00	\$48.40	\$454.68	11.9%	2.78
1996	\$13.63	\$0.00	\$7.38	\$0.00	\$21.01	\$420.44	5.3%	2.76
1997	\$31.77	\$0.90	\$8.04	\$0.00	\$40.72	\$435.34	10.3%	2.77
1998	\$34.73	\$4.43	\$8.74	\$0.00	\$47.90	\$444.96	12.1%	2.77
1999	\$31.17	\$7.09	\$8.62	\$0.00	\$46.88	\$442.78	11.8%	2.76
2000	\$30.13	\$8.26	\$8.25	\$0.00	\$46.64	\$448.43	11.6%	2.74
2001	\$26.89	\$8.89	\$9.14	\$0.00	\$44.93	\$403.51	12.5%	2.76
2002	\$25.06	\$9.62	\$10.60	\$7.26	\$52.54	\$386.62	15.7%	2.78
2003	\$24.87	\$9.38	\$10.98	\$5.05	\$50.27	\$381.81	15.2%	2.77
2004	\$23.23	\$9.29	\$10.90	\$7.36	\$50.77	\$360.47	16.4%	2.73
2005	\$22.86	\$9.18	\$10.83	\$7.05	\$49.91	\$354.76	16.4%	2.70
2006	\$24.19	\$9.07	\$10.71	\$6.76	\$50.74	\$373.33	15.7%	2.67
2007	\$23.52	\$9.07	\$10.70	\$6.55	\$49.85	\$363.47	15.9%	2.67

# BASE FARE, TAXES, AND EFFECTIVE TAX RATE



# OBSERVATIONS

- **Taxes have remained remarkably flat in real terms**
  - \$49.19 in 1993 vs. \$49.85 in 2007
  - However, security fee noticeably increased taxes in 2002
- **Effective tax rate is increasing as base fares decline in real terms**
  - 11.9% in 1993 vs. 15.9% in 2007
- **Average contribution per ticket to AATF down by 26.6% from 1993 to 2007**
  - However, domestic enplanements grew by 56.4%
- **PFCs and security fees are not keeping pace with inflation**



# CHANGING PERCEPTIONS?

- **“The multitude of fees and taxes imposed now accounts for about 25% of the fare paid by the average traveler”**

Robert Crandall, Former CEO, American, 2002

- **“Fees and taxes...typically amount to about 15%, according to a study done by MIT and Daniel Webster College”**

Robert Crandall, CEO, Pogo  
*The New York Times*, April 21, 2008



## PARTING THOUGHTS

- **Is there any rationale for an *ad valorem* tax?**
- **Should unit taxes be inflation adjusted?**
  - Segment tax is inflation adjusted
  - PFCs and security fees are not
- **What will happen as revenues increasingly come from untaxed airline charges for baggage etc.?**
  - United estimates \$750 million revenue gain (+4%)
  - US Airways estimates \$400-500 million revenue gain (+4%)



# SUPPORTING MATERIAL

# INDUSTRY/MEDIA EXAMPLES OF TICKET TAXES

	A	B	2003 Actual	C	2007 Actual
Base fare	\$240.00	\$172.00	\$294.13	\$239.00	\$313.62
Federal ticket tax	\$18.00	\$12.90	\$22.06	\$18.82	\$23.52
Federal segment tax	\$12.00	\$12.00	\$8.32	\$14.00	\$9.07
PFCs	\$18.00	\$18.00	\$9.74	\$18.00	\$10.70
Security service fee	\$10.00	\$10.00	\$4.48	\$10.00	\$10.00
Fuel tax	\$4.21				
Total taxes and fees	\$62.21	\$52.90	\$44.60	\$60.82	\$60.82
<b>Effective tax rate</b>	<b>26%</b>	<b>31%</b>	<b>15%</b>	<b>25%</b>	<b>16%</b>
No. of segments	4	4	2.77	4	2.67

A = R. Anderson (CEO, NWA), Senate Committee on Commerce, Science, and Transportation, 2003

B = SWA, Herb's Take on Hot Topics: Airline Coalition Urges Repeal of Security Fees, 2003

C = Rick Seaney (CEO, FareCompare.com), Forbes.com, June 5, 2008

# NON-STOP VS. CONNECTING

Itinerary Type	Federal Ticket Tax	Flight Segment Tax	PFC	Federal Security Fee	Total Taxes and Fees	Total Fare	ETR
Non-stop	\$21.40	\$6.80	\$8.32	\$5.00	\$41.52	\$326.90	14.5%
Connecting	\$28.23	\$14.11	\$16.01	\$10.00	\$68.34	\$444.69	18.2%

- Taxes and fees for non-stop tickets are ~40% lower than tickets with connections
- However, difference in ETR is more modest (14.5% for non-stop tickets vs. 18.2% for connecting tickets)