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Infrastructure-Related Taxes and Fees in the U.S. and EU

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Background

- **Concerns about increased impact of ticket taxes and fees**
 - **Airlines everywhere**
 - **U.S. Congress/EU Commission**
 - **Media**
 - **Passengers**
- **Objective: To quantify U.S. & EU taxes+fees**
 - **In absolute terms**
 - **Relative to ticket price**
 - **Changes over time**
 - **Distribution by fare levels, type of airline, distance**

Recent developments

- Balance in Airport and Airway Trust Fund has sharply declined and authority to collect taxes expires in 2007
- September 2005: U.S. Congress considers suspending the 7.5% federal ticket tax and/or the 4.3¢/gal. jet fuel tax
- Sweden: “A [new] tax on air tickets will be introduced from 1 May 2006, at a rate of between SEK 50 and SEK 100 per ticket.”
 - Swedish Ministry of Finance, September 20, 2005
- “France plans to put a tax on airline tickets next year to help finance the global struggle against poverty...and AIDS.”
 - Associated Press, August 29, 2005

U.S. ticket taxes and fees

Tax/Fee	Symbol	Rate	Recipient
Federal ticket tax	FTT	7.5%	Airport and Airway Trust Fund
Federal segment tax	FST	\$3.20 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 2005
- 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 FST & FTT rules exist for Alaska and Hawaii
- FSSF temporarily suspended from June 1 to September 30, 2003

U.S. taxes not included in study

Tax	Rate	Basis
International arrival tax	\$14.10	Per arriving international passenger
International departure tax	\$14.10	Per departing international passenger
Immigration user fee	\$7.00	Per arriving international passenger
Customs user fee	\$5.00	Per arriving international passenger
Animal and plant health inspection service passenger fee	\$4.95	Per arriving international passenger
Animal and plant health inspection service aircraft fee	\$70.00	Per arriving international aircraft
Jet fuel tax (commercial use)	4.3¢	Per gallon
Leaking underground storage tank fuel tax	0.1¢	Per gallon
Air carrier security fee	Confidential	Per carrier (based on CY 2000 screening costs)
Cargo waybill tax	6.25%	Domestic freight waybill
Frequent flyer tax	7.5%	Sale of the right to award frequent flyer miles to third parties

Definitions

- Total taxes and fees (U.S. example):

$$TTF = FTT + FST + FSSF + PFC$$

- Effective tax rate:

$$ETR = \frac{E(TTF)}{E(BF)} \times 100\%$$

U.S. methodology

- DB1A: DOT *Origin and Destination Data Bank 1A Ticket Dollar Value* database
- Includes all tickets ending with “0” (aka “10% ticket sample”)
- 2Q04: 4.4 million records representing 10.5 million pax
- 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

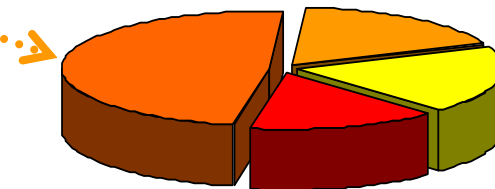
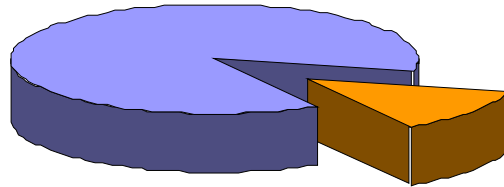
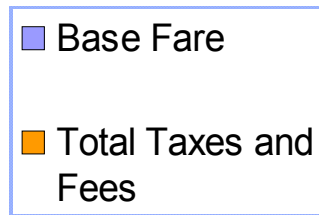
FST = \$3.20 x number of segments

FTT = 0.075 x BF

BF = Total – (FTT + PFC + FSSF + FST)

U.S. results

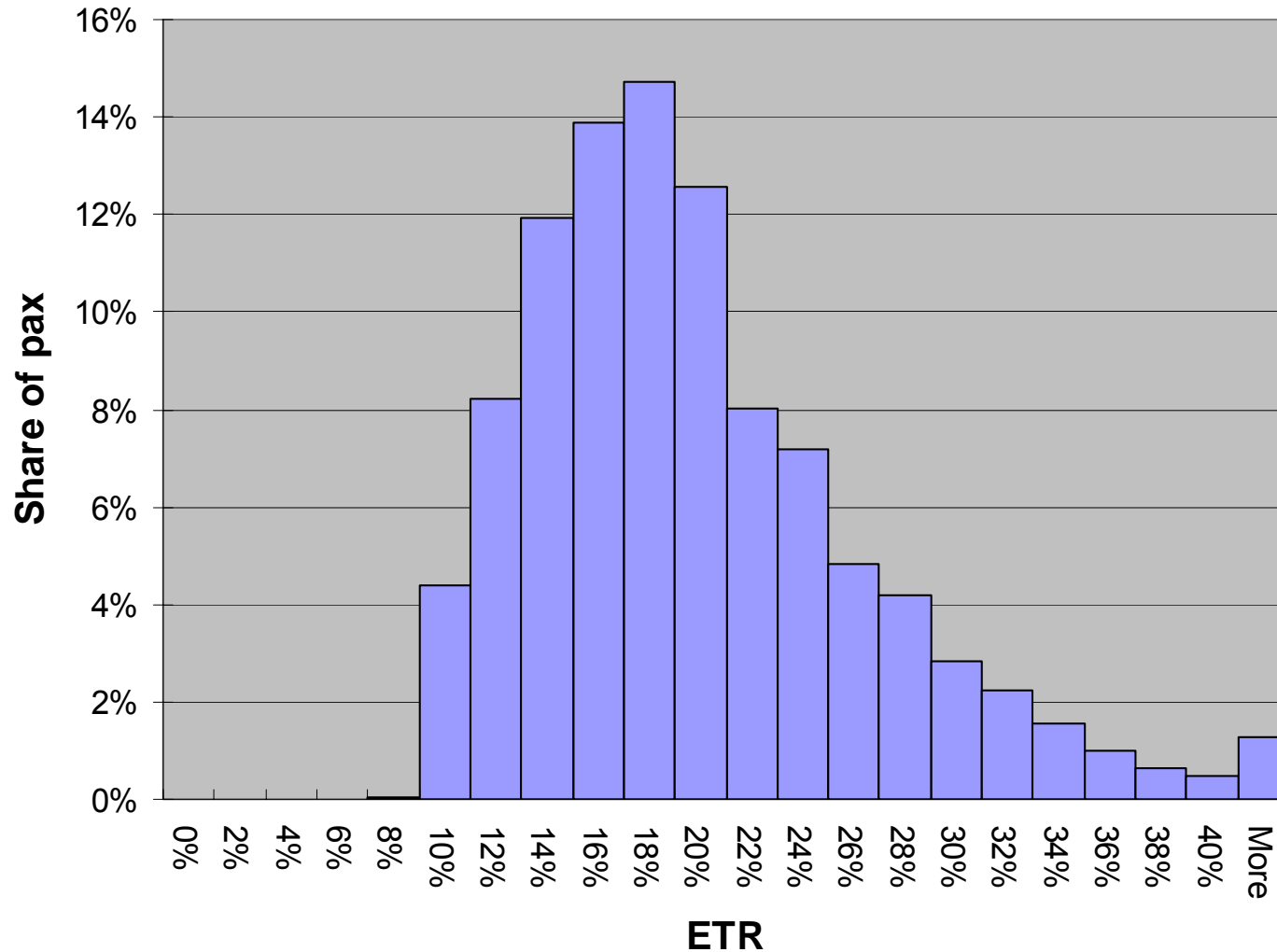
BF	TTF	FTT	FST	PFC	FSSF	ETR
\$268.29	\$44.25	\$20.12	\$8.06	\$9.58	\$6.50	16.5%



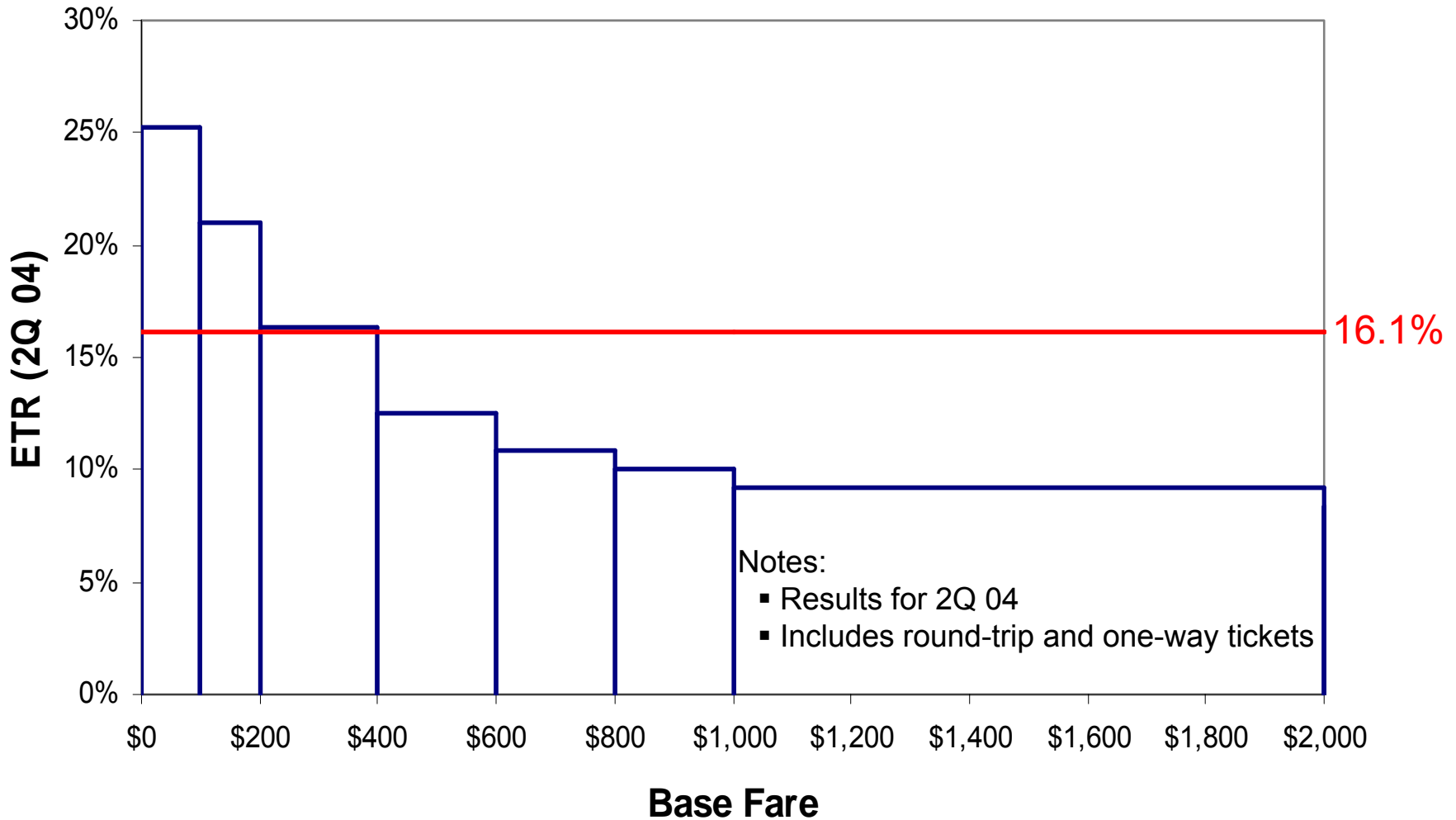
Notes:

- All results for 2Q 04
- Includes round-trip tickets only
- Average number of segments in each direction: 1.30

Distribution of ETR

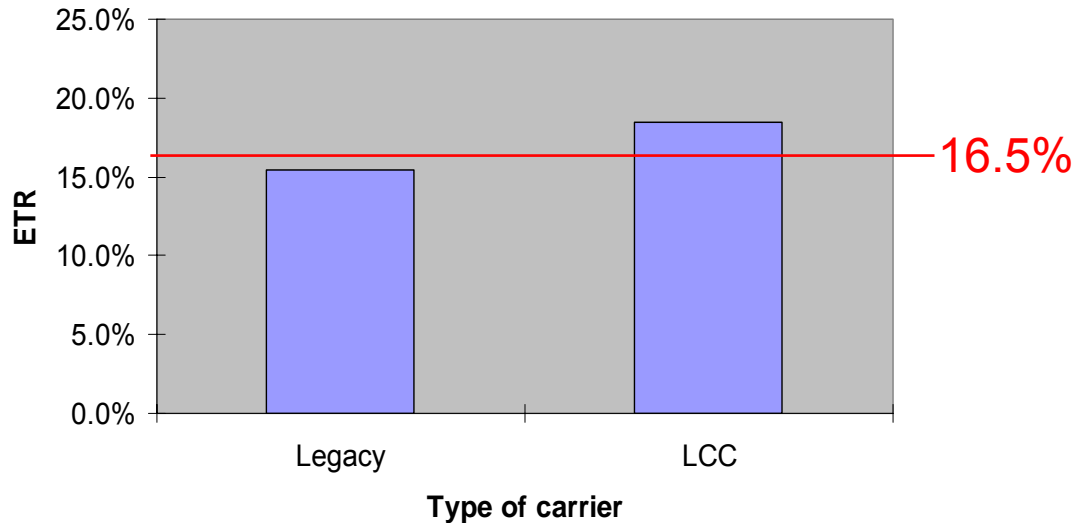


Taxes impact low fares...



...and low-cost carriers (but less than expected)

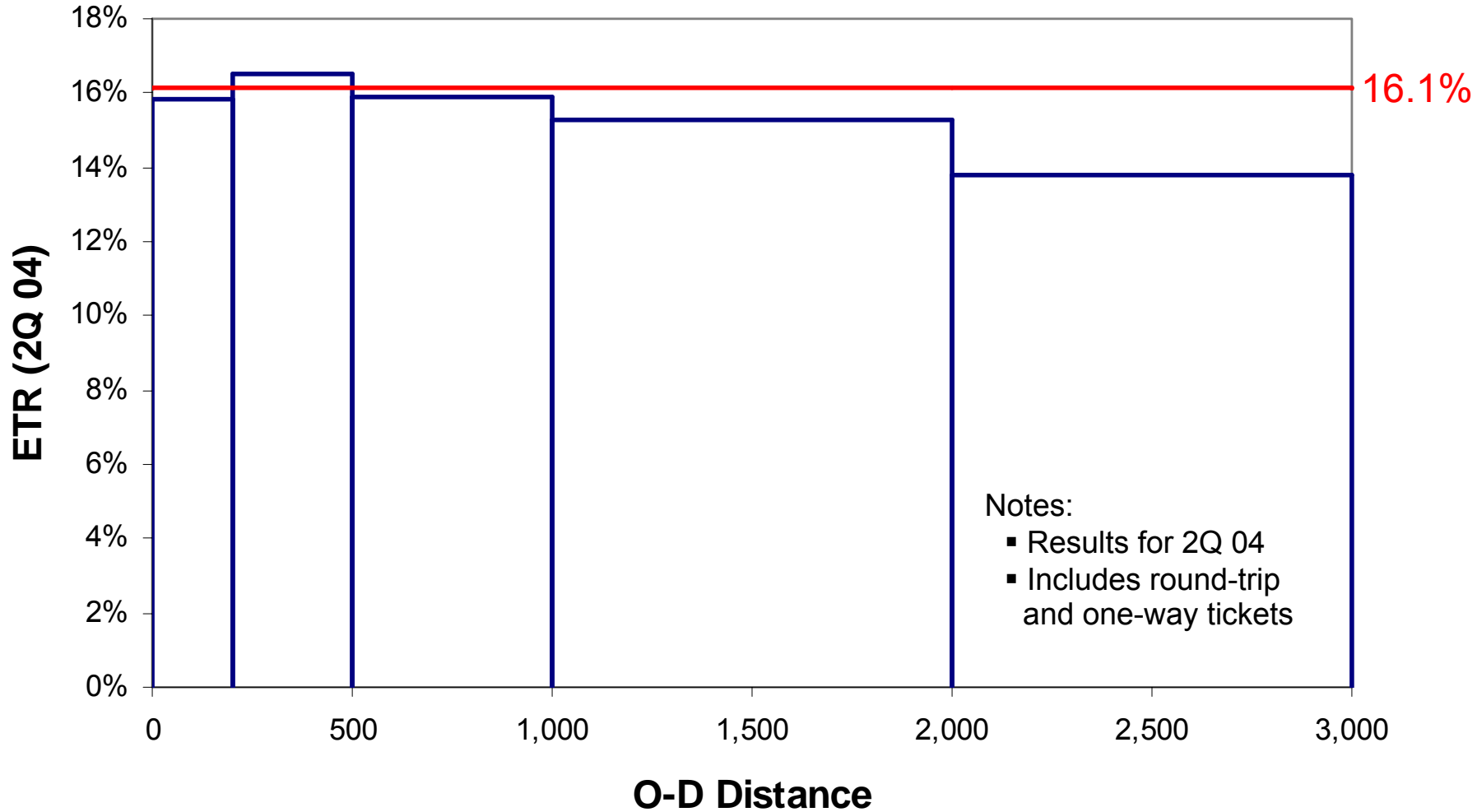
Carrier type	BF	TTF	FTT	FST	PFC	FSSF	ETR
Low-cost	\$185.91	\$34.37	\$13.94	\$6.99	\$7.81	\$5.63	18.5%
Legacy	\$305.33	\$47.00	\$22.90	\$7.99	\$9.66	\$6.45	15.4%



Notes:

- All results for 2Q 04
- Includes round-trip tickets only

Taxes and O-D distance



Comparison: 1993-2004

Quarter	BF	TTF	FTT	FST	PFC	FSSF	ETR
2Q 1993	\$444.89	\$48.40	\$44.49	-	\$3.91	-	10.9%
2Q 2002	\$291.74	\$46.26	\$21.88	\$8.35	\$9.07	\$6.96	15.9%
2Q 2004	\$268.29	\$44.25	\$20.12	\$8.06	\$9.58	\$6.50	16.5%

- Reported in 2004 dollars; round-trip fares only
- In real terms:
 - Average total taxes and fees per ticket: little change
 - Base fare has decreased by \$175 or 40% (!)
 - There has been an 8% fare decline since 2002
- With a constant base fare the ETR would have been 12.9% in 2004, *ceteris paribus*

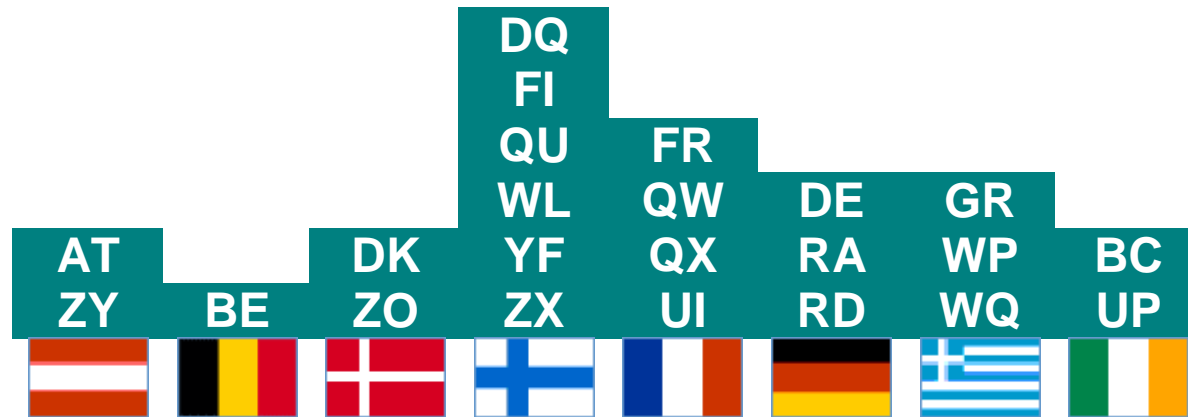
Conclusions – U.S.

- The effective tax rate on all domestic tickets in the U.S. in 2004 was 16%
- Ticket taxes impact the lowest fares, but impact on ***low-cost carriers*** is mitigated
- Effective tax rates are relatively insensitive to O-D distance traveled
- Tax rate has increased from 11% to 16% over last ten years, due to decline in fares

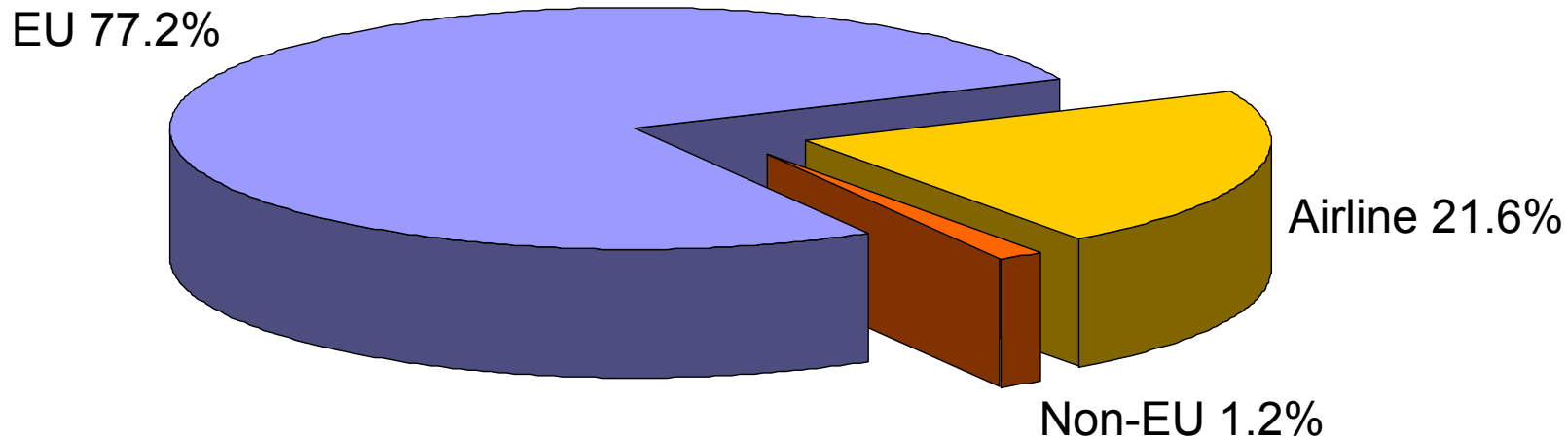
EU challenges

- No database equivalent to U.S. DB1A
- Limited GDS sample for EU-15:
 - 335,000 intra-EU tickets collected January 13-14, 2004
 - Ongoing analysis: 15 more days of 2004
- Does not include LCCs or charter carriers
- Does not cover air navigation service fees
- Results are not directly comparable to U.S.

EU ticket taxes and fees



Distribution of EU taxes and fees



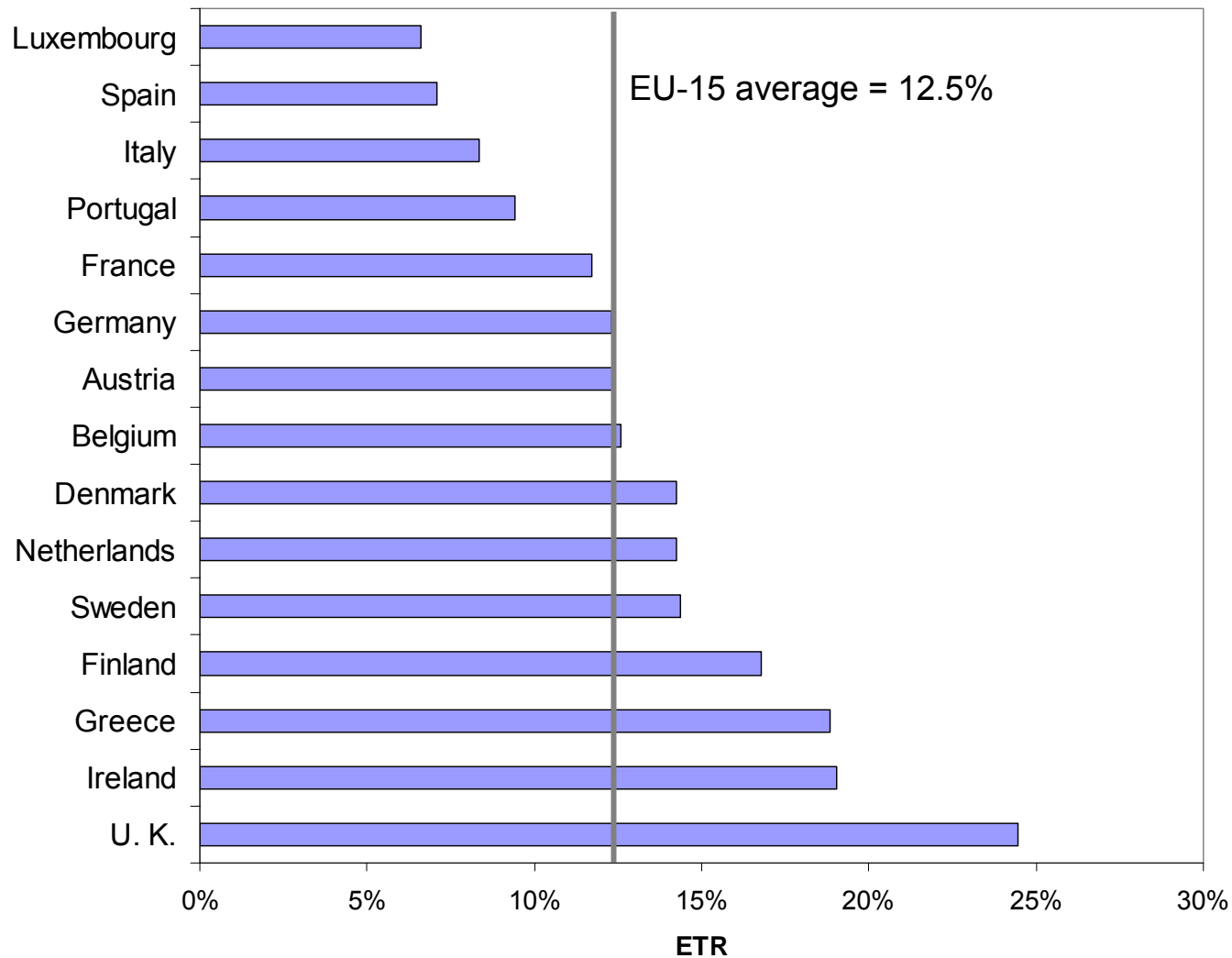
- YQ/YR (= “airline own use only”) make up 21.6% of taxes and fees
- A non-trivial amount of non-EU taxes are assessed on intra-EU tickets

EU results

Case	BF	TTF	BF+TTF	ETR
EU-15 Total	\$274.24	\$34.17	\$308.41	12.5%
EU-15 Roundtrip (81%)	\$298.82	\$38.68	\$337.50	12.9%
EU-15 One-way (19%)	\$169.64	\$14.97	\$184.61	8.8%
U.S. Roundtrip (2Q 04)	\$268.29	\$44.25	\$312.54	16.5%

Notes: Results for EU-15 nations from January 13-14, 2004 2-day GDS sample; YQ/YR included in BF

ETR by country of origin



Ten highest country-pair ETRs

Origin Country	Destination Country	Tickets in Sample	BF	TTF	ETR
U.K.	The Netherlands	2,063	\$115.65	\$53.03	45.9%
U.K.	France	5,365	\$163.16	\$51.20	31.4%
U.K.	Ireland	2,121	\$110.25	\$34.53	31.3%
Ireland	U.K.	1,124	\$105.16	\$31.36	29.8%
U.K.	U.K.	19,294	\$139.03	\$40.96	29.5%
Greece	Greece	1,162	\$126.28	\$33.43	26.5%
U.K.	Austria	595	\$198.28	\$50.58	25.5%
Finland	Finland	6,142	\$197.23	\$47.72	24.2%
U.K.	Belgium	837	\$224.90	\$51.26	22.8%
U.K.	Greece	557	\$262.77	\$59.76	22.7%

Notes: Only includes markets with at least 500 tickets in 2-day GDS sample; YQ/YR included in BF

Ten lowest country-pair ETRs

Origin Country	Destination Country	Tickets in Sample	BF	TTF	ETR
Spain	Portugal	1,256	\$394.44	\$19.89	5.0%
Italy	Spain	1,211	\$391.03	\$22.43	5.7%
France	Italy	2,703	\$625.92	\$39.41	6.3%
Germany	Sweden	529	\$774.54	\$49.53	6.4%
Sweden	Germany	714	\$765.94	\$49.67	6.5%
France	Spain	3,536	\$499.62	\$32.98	6.6%
Spain	France	3,247	\$432.14	\$29.10	6.7%
Spain	Spain	70,043	\$159.92	\$10.90	6.8%
France	Germany	3,522	\$670.37	\$45.79	6.8%
Spain	Italy	2,528	\$337.13	\$23.14	6.9%

Notes: Only includes markets with at least 500 tickets in 2-day GDS sample; YQ/YR included in BF

Distribution by base fare

Base Fare Range	Tickets in Sample	BF	TTF	ETR	Segments per Ticket
≤ \$100	90,628	\$63.57	\$26.91	42.3%	1.74
\$100–250	117,760	\$173.95	\$33.36	19.2%	1.98
\$250–500	84,419	\$371.07	\$37.99	10.2%	2.13
\$500–1000	32,333	\$670.84	\$43.96	6.6%	2.18
\$1000–2000	9,407	\$1,276.18	\$45.79	3.6%	2.45
> \$2000	235	\$2,323.51	\$46.93	2.0%	3.07
All	334,782	\$274.25	\$34.17	12.5%	1.98

Notes: Results for EU-15 nations from January 13-14, 2004 2-day GDS sample; YQ/YR included in BF

U.S.-EU comparison: The case of LH

- 55,560 LH tickets (Jan. 13-14, 2004)
 - ETR = 12.8%
 - ANS costs = 6.8%
 - “True” ETR = 19.6% (vs. 16% for U.S.)
- Very preliminary extrapolation:
 - LH ETR 12.8% \approx EU-15 ETR 12.5%
 - If LH ANS costs \approx EU-15 ANS costs, then “true” ETR for EU-15 \approx 19-20%

Conclusions – EU

- Dizzying array of national taxes
- Critical need for information or DB1A-like database
- Great variety in ETR by nation
- Overall EU-15 ETR similar to U.S., but value of comparison is very limited
- To compare EU-15 and U.S., we have to improve sampling + account for LCCs, charter flights, and ANS charges
- Including ANS may increase EU ETR to 19–20% vs. 16% for U.S. (based on Lufthansa/SAS data)

Questions?

