

47th TRF Conference

New York City, 23 - 25 March 2006



Transatlantic business traveller decision drivers: Nationality & product attribute differentials

Keith J Mason,

Dept of Air Transport, Cranfield University

Iain Dudley,

Market Analysis, Rolls-Royce

Importance of North Atlantic Market

- ➔ North Atlantic traffic accounts for 11.9% of worldwide RPKs (IATA 2005)
- ➔ Following 9/11 BA's traffic in this market dropped 17% and profits fell by 69% (BA 2002)

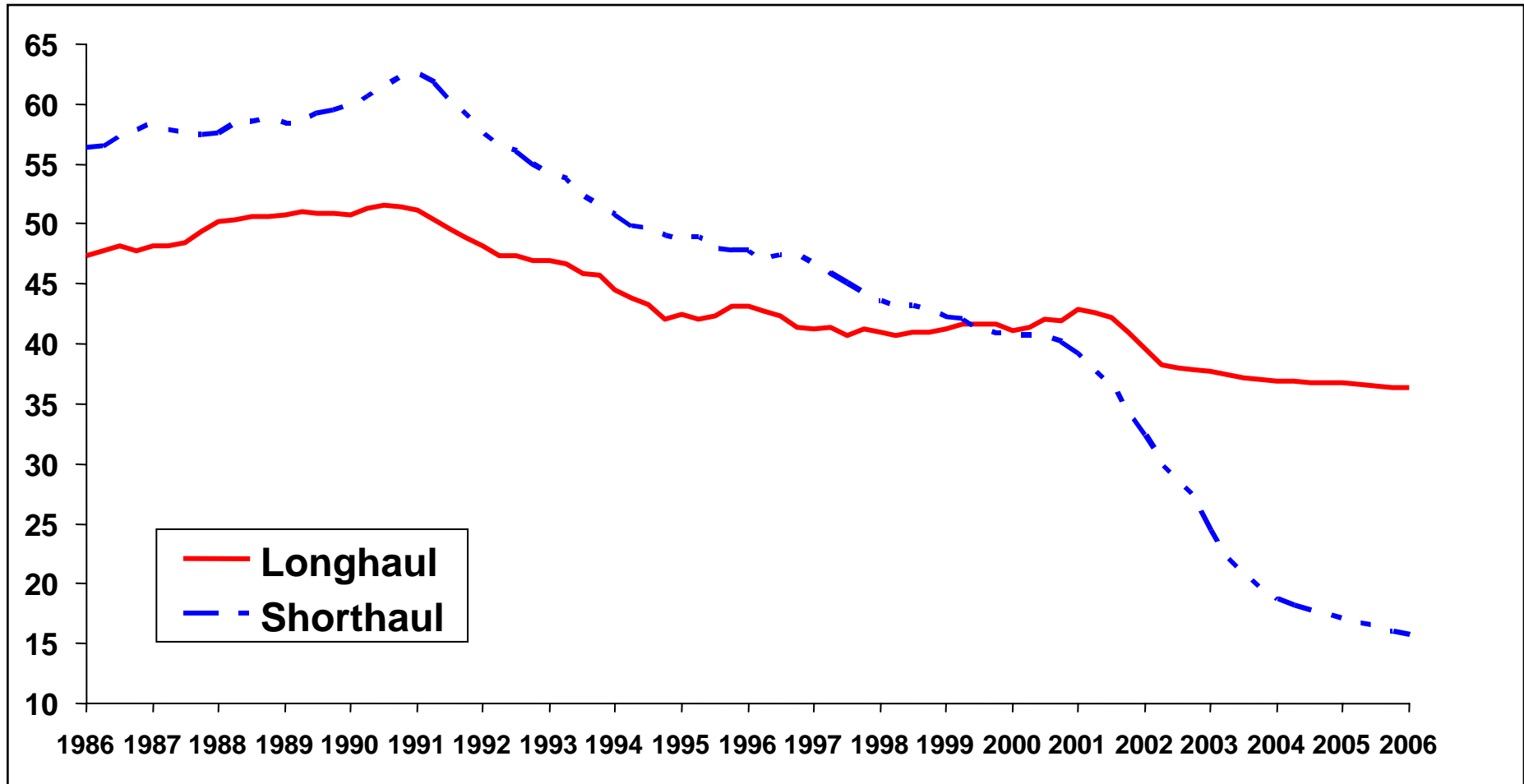
Business class is very important to airlines

Class of Service	Capacity ASK %	Load Factor %	Yield per RPK USc	Revenue %	Operating Ratio Revenue as % of Total Costs
First	2.4	36	23.5	3.8	73
Business	14.8	52	18.8	28.1	129
Economy	82.8	77	5.5	68.1	105
Total	100			100	

Source: IATA 2003

Propensity to fly premium

% of business travellers in premium cabins, 4 quarter moving average



Market in change – diverging demand

- Decreasing full Business Class demand
- Growth of single cabin Business Class services
 - Privat Air
- Development of discounted Business Class services
 - MaxJet
 - Eos
- Redefining “long haul”
- Downgrading to premium economy or economy
- Unbundling comfort and flexibility

Previous research

- ▶ Choice is based on first differentiating item – if core (schedule, aircraft, price) are similar it is the service elements (seat comfort, FFP, added services, etc.) that is the basis of the purchase decision (Guillibaud and Bond 1997)
- ▶ Brown found four market segment in LH business market
 - Switcher, Time conscious, Price Trader, and High maintenance

Long Haul Business Travel Purchase Factors

Order	1998	2002	2004
1	Convenient schedule	Seat comfort	Frequent Flyer Program
2	Frequent Flier Programme	Convenient schedule	Fare
3	Fare	Fare	Seat comfort
4	Airline punctuality	Frequent Flyer Program	Convenient schedule
5	Seat comfort	n/a	Past experience

Source: CATS IATA

- Fare increasing in importance
- Schedule convenience diminishing in relative importance
- Seat and FFP no trends

Research

➤ Research premise

- Recent changes in the decision factors and behaviour on North Atlantic business travel market means re-examination of the purchase factors is worthwhile.

➤ Research aims

- To evaluate the value of a number of product elements by forcing a sample of business travellers to trade product benefits against travel expenditure
- Assess the effect of nationality on the decision drivers on long haul business travellers

Methodological Considerations

- Attitude scales of product elements do not force respondents to trade one element against another
- Stated preference analysis was adopted to force respondents to trade product elements against each other
 - Price, Frequency, in-flight comfort, FFP rewards, ticket flexibility
- Business travellers from US and Europe may have different preferences

Stated preference design

- Respondents asked to consider a hypothetical route
 - London (no airport defined) and Chicago
- Variables used
 - Price (£1,000, £1,500, £2,500)
 - In-flight comfort (“Standard Seat” (Economy), Extra Leg Room (Economy Plus), Flat Bed (Business Class))
 - FFP (points awarded, points not awarded)
 - Frequency (daily, and thrice daily, five times daily)
- Orthogonal design
 - 16 product offerings
- Measurement
 - 10 point rating scale on likeliness to choose service

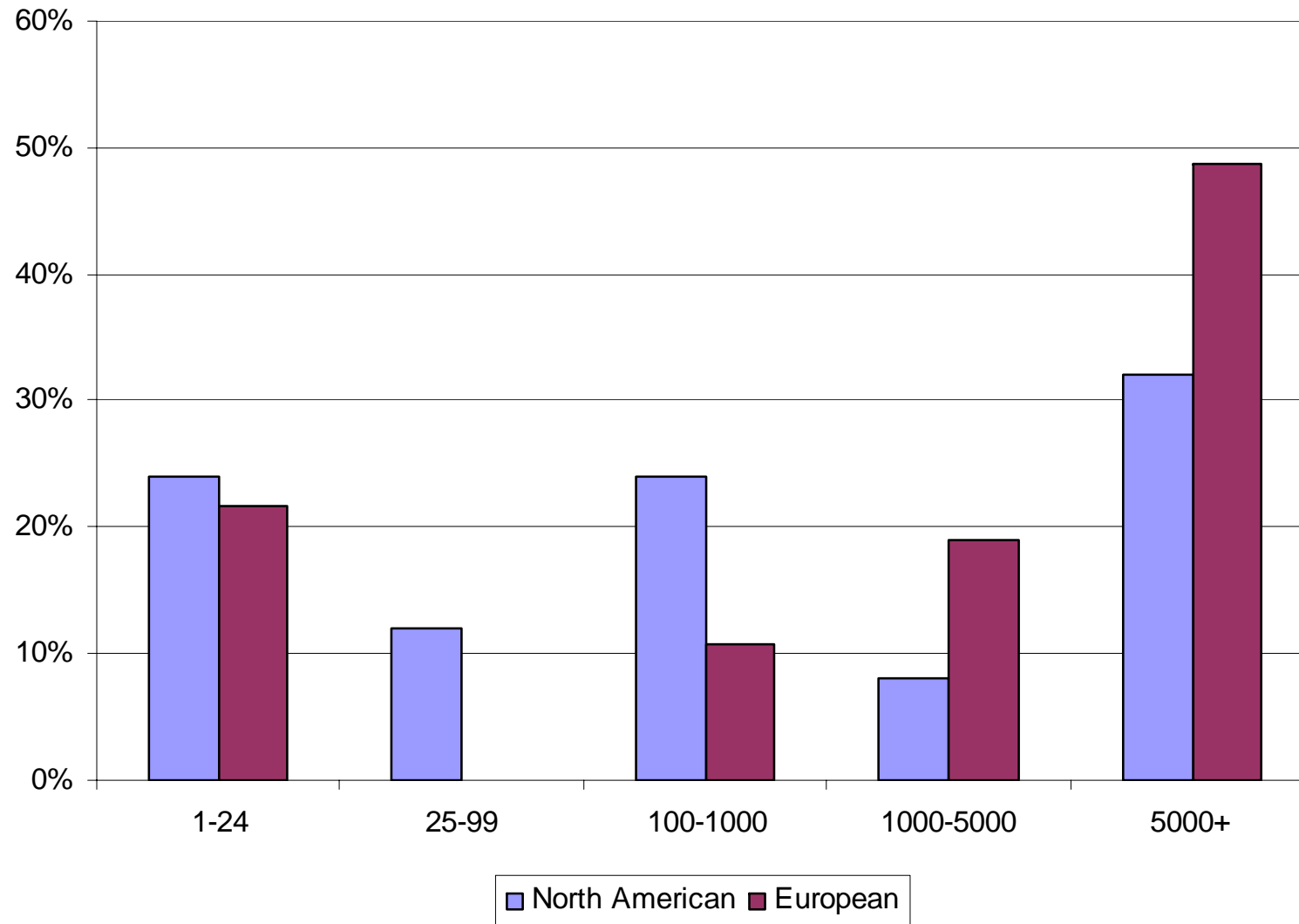
Survey Administration

- Online survey distributed to databases from:
 - Association of Travel Executives
 - UK Institute of Travel Management
- $n = 62$ respondents (10% response rate)
- 992 lines of SP data
- 200 lines held out for model validation

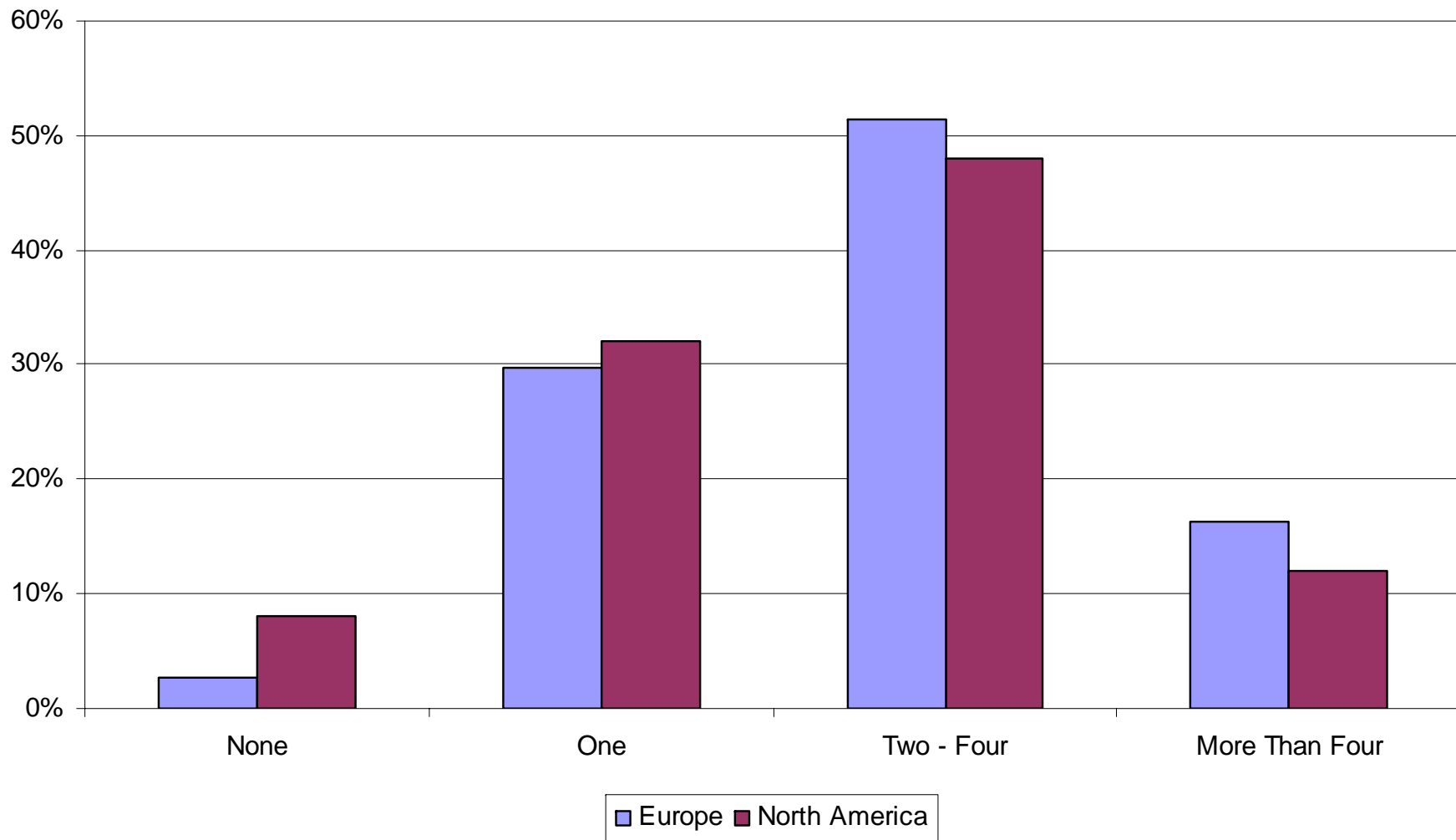
Results

- 79% in Director or Senior management levels
- 74% Male (72% in US)
- 80% between 25 and 65 years of age
- 14.6 business trips per year
- Of which 7.44 long haul

Company size profile of respondents



FFP membership



FFP reward usage

- No difference between North American and European counterparts
 - 80% used accrued points for personal travel benefits
 - 16% used points for upgrades
 - 4% never redeemed rewards

Model of Long Haul Business Travellers

		<i>t-statistics</i>
Score = 2.458	+ (-1.172 * Price)	-12.766
	+ (1.015 * Seat Comfort)	11.167
	+ (1.544 * FFP)	10.289
	+ (0.172 * Frequency)	3.841
	+ (0.468 * Ticket Flexibility)	3.119

$R^2 = 0.26$

Validity test: Compare model prediction against hold-out
 $r = 0.547$

Model of European LH Business Travellers

		<i>t-statistics</i>
Score = 2.458	+ (-1.193 * Price)	-9.639
	+ (1.048 * Seat Comfort)	8.555
	+ (1.120 * FFP)	5.538
	+ (0.812 * Frequency)	4.016
	+ (0.160 * Ticket Flexibility)	2.649

$R^2 = 0.241$

Validity test: Compare model prediction against hold-out
 $r = 0.571$

Model of North American LH Business Travellers

		<i>t-statistics</i>
Score = 2.458	+ (-2.170 * Price)	-8.884
	+ (1.040 * Seat Comfort)	7.654
	+ (0.962 * FFP)	10.341
	+ (0.190 * Frequency)	3.033

$R^2 = 0.34$

Validity test: Compare model prediction against hold-out
 $r = 0.665$

Scenario Analysis Examples

Price increase by £500

	Price	Seat	FFP	Freq	Flex	All	Europe	N. America	
Scenario 1	£ 1,000.00		1	0	1	1	2.941	3.135	2.479
Scenario 2	£ 1,500.00		1	0	1	1	1.769	1.942	1.339
Change in attractiveness							-39.85%	-38.05%	-45.99%

Number of Frequencies

	Price	Seat	FFP	Freq	Flex	Europe	N. America	
Scenario 1	£ 1,000.00		1	1	1	3	4.575	5.029
Scenario 2	£ 1,000.00		1	1	1	1	4.255	4.649
Change in attractiveness							-6.99%	-7.56%

Ticket Flexibility

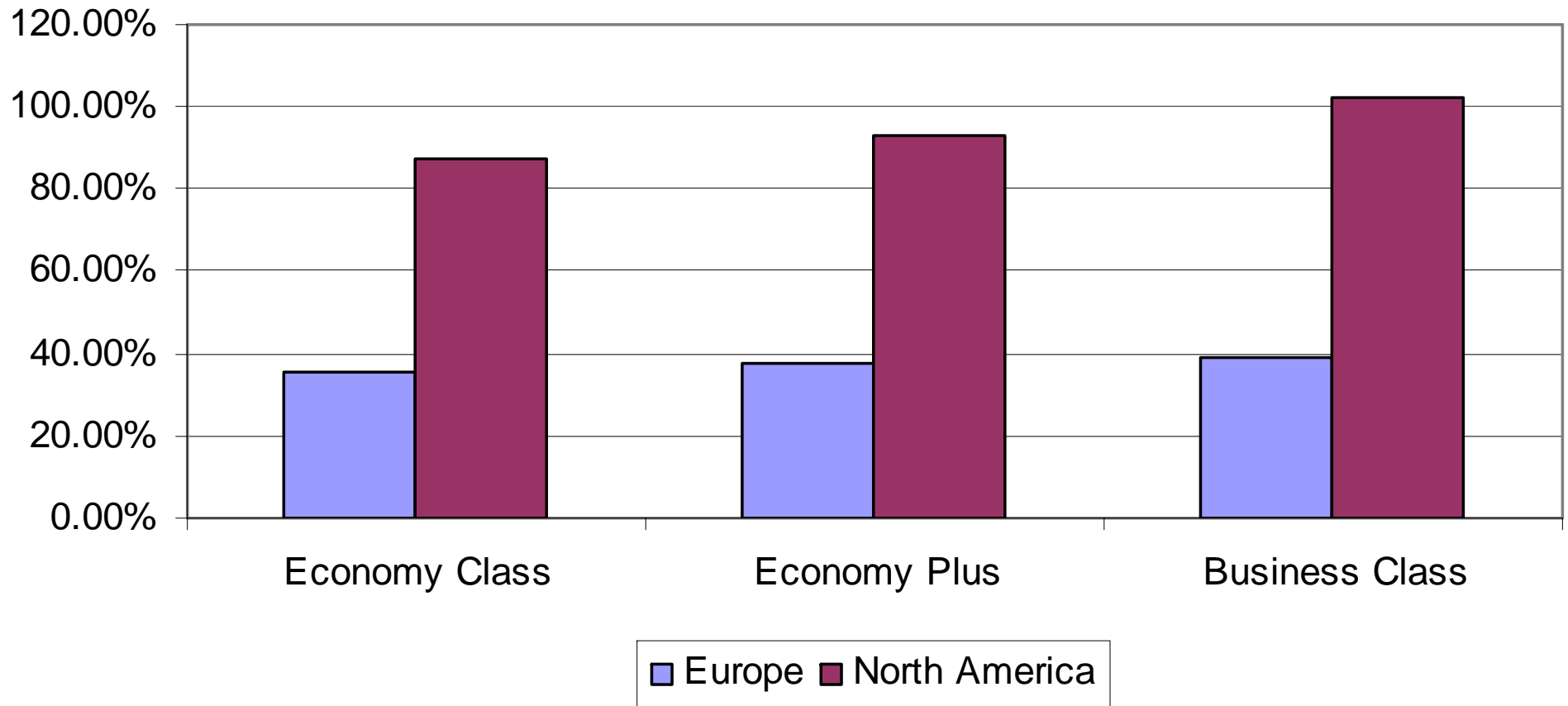
	Price	Seat	FFP	Freq	Flex	Europe	N. America
Scenario 1	£ 1,000.00	1	1	1	1	4.255	4.649
Scenario 2	£ 1,000.00	1	1	1	2	4.961	4.649
Change in attractiveness						16.59%	0.00%

Impact of FFP points awards on three classes

Attribute	Economy	Economy Plus	Business Class
Price	£1,000	£1,500	£2,500
Seat	Standard seat	Extra legroom	Flat bed
Flexibility	No Flexibility	No Flexibility	No Flexibility
Frequency	1 Daily	1 Daily	1 Daily

By adding FFP rewards to each of these products we can see in the increase in attractiveness

Impact of addition of FFP rewards



Economy Plus products

Attribute	Economy	Economy Plus
Price	£1,000	£1,500
Seat	Standard seat	Extra legroom
Flexibility	No Flexibility	Flexibility
Frequency	1 Daily	1 Daily

	Price	Seat	Freq	Europe	N. America
Scenario 1	£ 1,000.00	1	1	3.135	2.479
Scenario 2	£ 1,500.00	2	1	3.696	2.301
				17.89%	-7.18%

NB: FFP points are not included in analysis due to the high impact on N. American respondents, but their inclusion would make Economy Plus much more attractive

Conclusions

- Price is the key purchase factor
- For N. American business travellers FFP point accumulation and reward is still a strong purchase factor
- For European ticket flexibility adds to service package attractiveness
- Premium Economy products can be constructed to be highly attractive to both N. American and European travellers