Market power assessment: Gatwick and Stansted Airport

07 December 2011

Overview

1. Approach
2. Constraints on airport charging
3. Physical constraints on airline switching
4. Impact of switching on airline costs
5. Evidence on passenger switching
6. Conclusion

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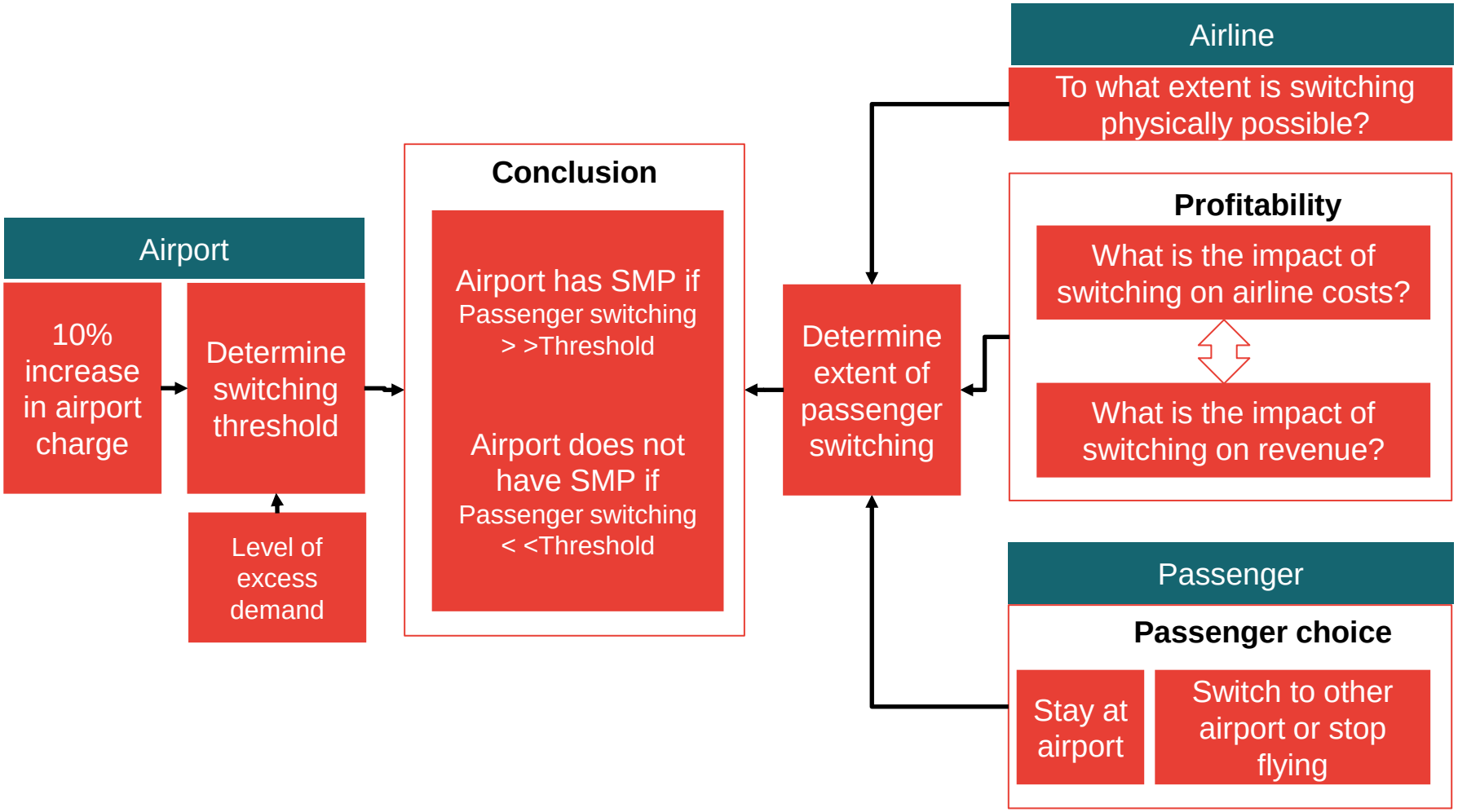
Approach

Under what circumstances would it be profitable for these airports to impose a sustained 10% increase in airport charges above the competitive level?

- Taking into account *both* passengers and airlines
- Using empirical evidence

Methodology



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Number of passengers required to switch…

Includes retail revenue

…for additional airport profit from a10% increase in airport charges to be zero		
Airport	Assuming fixed airport costs	Assuming that each lost passenger saves 30% of opex per passenger
LGW	1.8 million	2.3 million
STN	1.1 million	1.3 million

Based on an assumption by the CC

Implied passenger demand elasticity

Airport	Increase in average ticket price	Decrease in passengers required to offset increase in airport charges	Elasticity required for passengers to switch so that there is no additional profit
LGW	0.6%	7.2%	11.5
STN	1.1%	7.3%	6.7

From IPS survey

Route level elasticities estimated by IATA (2007) -1.2 to -1.5

… strapline text here

ATMs required to switch

Number of ATMs required to switch			
Airport	Number of ATMs per day	Number of landings and departures per day	Number of based aircraft
LGW	46	23	7-8
STN	29	14	4-5

Relevance of excess demand at Gatwick

Slot demand is expected to grow by 17% between 2011 and 2019 (based on DfT, 2011)

2011 summer schedule:

25 slot bids per day in excess of slot capacity

By 2019:

Potential for up to **129** excess slot bids per day

- Excess demand at Gatwick to some extent insulates airport from airline switching – the estimated number of flights required to switch could therefore be viewed as a lower estimate.

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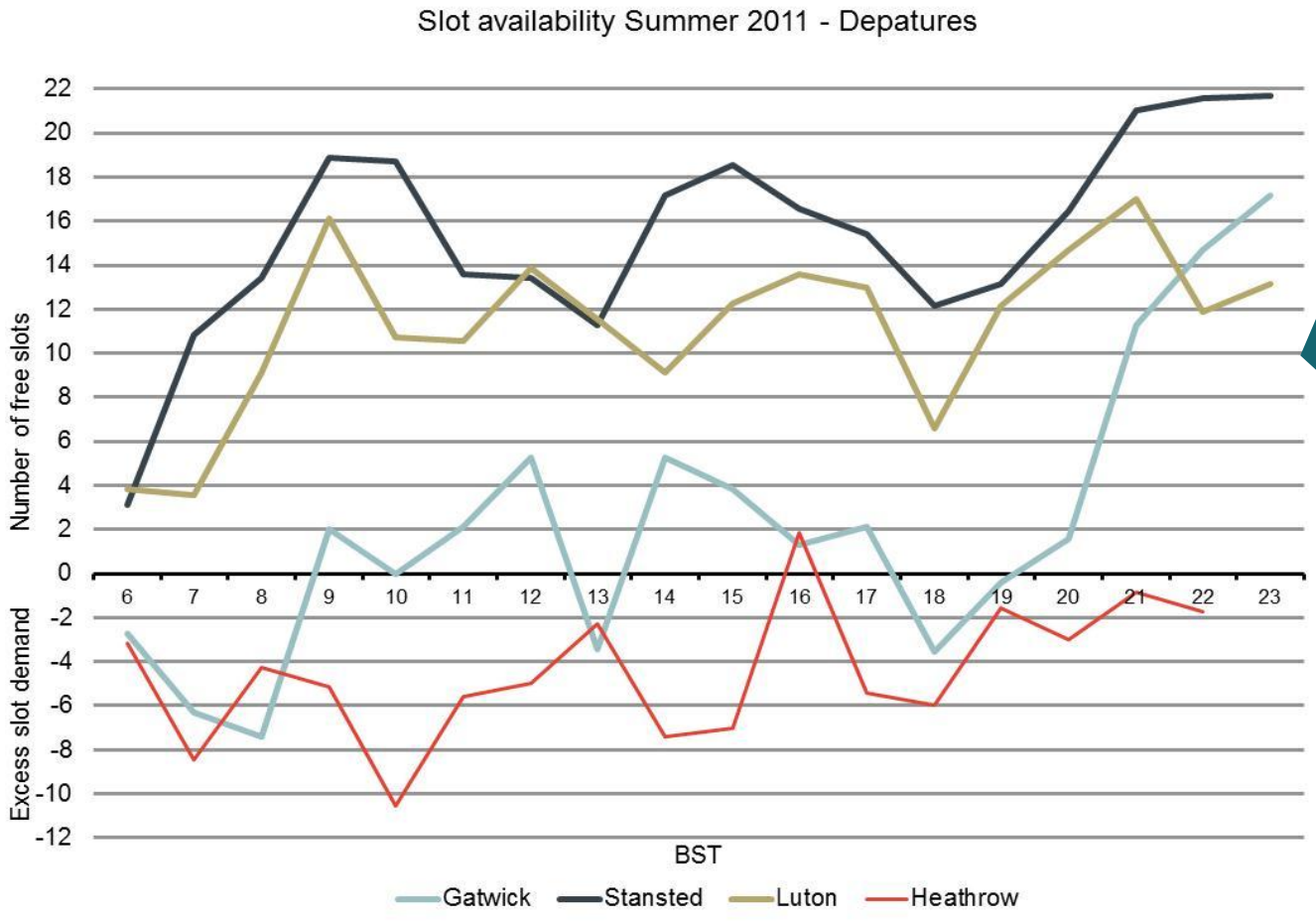
Relevance of slot availability

Are there sufficient slots are other London airports to switch to?

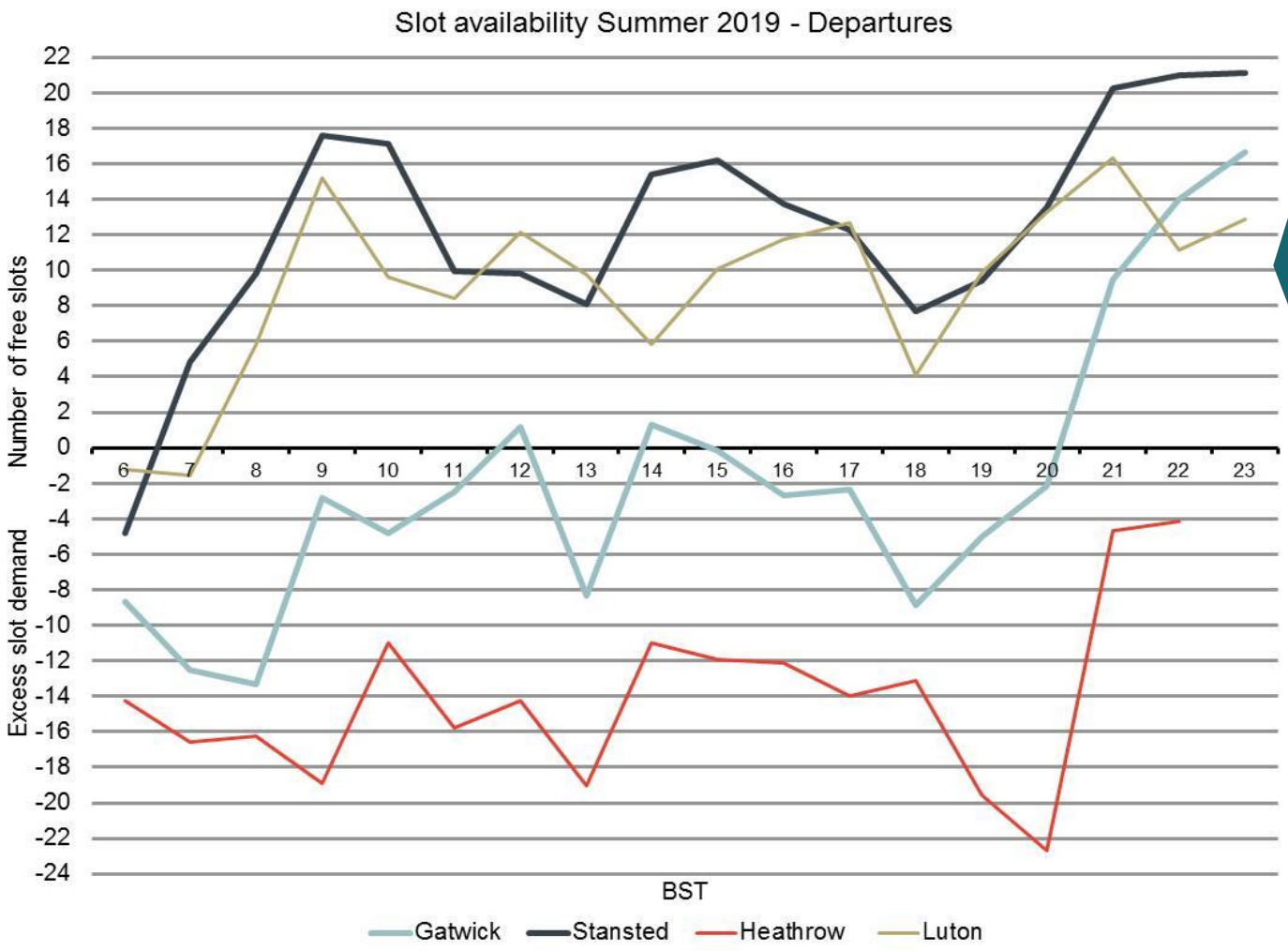
- Type of switching depends on airline operational model
  - Relocate specific arrival and departure slots – Charter carriers and some legacy carriers
  - Rebase aircraft - Point-to-point carries and some legacy carriers
- Focus on rebasing of aircraft as
  - 72% of ATMs at Gatwick are undertaken by based aircraft
  - 82% of ATMs at Stansted are undertaken by based aircraft
- Rebasing aircraft implies relocating six to eight departure and arrivals
- Operational model based on economies of scale, flexibility and crew being at home overnight

2011Slot availability



- Heathrow full
- Gatwick full for some of the day
- Luton and Stansted could accommodate 7-8 based aircraft from Gatwick but morning departures need to be spread
- Luton could accommodate 4-5 rebased aircraft from Stansted

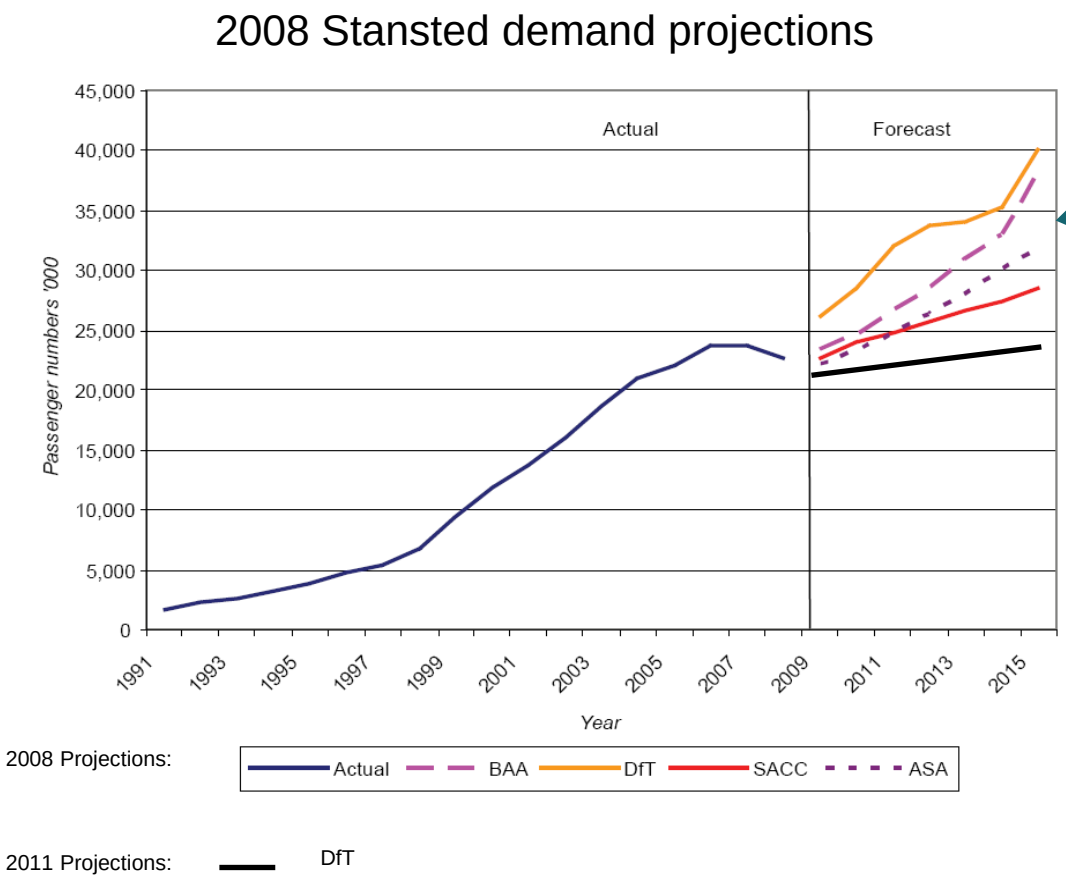
2019 Slot availability



- Gatwick and Heathrow full
- Luton and Stansted could accommodate additional 7-8 aircraft but morning capacity constrained at all airports until 8am
- Luton could accommodate 4-5 aircraft from Stanted with late morning departures

… slot availability increasingly constrained

Variability of demand forecasts



- Strong variability of demand forecasts illustrated by 2008 Stansted projections
- Within three years the forecast number of passengers for 2015 has changed by nearly 70%
- Risk that slot availability will constrain switching sooner

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Impact of switching on airline costs

- Route maturity costs
- Marketing costs
- Crew relocation costs

Total switching costs

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Cost of 10% increase in airport charges

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Evidence on passenger switching

Historic evidence	• Limitations of this approach:
	  ◻ Impact of single factor such as macroeconomic conditions cannot be isolated
	  ◻ Price changes are insufficiently frequent
	• Evidence over past 5 years suggest that very large increases in in airport charges (significantly larger than the 10% threshold usually applied in competition tests) do not cause a substantial reduction in passenger numbers

Modelling	• DfT's a multinomial logit model called National Air Passenger Allocation Model (NAPALM)
	• Predicts passenger demand from each of 455 UK districts for each of the different UK airports according to passengers' preferences for:
	  ◻ the proximity to those airport in terms of travel time
	  ◻ the service frequency at those airports
	  ◻ in-flight time to a particular destination for services at those airports
	• Simulated the effect of a 10% increase in airport charges and recalculated the predicted allocation

NAPALM: Impact of a 10% change in airport charges at Gatwick on passenger numbers

Airport	Base case	No capacity available at LHR
LGW	**-1.28 m**	**-0.95 m**
STN	0.51 m	0.55 m
LTN	0.14 m	0.16 m
LHR	0.40 m	0.00 m
LCY	0.03 m	0.00 m
Out of London	0.19 m	0.24 m

Compared to 1.8m-2.3m required to switch to offset the 10% increase in revenue

NAPALM: Impact of a 10% change in airport charges at Stansted on passenger numbers

Airport	Base case	No capacity available at LHR
LGW	0.30 m	0.36 m
STN	**-0.69 m**	**-0.61 m**
LTN	0.11 m	0.13 m
LHR	0.15 m	0.00 m
LCY	0.02 m	0.00 m
Out of London	0.10 m	0.13 m

Compared to 1.1m-1.3m required to switch to offset the 10% increase in revenue

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Conclusion on..	Evidence	Indicative of SMP Gatwick	Indicative of SMP Stansted
Constraints on airport charging	• Price elasticities of 11.5 at Gatwick and 6.7 at Stansted required to offset 10% increase in charges • Significant excess demand may insulate the airport from fall in passengers after incumbent airline switches as slots are taken up by other airlines	✓ ✓	✓ ✗
Physical switching constraints to airlines	• By 2019 slot availability is likely to be a constraint to some extent on the rebasing of aircraft. It is likely that no slots will available at any of the major London airports before 8am.	?	?
Switching costs	• The cost of rebasing an aircraft seem to significantly outweigh the cost of a 10% increase in airport charges at either Gatwick or Stansted	✓	✓
Passenger switching	• Passenger switching indicated by model substantially lower than levels required to offset 10% increase in charges	✓	✓

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