



## Airline Code-shares and Competition

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## Airline Code-shares and Competition - Discussion

- The Study
- Understanding Code Share Agreements
- Quantifying EU code share operations
- Comparisons of fares and capacity
- Competition Impact Assessment Framework

## The Study

## Study for the European Commission

- The European Commission (DG Competition) commissioned Steer Davies Gleave, transport consultants, to undertake a study into:
  - *“The nature and competition impact of airline code-share agreements”*
  
- The Commission required two main outputs:
  - *A “typology” of airline code shares; and*
  - *A conceptual framework for the assessment of the competition impact of code-share agreements*

## Background

- The growth of the three large airline alliances:
  - STAR
  - oneworld
  - SkyTeam
- Airline code-share agreements overlap strongly with the alliances and have grown steadily in recent years:
  - Over 4000 code-share routes operated by EU carriers
  - Over 2 million annual operations
  - Over 250 million seats offered
- The Commission wanted to understand how code shares worked in practice and what to look for in assessing the competitive impact of the level of cooperation required to operate code shares



# Understanding Code Share Agreements

## What is an airline code-share?

- A code-share agreement allows for a flight operated by one carrier also to be marketed by another carrier with its own flight number
  - *For example, the Lufthansa-operated flight LH4725 from London Heathrow to Frankfurt is also marketed by BMI as the BD3205*
  - *The United Airlines-operated flight UA909 from Chicago to Denver is marketed by Lufthansa (as part of journey starting in Germany) as the LH430*
- Historically, code-shares arose because connections between flights on the same airline were given higher priority in reservations systems (CRSs/GDSs) than connections between different airlines
  - *Designating a connecting service with the same airline code allowed airlines to highlight sales onto their preferred partner airlines*

## Types of code-share agreements

- Code-shares can be classified:
  - *by the underlying geography of the operation*
  - *by the features of the code-share agreement itself*
  - *by associated agreements between the airlines*
  - *by the regulatory environment in which they operate*

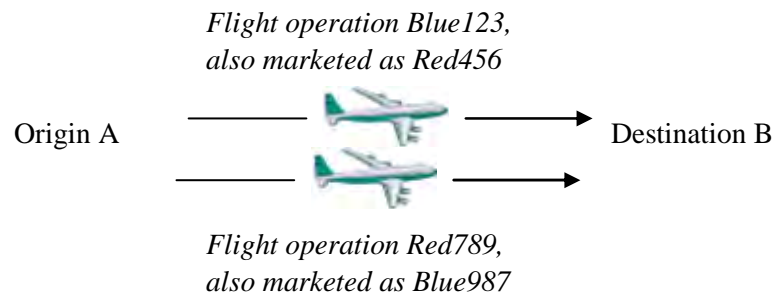




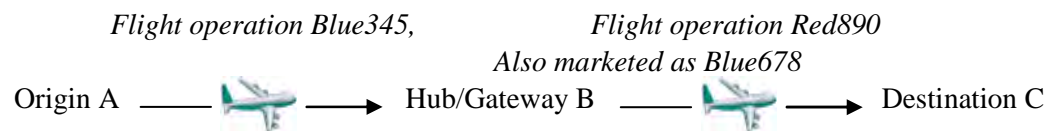
# Code-share geographies



■ Unilateral Operation  
(on trunk route)



■ Parallel Operation  
(on trunk route)



■ “Behind and beyond”  
(connecting to a trunk route)

# What's in a code-share agreement?

A code-share agreement is a commercial contract, covering:

- List of routes and flights covered
- Marketing and product display
- Inventory control procedures -
  - ***“Freesale” - real-time links to the operating carrier’s seat inventory; or***
  - ***“Block space” - pre-reserved “block” of seats for marketing carrier to sell***
  
- Pricing, ticketing, commission payments and financial settlements -
  - ***Often in parallel agreements outside the code-share agreement itself***
  
- Passenger handling and airport procedures
- Technical, operational, safety procedures
- Liability, indemnification and insurance



## Other important agreements that may apply

- Industry-wide agreements:
  - *Multilateral Interline Traffic Agreement (MITA)*
  - *Fare Construction Rules*
  - *Multilateral Prorate Agreement (MPA)*
  - *Financial settlement*
  
- Bilateral agreements:
  - *Special Prorate Agreements (SPAs)*
  - *Booking Class Mapping (part of code-share or SPA)*
  - *Code-share commission (part of code-share or SPA)*
  - *Frequent Flyer Programme agreements*
  - *Membership of airline Alliance*
  
- Regulation
  - *Grant of anti-trust immunity, allowing carriers to discuss fares, jointly market and share revenues*



## Quantifying EU code share operations

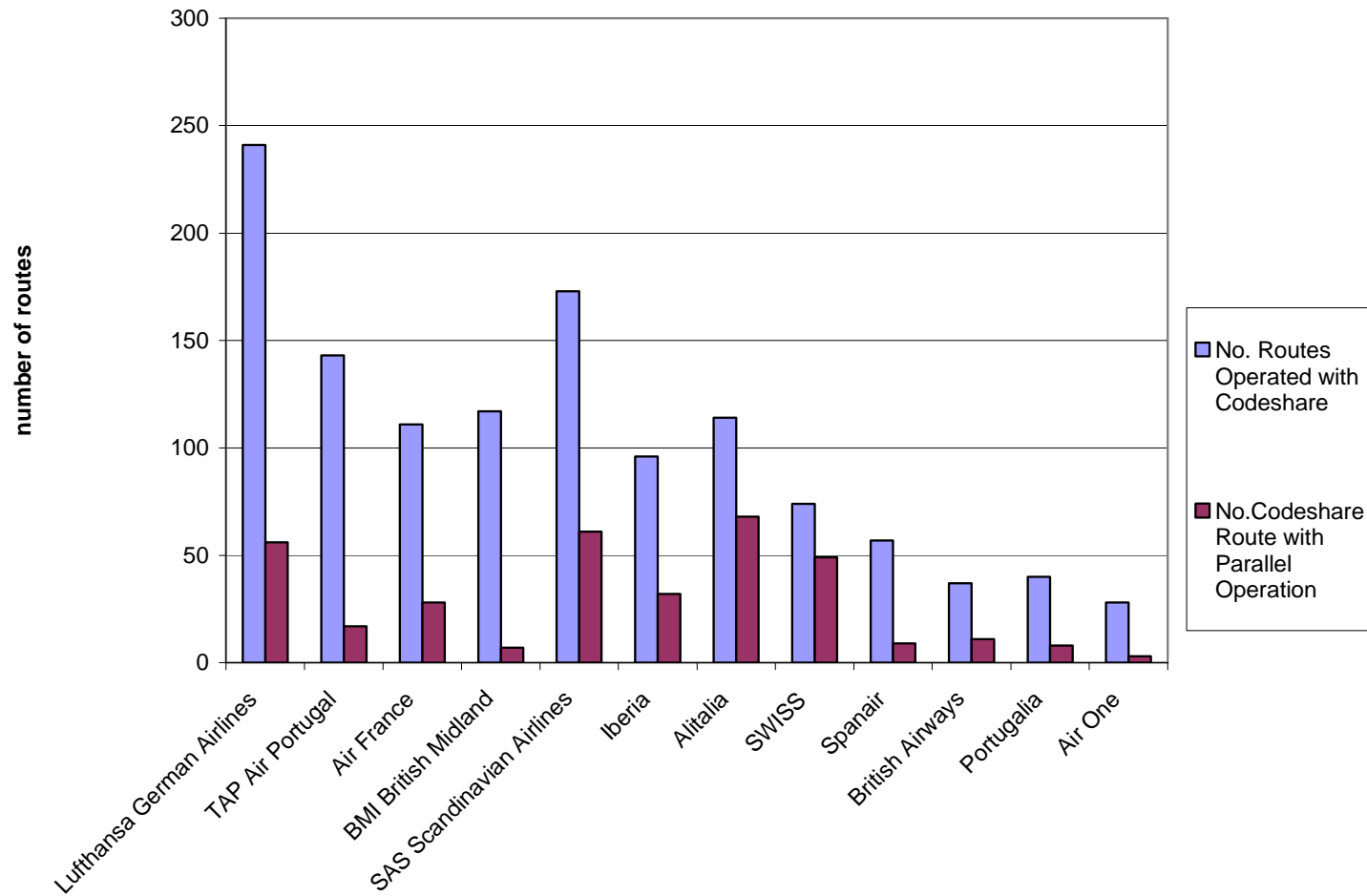
## Summary of code-share activity for EU-domiciled airlines

### Code-Share Routes, Operations and Seats Operated by EU-Domiciled Carriers

	<i>Absolute Values</i>					<i>Index</i>					<i>CAGR</i>
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006	2002 - 2006
<b>Routes</b>											
Parallel	1,245	1,351	1,354	1,388	1,367	100	109	109	111	110	2.4%
Non-Parallel	2,556	2,497	2,929	2,921	2,987	100	98	115	114	117	4.0%
<b>Total</b>	<b>3,801</b>	<b>3,848</b>	<b>4,283</b>	<b>4,309</b>	<b>4,354</b>	<b>100</b>	<b>101</b>	<b>113</b>	<b>113</b>	<b>115</b>	<b>3.5%</b>
<b>Operations ('000)</b>											
Parallel	615	771	740	797	860	100	125	120	130	140	8.8%
Non-Parallel	1,112	1,133	1,137	1,157	1,245	100	102	102	104	112	2.9%
<b>Total</b>	<b>1,726</b>	<b>1,904</b>	<b>1,877</b>	<b>1,953</b>	<b>2,105</b>	<b>100</b>	<b>110</b>	<b>109</b>	<b>113</b>	<b>122</b>	<b>5.1%</b>
<b>Seats (m)</b>											
Parallel	70	86	85	94	103	100	124	123	135	148	10.3%
Non-Parallel	145	149	155	161	170	100	102	107	111	117	4.0%
<b>Total</b>	<b>215</b>	<b>235</b>	<b>241</b>	<b>256</b>	<b>273</b>	<b>100</b>	<b>109</b>	<b>112</b>	<b>119</b>	<b>127</b>	<b>6.2%</b>

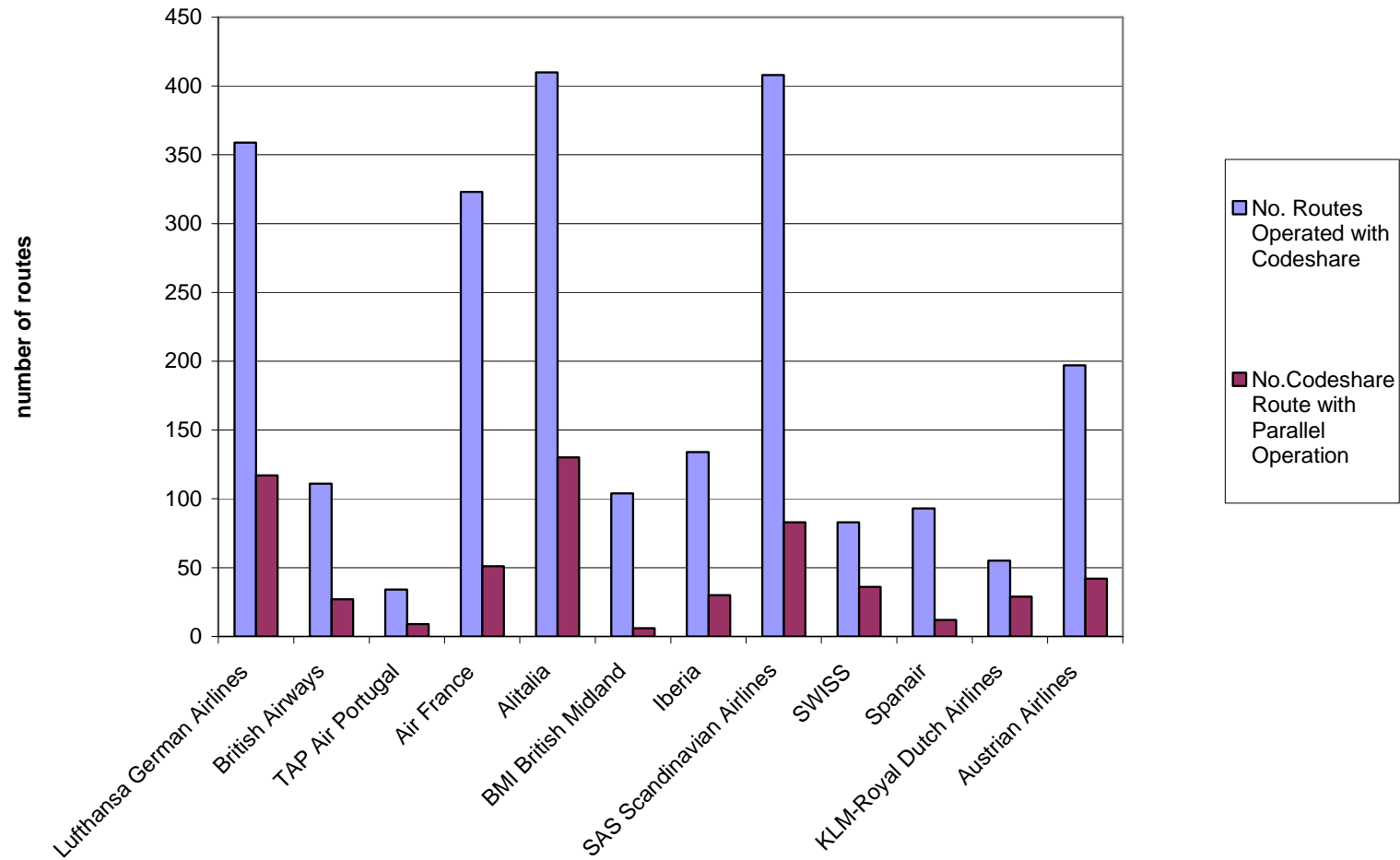
# Code share routes operated by EU airlines

Codeshare routes operated by EU airliners



# Code share routes marketed by EU airlines

Codeshare routes marketed by EU airliners



Comparisons of fares and capacity -  
parallel code-share vs. parallel non-code-share routes



## Routes compared

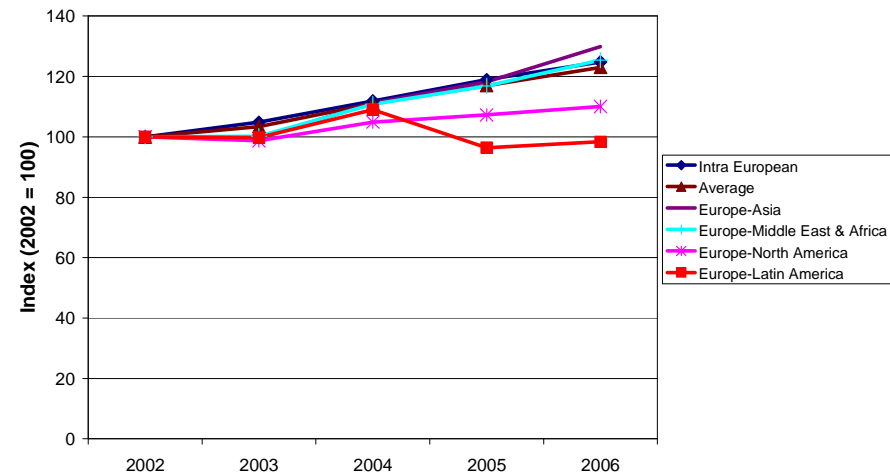
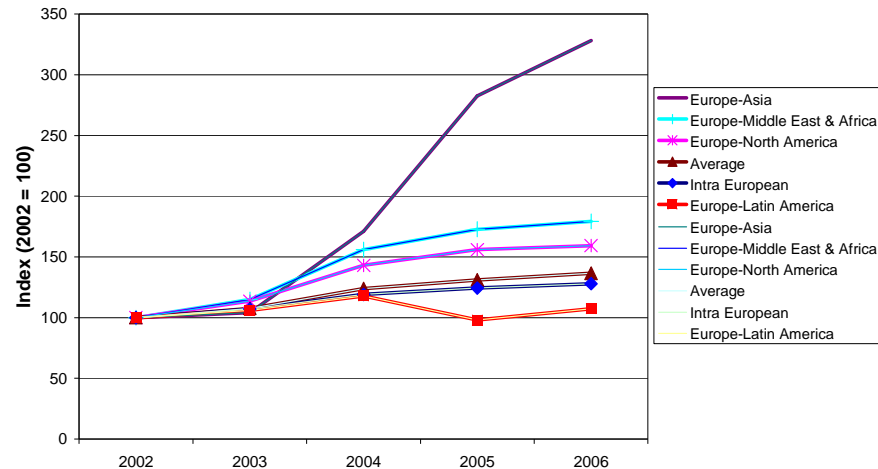
Route type	Code-share route	Comparator non code-share route
Long haul	Madrid-Santiago de Chile	Madrid-Buenos Aires
	Paris-Mexico	Madrid-Bogota
	Frankfurt-Toronto	Paris-Toronto
	Madrid-Miami	Dublin-New York
	Frankfurt-Cape Town	Paris-Johannesburg
	Paris-Beirut	Paris-Tel Aviv
	Amsterdam-Kuala Lumpur	Amsterdam-Bangkok
	Frankfurt-Singapore	Paris-Singapore
	Short haul	London-Helsinki
Paris-Madrid		London-Milan
Amsterdam-Prague		Amsterdam-Warsaw
Brussels-Zurich		Brussels-Vienna

## Comparison of trend in seats provided on comparator routes

Codeshares			Non-Codehares		
	No of Operating Carriers in 2006	CAGR (2002 - 2006)	CAGR (2002 - 2006)	No of Operating Carriers in 2006	
Madrid-Santiago	3	13.4%	12.4%	3	Madrid-Buenos Aires
Paris-Mexico	2	11.1%	18.3%	4	Madrid-Bogota
Frankfurt-Toronto	3	1.0%	5.9%	3	Paris-Toronto
Madrid-Miami	3	-12.2%	22.8%	3	Dublin-New York
Frankfurt-Cape Town	2	4.3%	6.2%	2	Paris-Johannesburg
Paris-Beirut	2	2.1%	8.3%	2	Paris-Tel Aviv
Amsterdam-Kuala Lumpur	2	7.9%	-0.2%	3	Amsterdam-Bangkok
Frankfurt-Singapore	3	-0.6%	-1.8%	2	Paris-Singapore
London-Helsinki	3	4.6%	1.3%	4	London-Stockholm
Paris-Madrid	5	2.8%	7.2%	4	London-Milan
Amsterdam-Prague	4	3.3%	4.2%	2	Amsterdam-Warsaw
Brussels-Zurich	1	-4.5%	0.7%	3	Brussels-Vienna

- Capacity grew faster on non-code-share routes in 8 out of 12 comparator pairs
- Not supportive of code-shares being beneficial to the consumer

## Wider comparison of capacity growth



Capacity trend on all routes where NEW code-share between 2003 and 2006

Capacity trend on other routes (either existing code-share in 2003, or no code share by 2006)

- Faster growth where code-shares introduced (with the exception of intra-Europe routes)
- Indicative of benefits to consumer

## Fares Comparisons - Long haul routes

### Time-sensitive fare per km comparison (average of business and economy)

Codeshare		Non-codeshare	
Average fare per km		Average fare per km	
Madrid-Santiago	0.39	0.29	Madrid-Buenos Aires
Paris-Mexico	0.44	0.31	Madrid-Bogota
Frankfurt-Toronto	0.47	0.59	Paris-Toronto
Madrid-Miami	0.41	0.36	Dublin-New York
Frankfurt-Cape Town	0.37	0.49	Paris-Johannesburg
Paris-Beirut	0.58	0.33	Paris-Tel Aviv
Amsterdam-Kuala Lumpu	0.28	0.19	Amsterdam-Bangkok
Frankfurt-Singapore	0.31	0.38	Paris-Singapore

### Non-time-sensitive fare per km comparison (advance purchase fares)

Codeshare		Non-codeshare	
Average fare per km		Average fare per km	
Madrid-Santiago	0.15	0.12	Madrid-Buenos Aires
Paris-Mexico	0.13	0.17	Madrid-Bogota
Frankfurt-Toronto	0.16	0.22	Paris-Toronto
Madrid-Miami	0.18	0.12	Dublin-New York
Frankfurt-Cape Town	0.09	0.09	Paris-Johannesburg
Paris-Beirut	0.15	0.12	Paris-Tel Aviv
Amsterdam-Kuala Lumpu	0.10	0.10	Amsterdam-Bangkok
Frankfurt-Singapore	0.10	0.11	Paris-Singapore

- Time-sensitive fares about 10% higher on code-share routes
- Non-time-sensitive fares similar

## Fares Comparisons - Intra-European routes

### Time-sensitive fare per km comparison (average of business and economy)

Codeshares		Non-Codeshares	
	Average fare per km		Average fare per km
London-Helsinki	0.25	0.25	London-Stockholm
Paris-Madrid	0.29	0.10	London-Milan
Amsterdam-Prague	0.37	0.27	Amsterdam-Warsaw
Brussels-Zurich	0.72	0.42	Brussels-Vienna

### Non-time-sensitive fare per km comparison (advance purchase fares)

Codeshares		Non-Codeshares	
	Average fare per km		Average fare per km
London-Helsinki	0.17	0.08	London-Stockholm
Paris-Madrid	0.10	0.07	London-Milan
Amsterdam-Prague	0.19	0.15	Amsterdam-Warsaw
Brussels-Zurich	0.39	0.23	Brussels-Vienna

- Fares on code-share routes generally significantly higher than fares on the comparator route
- Extreme example is on Brussels-Zürich, a unilateral code-share
- Exception is London-Helsinki, a code-share without anti-trust immunity

## What the analysis tells us

- The quantitative analysis of comparator routes gives mixed messages -
  - *Capacity tended to grow faster on the non-code-share route*
  - *Fares tended to be higher on the code-share routes, especially within Europe*
  
- However...
  - *The amount of data is limited and the comparisons are not perfect*
  - *Generally across the world (though not on intra-European routes), capacity has grown faster where new code-shares have been introduced*
  - *We did not look at “behind and beyond” code-shares, as it is very hard to find suitable comparators for these*
  
- We can conclude that there may well be cases where code-sharing is anti-competitive (or forms part of an anti-competitive arrangement), but each case needs to be looked at on its merits

# Competition Impact Assessment Framework

## What the Commission looks for in assessing competitive impact

■ Competition assessments are undertaken considering:

- *Market definition*
- *Barriers to entry*
- *Market shares*
- *Competitive dynamics*
- *Prices and profits*
- *Consumer benefits*
- *“Remedies” - mitigating the impact of the problem*





## Competition Impact of code share agreements - considerations

Geographical characteristics -

- *Unilateral, parallel, or behind & beyond*

■ Features of the agreement -

- *Coordination of schedules or capacity*
- *Cooperation on pricing, selling or marketing*
- *Revenue or profit sharing*
- *Discriminatory access to capacity (favouring code-share partners over other airlines)*

■ Features of related agreements, particularly -

- *Discriminatory access to through fares for code-share partners*
- *Discriminatory proration provisions (e.g. through an SPA)*
- *Block-space agreements*
- *Frequent flyer programme agreements*
- *Alliance membership*

## Anti-competitive risks (1)

### ■ Unilateral trunk codeshares



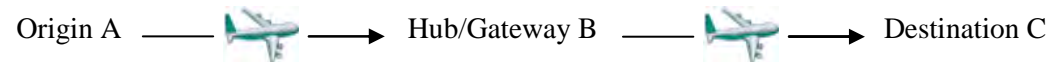
- *Low potential benefit to consumers, as no additional frequency or capacity (but may give access to preferred brand)*
- *Allows marketing carrier onto route at no cost - may shut out smaller operators (barrier to market entry)*

### ■ Parallel operation codeshares



- *May benefit consumers by increasing accessible frequency on the route*
- *May create improved connections to behind points*
- *Where market share is high, may create barrier to entry, reducing competition*

## Anti-competitive risks (2)



### ■ “Behind and beyond” code shares:

- *Often provide increased journey opportunities to consumers*
- *Competitive “through fares” for the full journey are generally available*
- *Alternative connecting journeys with other airlines, possibly over other hubs, may be available (so high market share may be less of an issue)*
- *However, there may be discriminatory provisions against other airlines with respect to access to through fares or prorated agreements, reducing their ability to compete*

| Thank you