



The impact of the expansion of Dubai International Airport and Emirates on international airline competition.

Dr. Christoph Brützel

The impact of Emirates' growth strategy on the Europe-Asia market

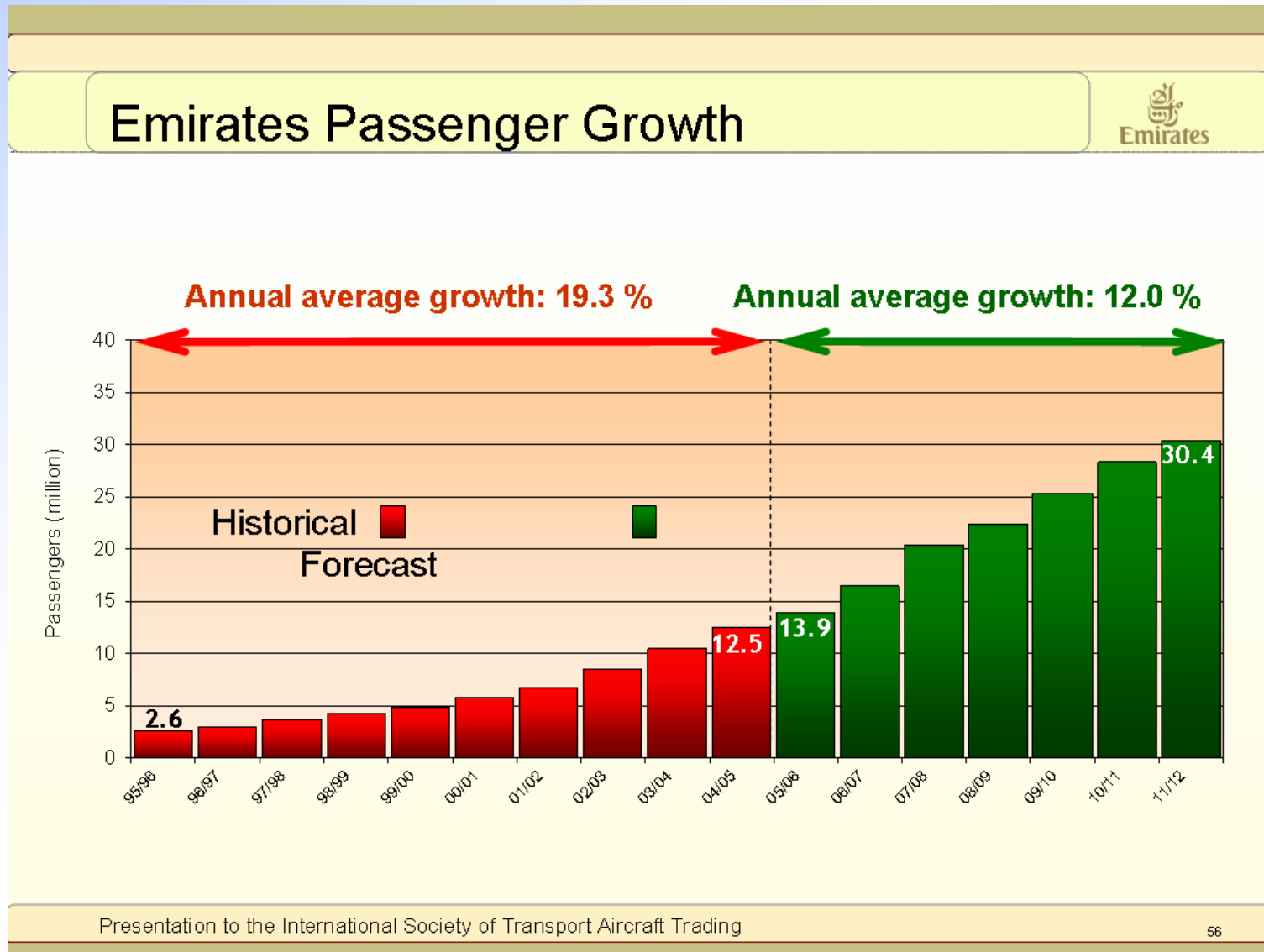
– the view from Europe –

Amsterdam Bilderberg Garden Hotel
April 7, 2006

Summary

- Emirates has set ambitious growths targets
- EMIRATES growth is based on its favorite unit cost
- How does growth work in airline passenger markets?
- EMIRATES' fleet and growth strategy focuses on large aircraft
- To place capacities, EMIRATES will have to follow aggressive pricing strategies
- EMIRATES regional growths targets focus on Europe, the Americas and Africa
- How will it hurt?
- Who will suffer most?

Emirates is planning for an ambitious growth track.



EMIRATES proudly presents Dubai's unstoppable growth ...

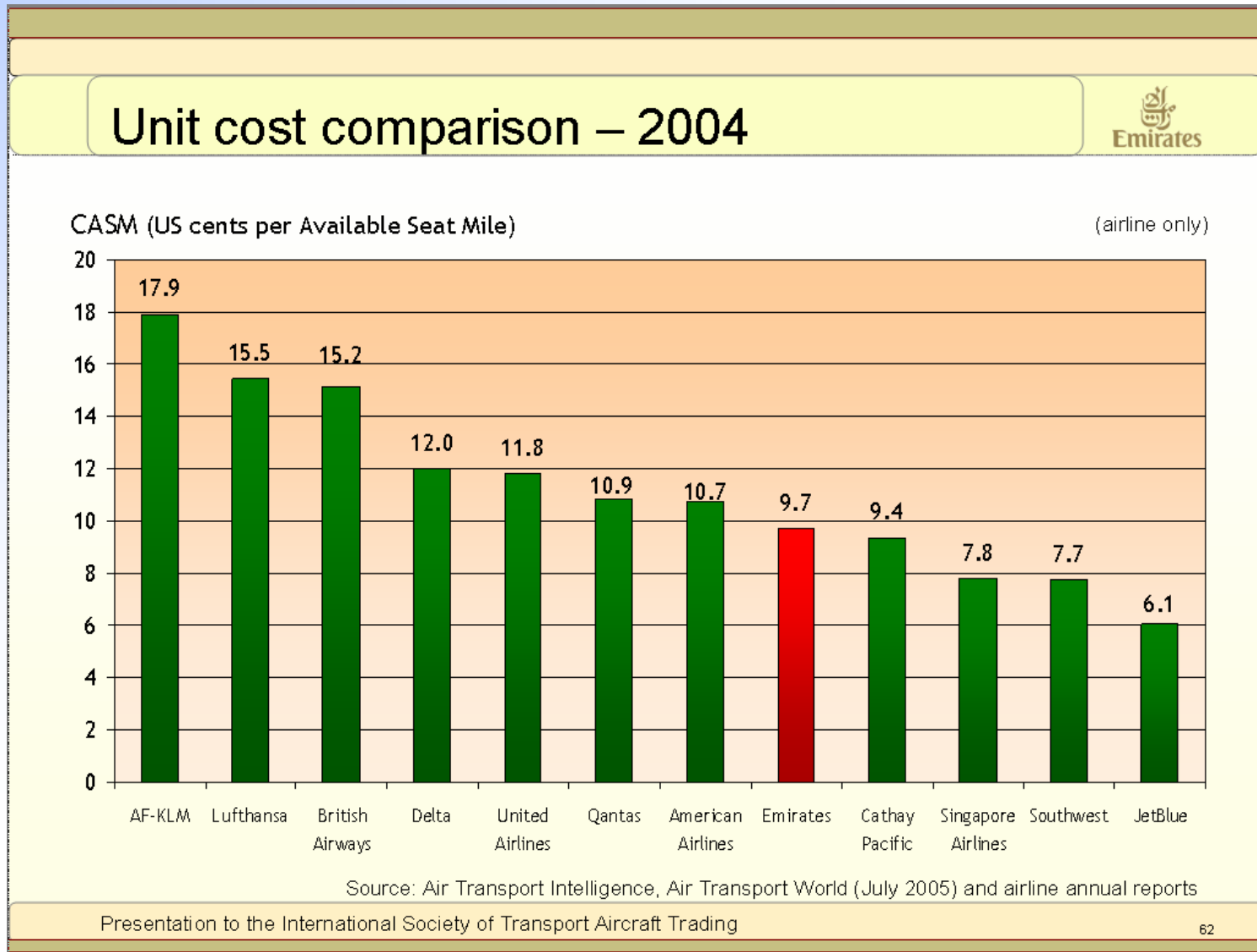
Unstoppable growth of Dubai



| | 2004 | 2010 |
|---------------------------------|--------------|--------------|
| Home population | 1.3 million | 4.0 million |
| Hotel guests | 5.4 million | 15 million |
| Hotel beds | 38,300 | 117,300 |
| Dubai Airport passenger traffic | 21.7 million | 60 million |
| Emirates passengers | 12.5 million | 28.4 million |

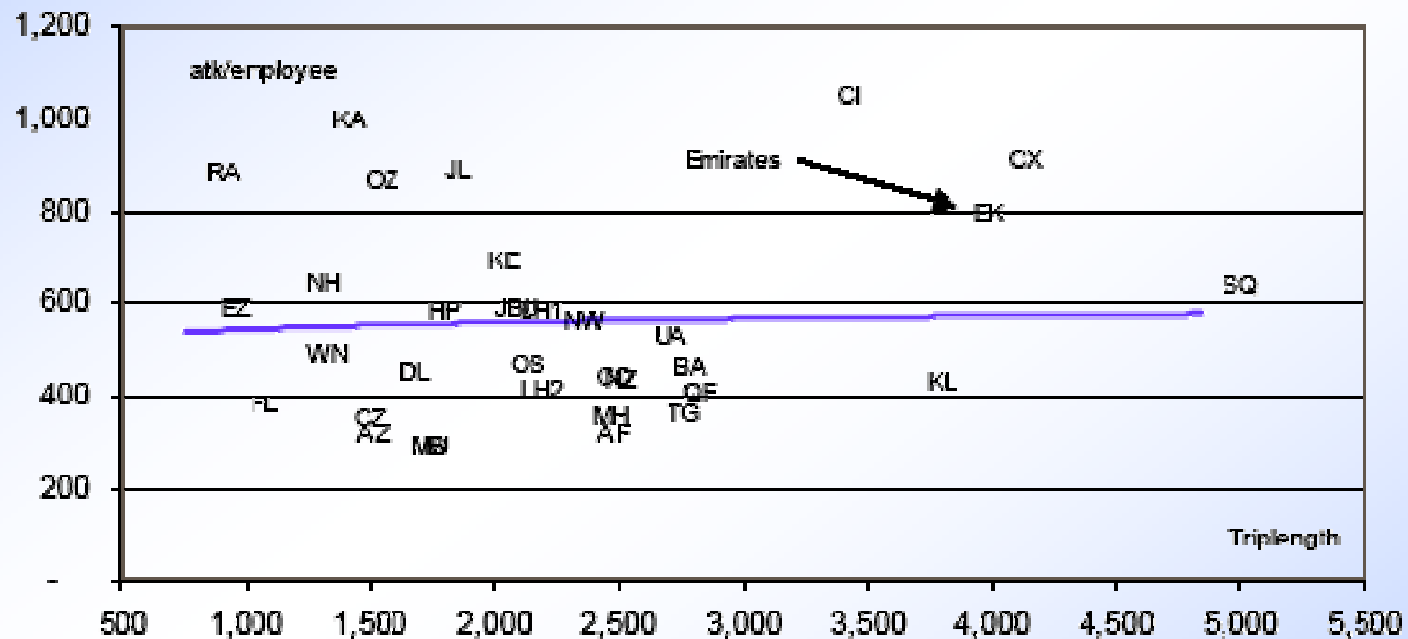
Source: Department of Tourism and Commerce Marketing (DTCM), Dubai Civil Aviation (DCA)

... and its unit cost position ...



... based on high labour productivity ...

Chart 14: Overall labour productivity, FY 03*

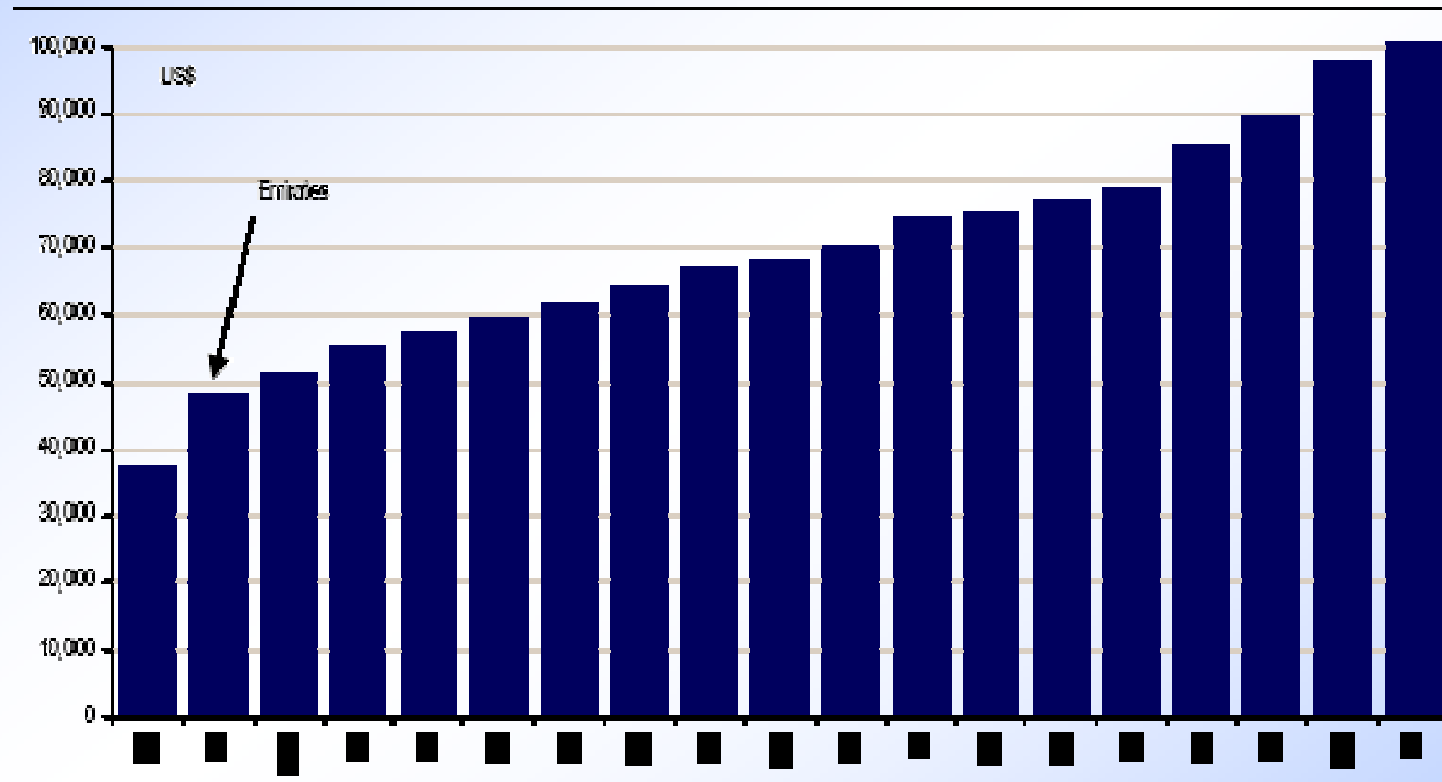


Source: Company data, UBS estimates * Emirates to year-end March 2004

Source:UBS Investment Research: What does Emirates mean for Europe?, Jan. 2005

... low labor unit cost ...

Chart 15: Average cost per employee, FY 03*



Source: Company data, UBS estimates. * Emirates to year-end March 2004

Source: UBS Investment Research: What does Emirates mean for Europe?, Jan. 2005

... and low airport charges at its hub.

Dubai Airport Charges scheme

Landing Charges

Basis

Maximum permissible take-off weights as shown in the certificate of airworthiness.

Rates

Aircraft weighing

Not exceeding 4,500 KG

Exceeding 4,500 KG but not exceeding 45,000 KG

Exceeding 45,000 KG

Rates per landing

AED 10.00 per 1000 KG or part thereof

AED 11.60 per 1000 KG or part thereof

AED 12.70 per 1000 KG or part thereof

Rules

The payment of the landing charge entitles the aircraft to:

1. the use of all maneuvering areas on the airport,
2. all navigational approach and lighting aids,
3. all emergency services and all briefing and meteorological services,
4. the services of the aerodrome personnel, if available, for manual assistance in guiding, housing or parking the aircraft,
5. the provision of local air traffic services

Parking Charges

Basis

Fees will be charged according to the length of the aircraft multiplied by the span. For the first 500 square feet AED 2.75 For each additional 100 square feet or part thereof 0.55 Fils.

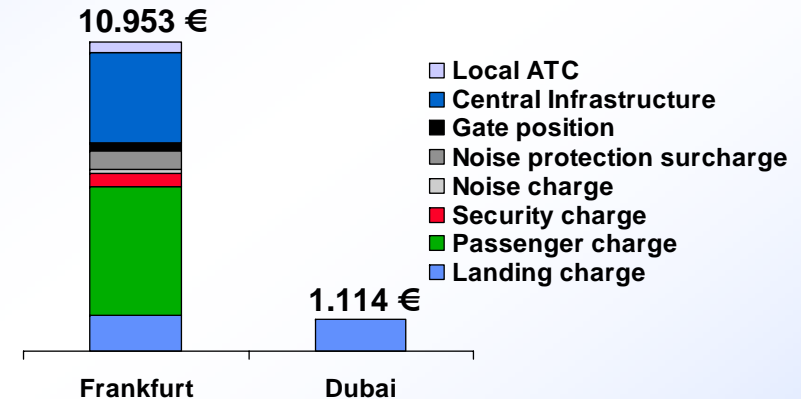
Rules

No Parking fee will be charged for the first six hours after landing. After the six hours and for each period of 24 hours, or part thereof, fees will be charged as above.

Other Charges

- Passenger service charges: Nil.
- Security charges: None specified.
- Noise related charges: None specified.

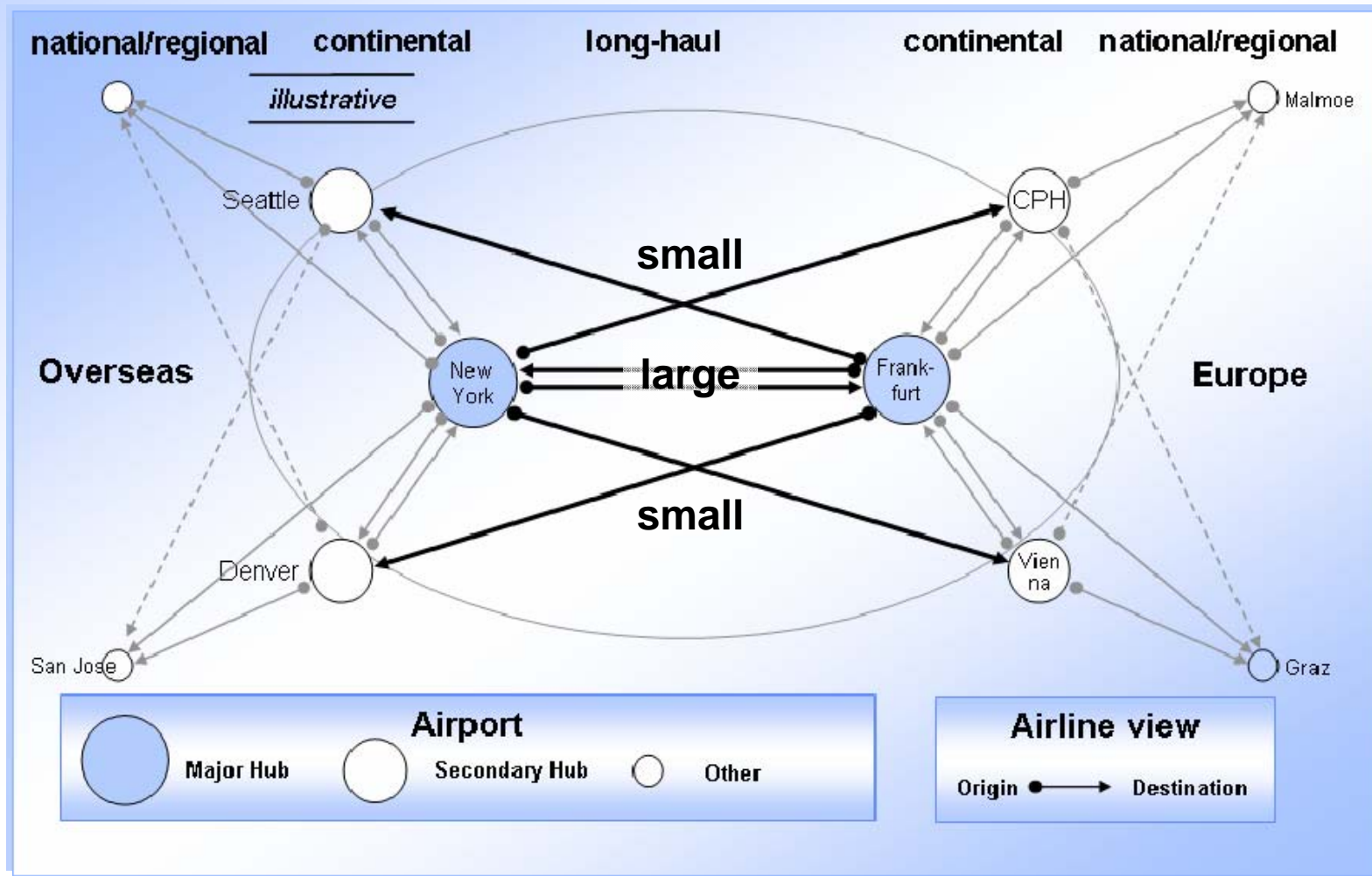
Example: Turnaround Airport charges B747-400



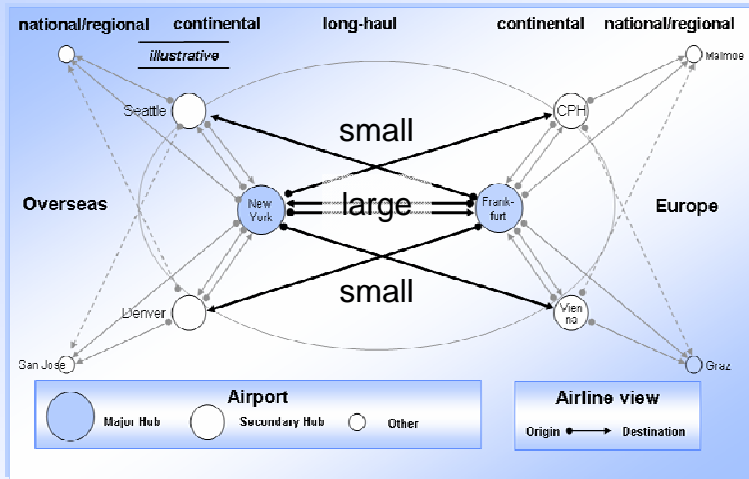
| | |
|------------|----------|
| AC type | B747-400 |
| MTOW | 396 to. |
| Passengers | 320 |
| Cargo (to) | 10 |

| Charge item | Frankfurt | Dubai |
|----------------------------|-----------------|----------------|
| Landing charge | 1.261 € | 1.114 € |
| Passenger charge | 4.560 € | - € |
| Security charge | 476 € | - € |
| Noise charge | 150 € | - € |
| Noise protection surcharge | 648 € | - € |
| Gate position | 275 € | - € |
| Central Infrastructure | 3.222 € | - € |
| Local ATC | 362 € | - € |
| Total | 10.953 € | 1.114 € |
| Per Passenger | 34,23 € | 3,48 € |

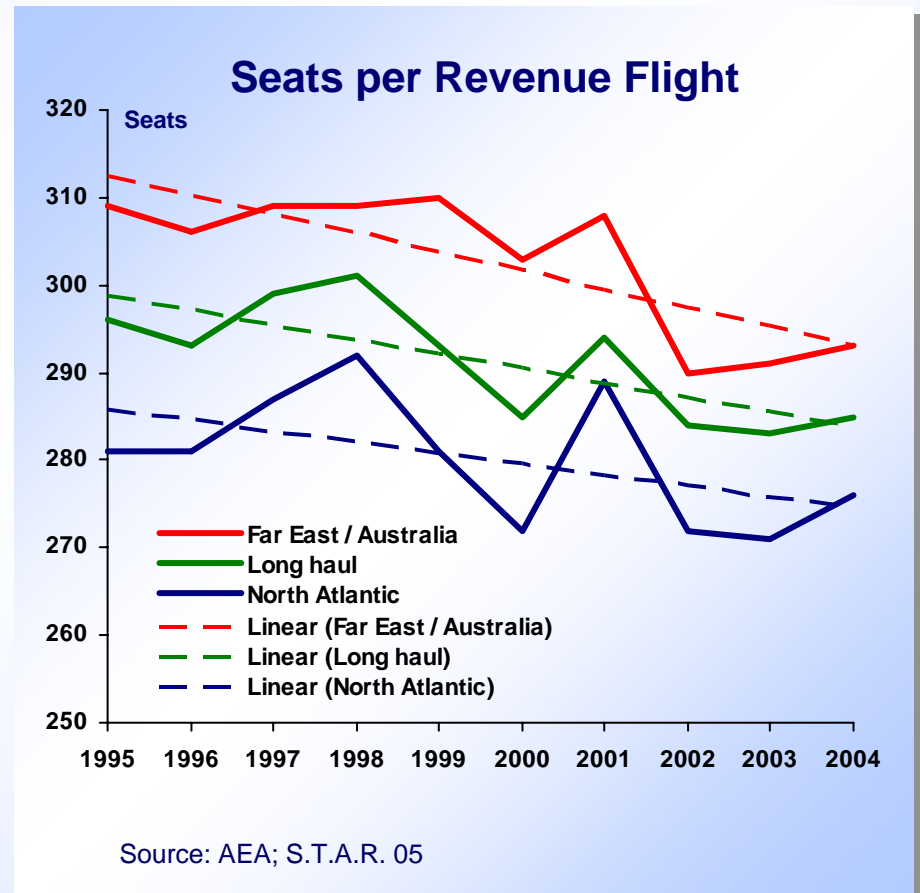
How does growths work in the global markets?



How does growths work in the global markets?



- ETOPS reduced economies of size in long haul operation
- B 787 and A 350 will further do so
- Customers prefer non stop
- Cost per O&D passenger of non stop operation is lower than that of hub & spoke operation
- Growing demand allows for increasing non stop services between major hubs and secondary hubs



EMIRATES growth strategy focuses on large aircraft.

Emirates Passenger Fleet development

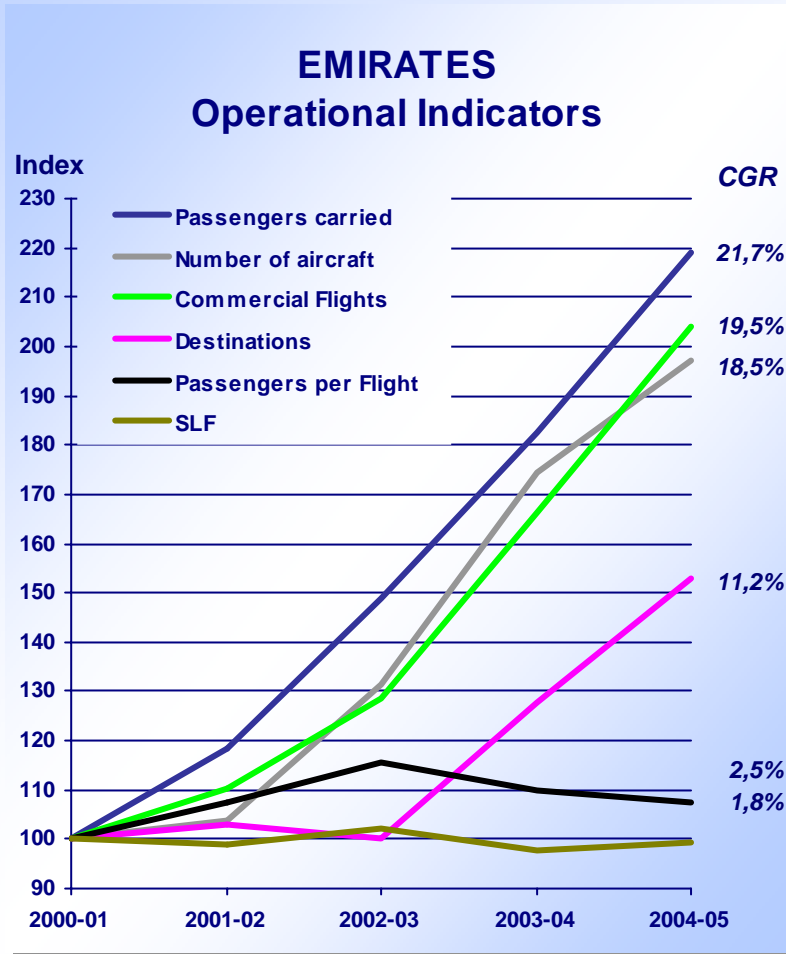
| Aircraft | 2004 | 2010 | Seats / AC | Seats 2004 | Share | Seats 2010 | Share |
|--------------|-----------|------------|--------------------------------|---------------|--------------|---------------|-------------|
| A330-200 | 29 | 29 | 237 | 6.873 | 38,6% | 6.873 | 11,5% |
| A340-500 | 4 | 10 | 258 | 1.032 | 5,8% | 2.580 | 4,3% |
| A340-300 | 6 | 8 | 267 | 1.602 | 9,0% | 2.136 | 3,6% |
| B777-200 | 9 | 9 | 303 | 2.727 | 15,3% | 2.727 | 4,6% |
| A340-600 | 0 | 10 | 370 | 0 | 0,0% | 3.700 | 6,2% |
| B777-300ER | 1 | 30 | 386 | 386 | 2,2% | 11.580 | 19,4% |
| B777-300 | 12 | 12 | 434 | 5.208 | 29,2% | 5.208 | 8,7% |
| A380-800 | 0 | 45 | 550 | 0 | 0,0% | 24.750 | 41,6% |
| Total | 61 | 153 | 2004: 292 2010: 389 | 17.828 | 100,% | 59.554 | 100% |

+ 33 %

+ 234 %

Major challenge will be to outperform own targets and to overcome market paradigms.

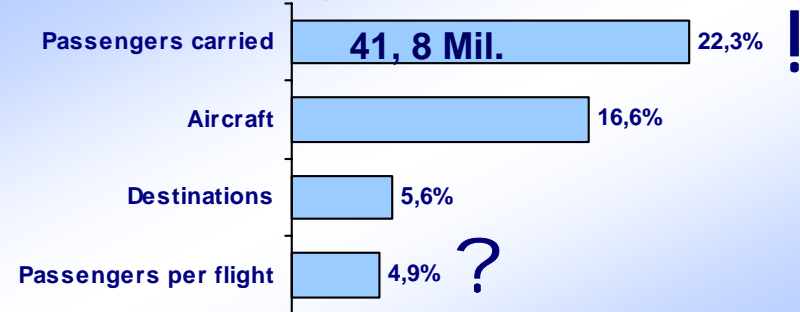
History



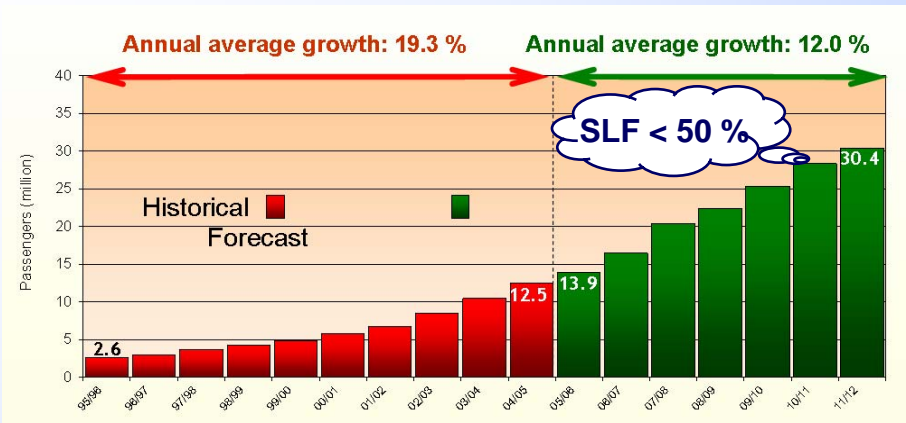
CGR: Compounded growth rate
Source: EMIRATES Annual reports

Implications of fleet growth

Compounded growth rates 2005 - 2010



Assumptions: Flights / AC and SLF remain constant



EMIRATES will have to and will fill incremental capacity at incremental yields

- **Placing capacities in the market will follow the »Frankfurt potato theorem«*)**
- **As F-/C-Class compartments of existing aircraft can well be expanded to serve additional high yield demand, additional A 380 seat capacity potential is economy class potential only.**
- **Economy class market is highly price sensitive**
- **Long range economy class capacity of network carriers is oversized anyway and offered at extremely discounted rates to fill seats.**



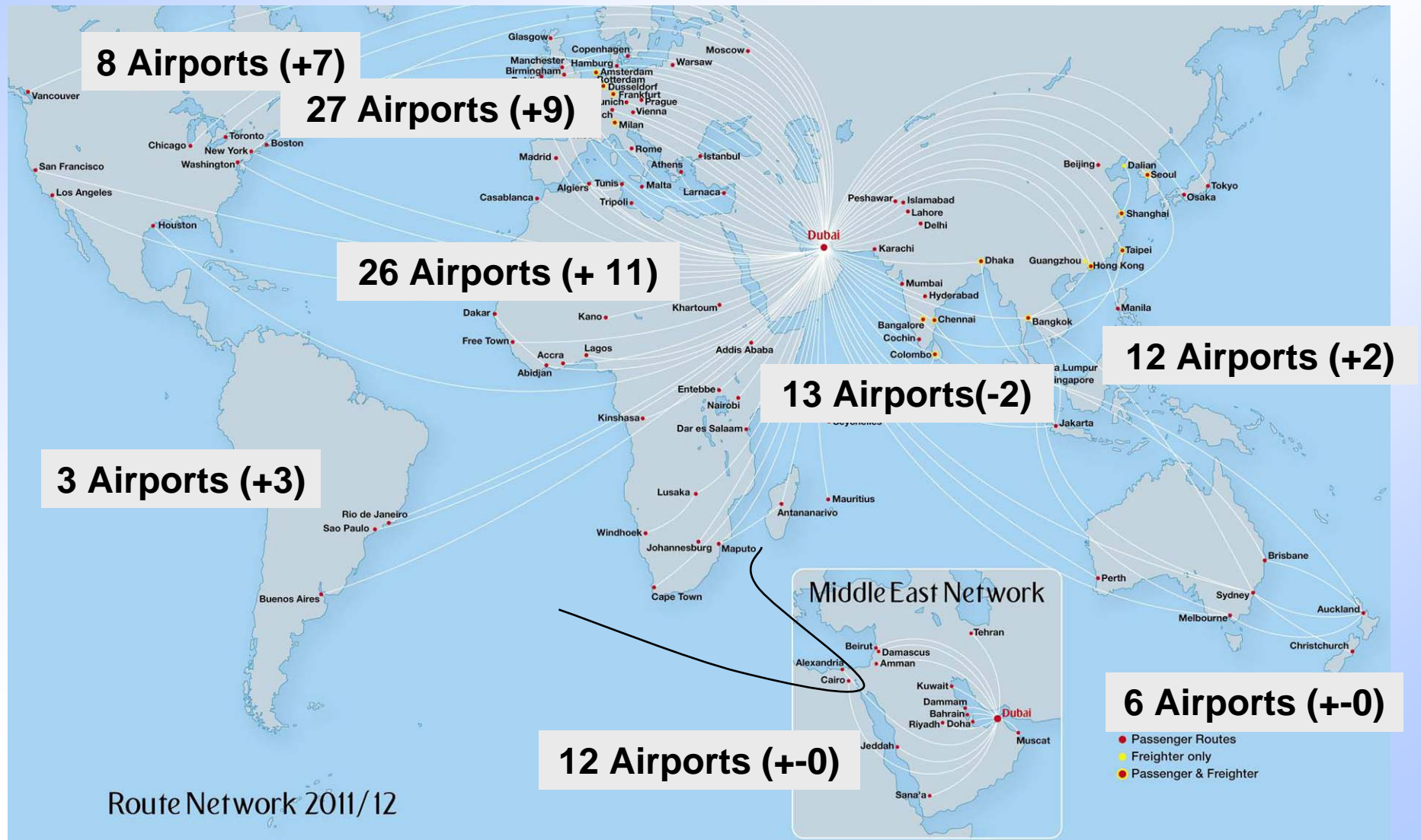
To fill capacities EMIRATES will have to follow a most aggressive pricing strategy.

*) Frankfurt potato theorem: Once potatoes are on the table, they are going to be eaten.

Emirates Route Map Today ...

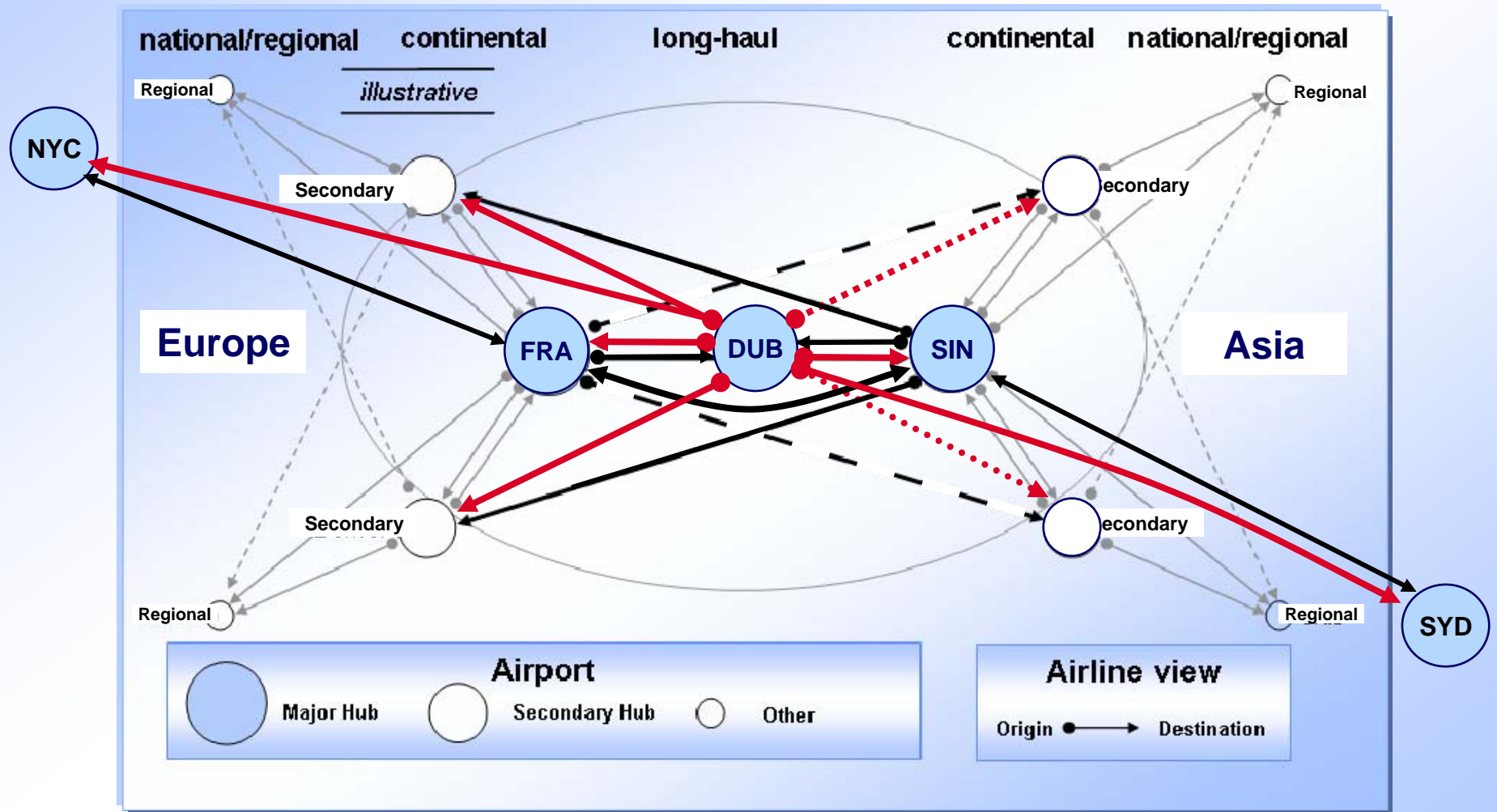


Emirates' network expansion targets are Europe, the Americas and Africa

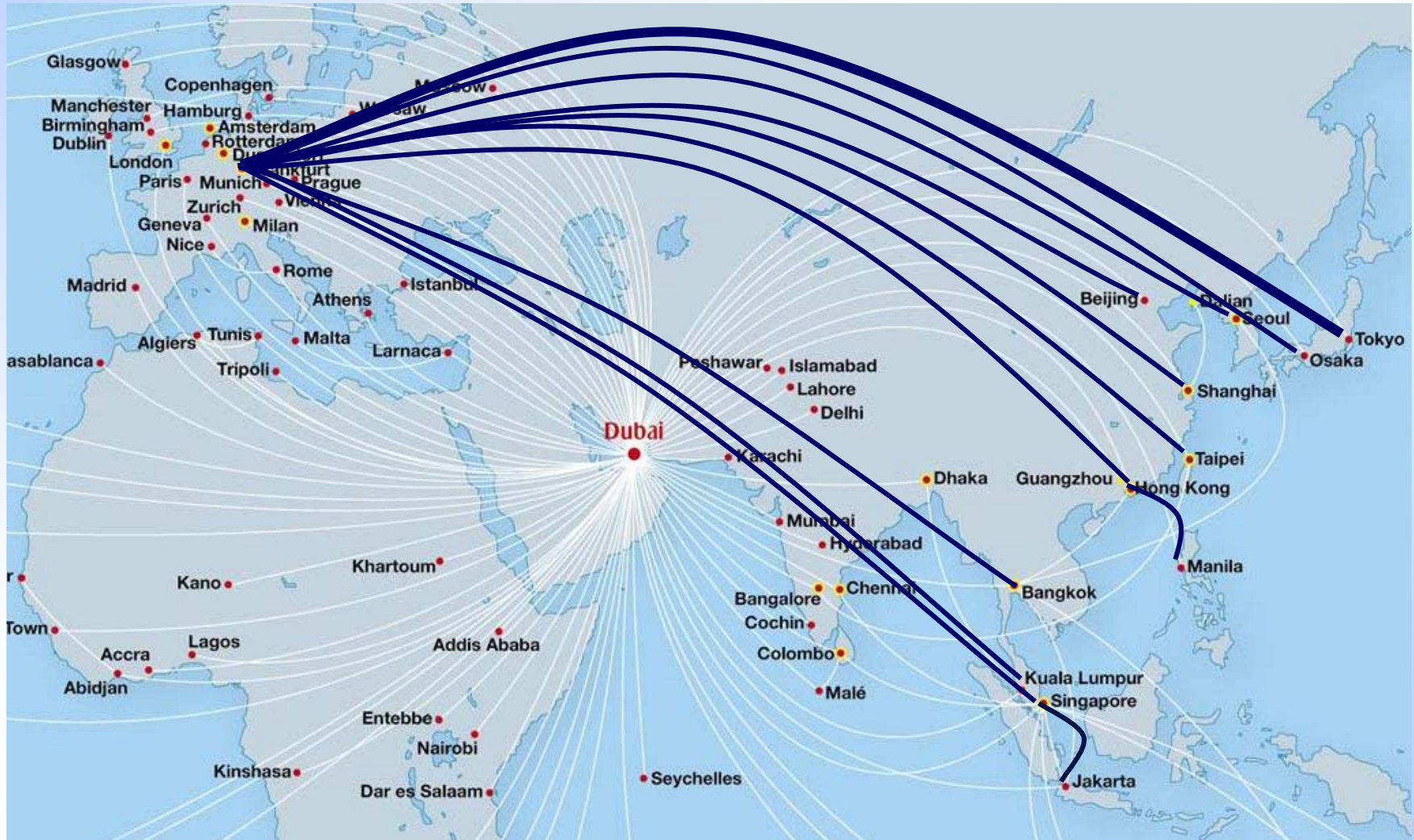


Route Network 2011/12

EMIRATES is in the middle of the game



EMIRATES connecting products can hardly match non stop services between European major hubs and Asia, but ...

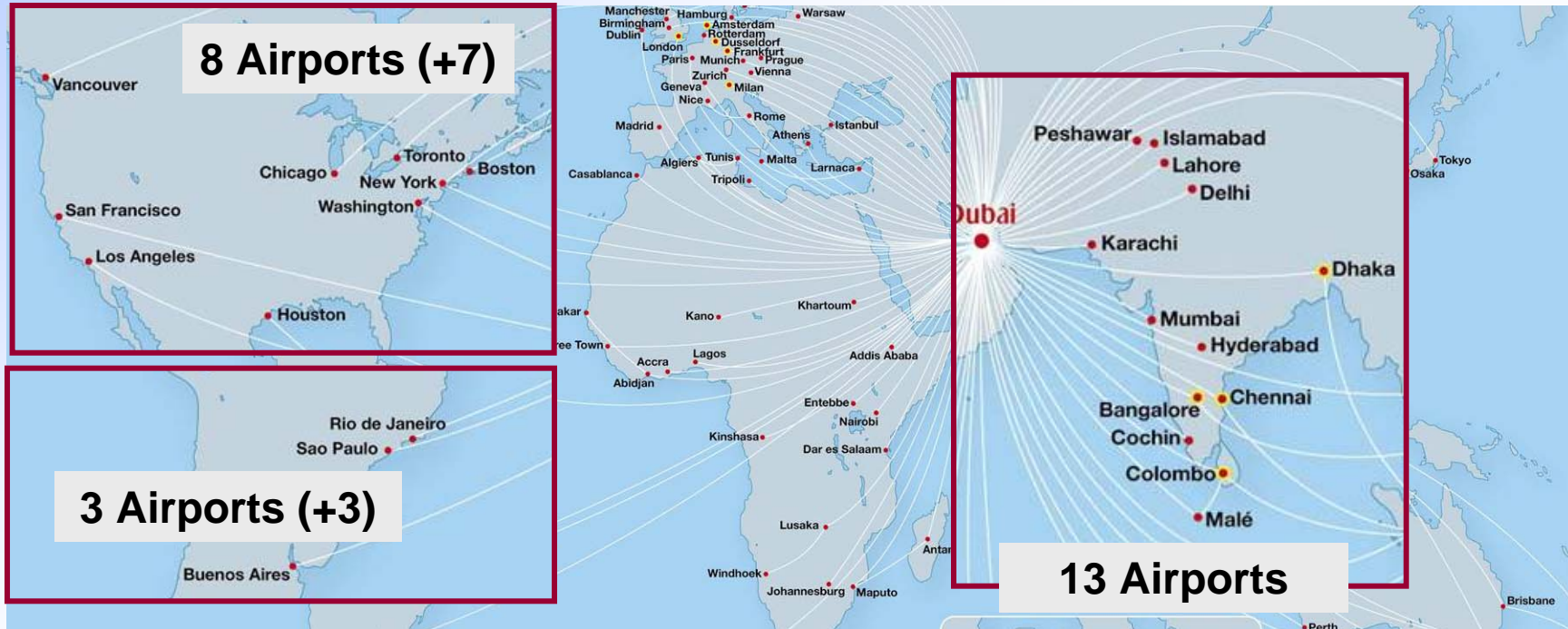


... Emirates expansion into secondary European hubs and regional airports with strong catchment areas will hurt.



- Secondary regional airports warmly welcome EMIRATES as an attractive long haul carrier in their portfolio non regarding that most passengers will then only change the place of transfer.
- European Global Network Carriers (AF/KL, BA, LH) operating A 380 / B 747 will be challenged by low yield offers in their hubs and loose high value feed from secondary airports.
- Secondary Network Carriers (i.e, AZ, IB, OS, SK) will not be cost competitive. Their anyway hardly profitable operations into Asia will be ruined.

Attracting high value passenger flows between US and India EMIRATES will additionally cannibalize traditional European hub carriers' grounds.



- O&Ds between the Americas and India provided – so far – most valuable traffic for European hub carriers.
- EMIRATES will challenge them and European hubs with immediate competition.

EMIRATES' one-stop-connections between Europe and Australia will be a most attractive alternative to the market.



Growth strategies of both, airlines and airport are driven by the vision to create local value added rather than by a short term ROI appraisal.



Facts

- Growth targets extremely aggressive
- Required increase of passengers per flight question market paradigms
- A 380 to be operated from / to major hubs, mostly in direct competition to non stops
- Feeder cost at network origin and destination hubs

Jebel Ali International Airport City

Planning

- 10 times the size of Dubai Airport
- 140 square kilometres
- 6 concourses and 2 terminals
- 6 parallel runways
- 120 million passengers p.a.
- 12 million tonnes of cargo p.a.
- Estimated investment of US\$8.2b
- Encircled by an Airport City

Of the major hub carriers' networks, Lufthansa's and KLM's are the most exposed

Chart 20: British Airways long-haul seats by region, May 2005-August 2005

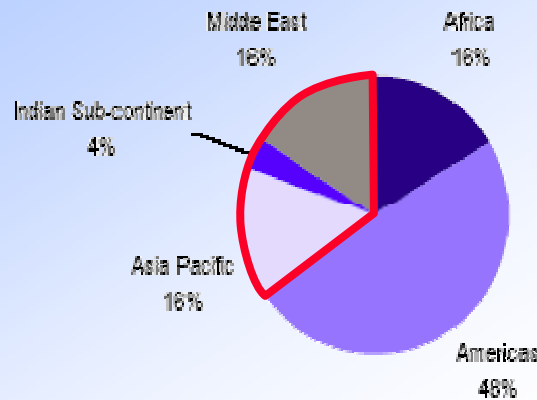


Chart 21: Lufthansa long-haul seats by region, summer 2005

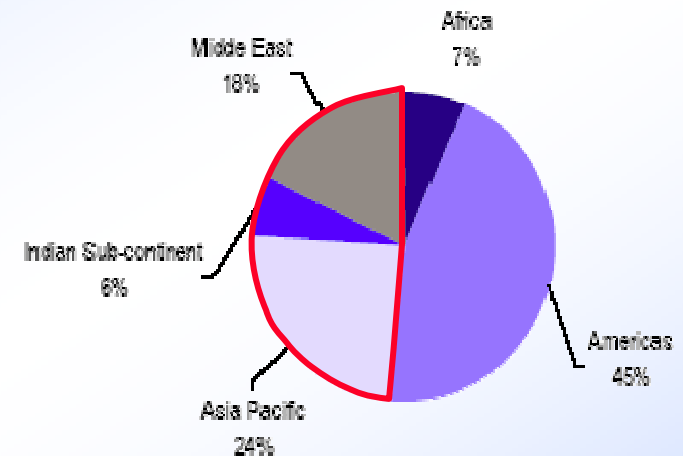


Chart 22: Air France long-haul seats by region, May-August 2005

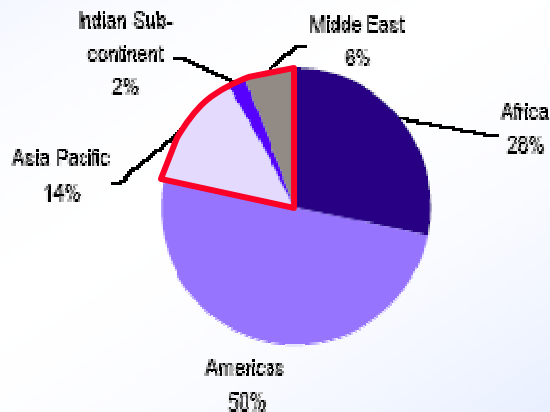
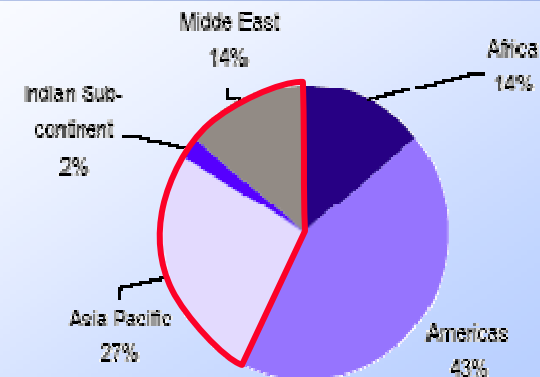


Chart 23: KLM long-haul seats by region, May-August 2005



In conclusion

- **Emirates growth targets are very ambitious – own fleet projections require even more passengers.**
- **Exploding capacities and large size of aircraft will ruin markets – EMIRATES will fill seats at lowest yields.**
- **Return on invest seems questionable – particularly at market cost standards**
- **Major European hub carriers will remain competitive in non-stop-markets to Asia, but suffer from EMIRATES cannibalizing their feeders from Europe and the Americas into India**
- **European regional airports with strong catchment areas will benefit from EMIRATES' pressure to gain critical mass beyond major hubs**
- **Secondary hub carriers will not be in the position to serve Asian markets profitably .**