

Lessons from the crazy world of the airline industry

Dr Andrew Sentance

Warwick Business School and Bank of England

**MBA Managerial Economics Module
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Outline

- Use of economics in business
- Understanding the airline industry
- British Airways: Future Size and Shape, 2001-2006
- Current airline industry issues

Use of economics in business

- Macroeconomic analysis
- Formulating business strategy
- Influencing regulators and government

Macroeconomic analysis

- Economic growth
 - Impact of cycle and medium-term trends
 - Forecasts
 - Implications for key market segments
- Demographics and socio-economic change
- Exchange rates and interest rates
- Oil and commodity prices

Formulating business strategy

- Frameworks for analysing business trends
 - Impact of key macro variables
 - Distinguishing cycle from structural trends
 - Understanding changing competitive environment and market structure
- Forecasts/scenarios for market growth and other business drivers
- Specialist analysis and input, if required

Influencing regulators/government

- Explaining economic frameworks used by authorities to senior management
- Building an objective economic case aligned with business strategy
- Quantifying costs and benefits
- Drawing authority from use of external or independent experts

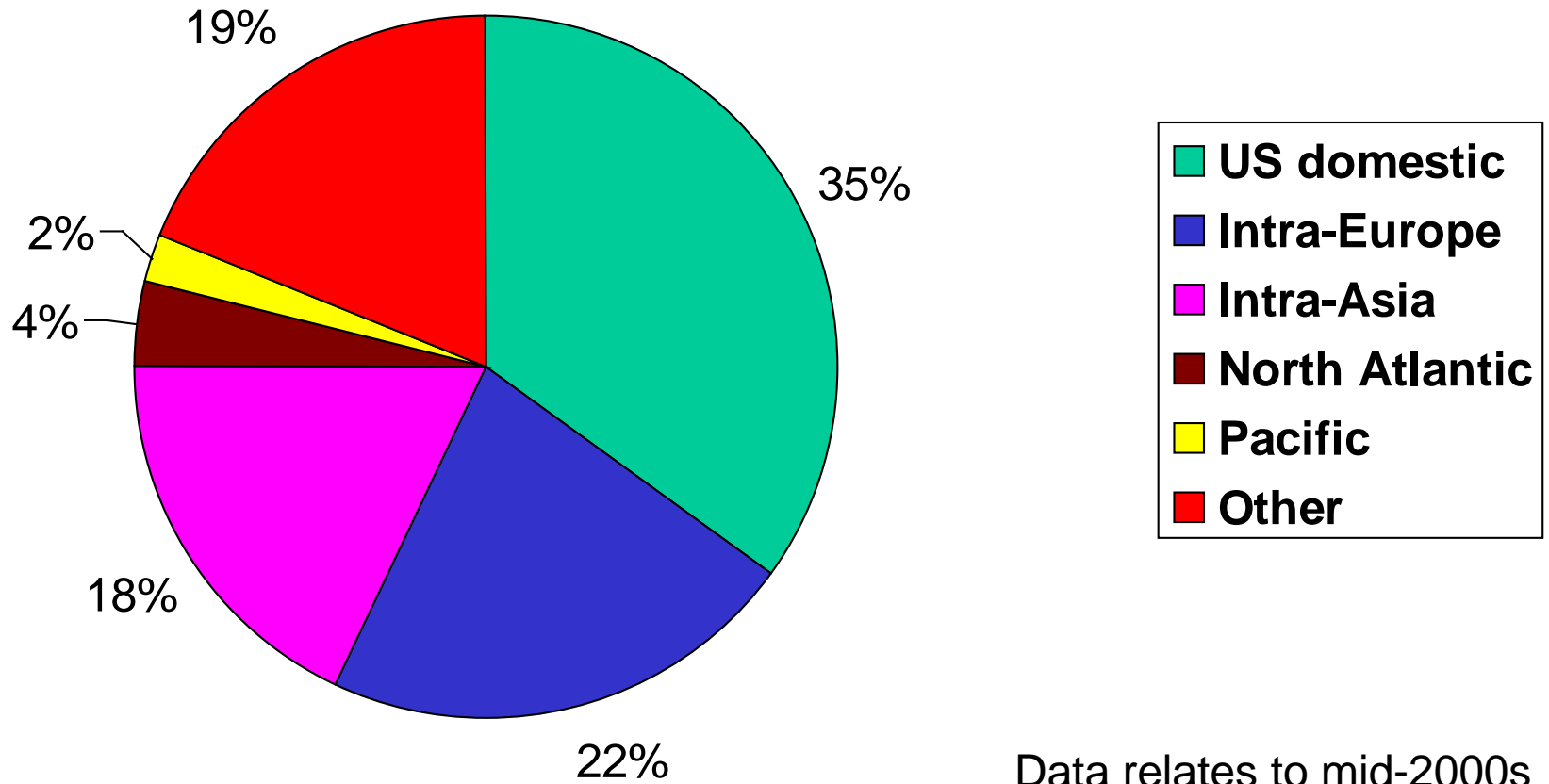
Role of economists in business

- Growing employment in 50s and 60s as business analysts and corporate advisers
- By 1970s – large economics departments in many corporates, headed by a Chief Economist, who is also a senior corporate adviser
- 1980s onwards:
 - Downsizing/restructuring + growth of finance and MBAs undermines internal economics function in many companies
 - Shift in focus from forecasting to business strategy and regulation
 - Growth of economic consultancy
 - Within corporates - smaller teams, mainly found in financial sector and in regulated businesses

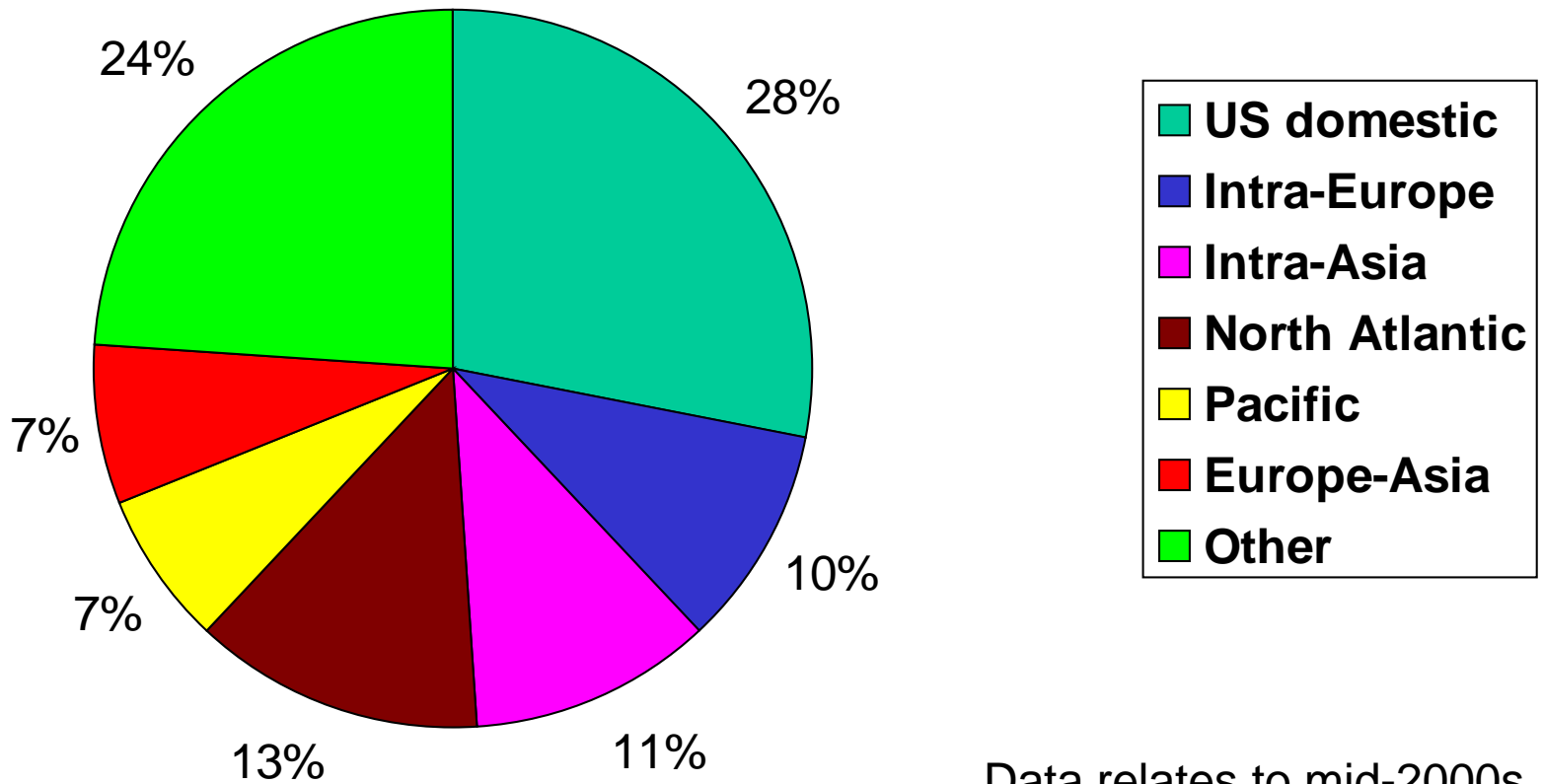
The global airline industry (1)

- Global revenue c.\$500bn (75% passenger; 11% cargo; 14% other)
- 2.2bn passenger trips each year
- 38m tonnes of freight – 2% of world trade by volume but up to 40% of value
- c.900 airlines (230 IATA members)
- 2.1m employees (5m inc airports and airspace)
- 22,000 aircraft worldwide, serving 1670 airports
- Average aircraft age of around 11 years

Global Airline Market – by passenger



Global Airline Market – by traffic

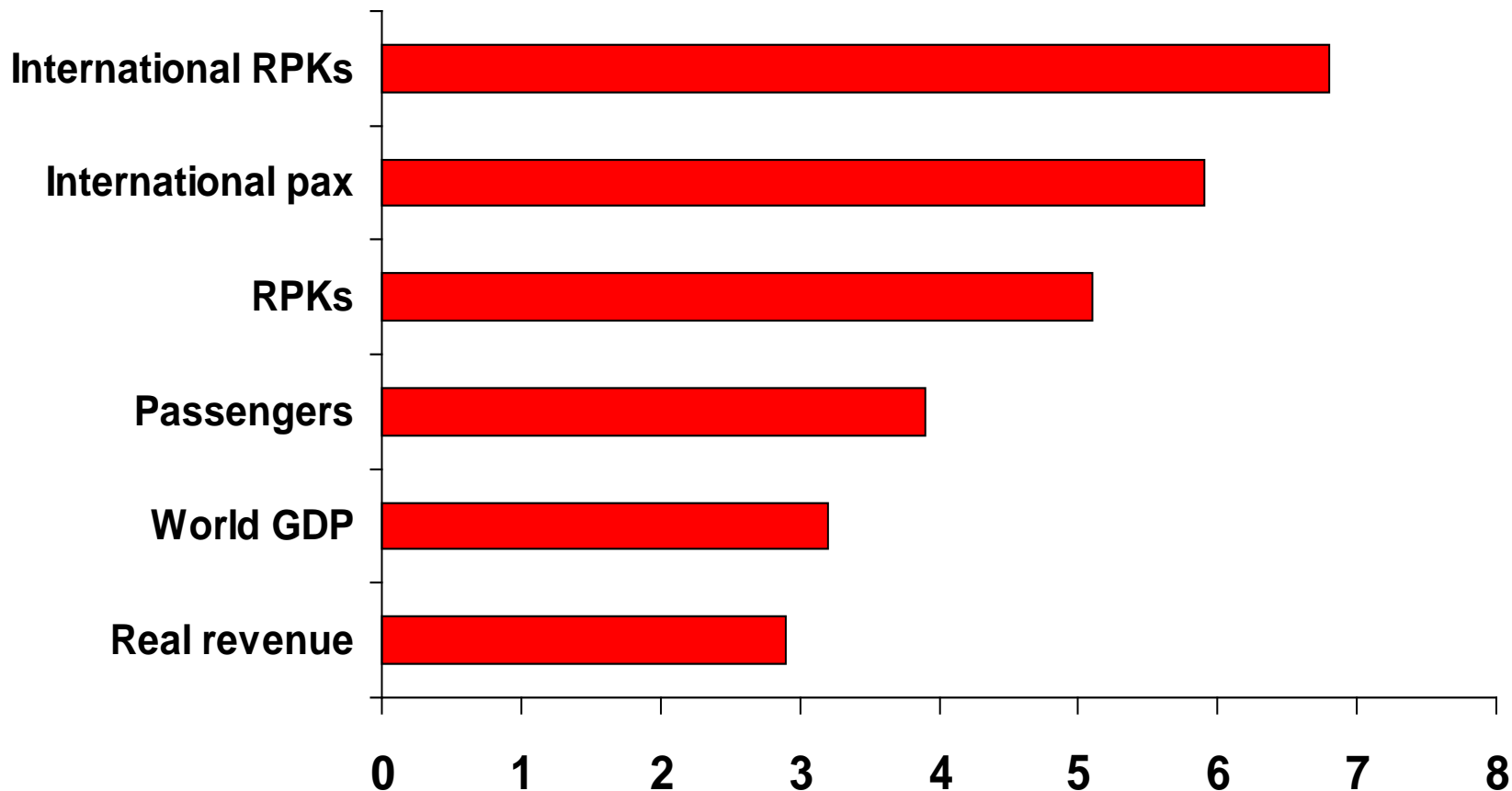


The global airline industry (2)

- High volume growth accompanied by falling prices
- Volatile demand and oil prices
- Network industry with high fixed costs
- Low margins and poor profitability
- Legacy of government regulation and intervention
- Dynamic and highly competitive markets, but significant barriers to consolidation
- Significant monopoly suppliers

Growth trends

% per annum growth rate, scheduled passengers, 1980-99

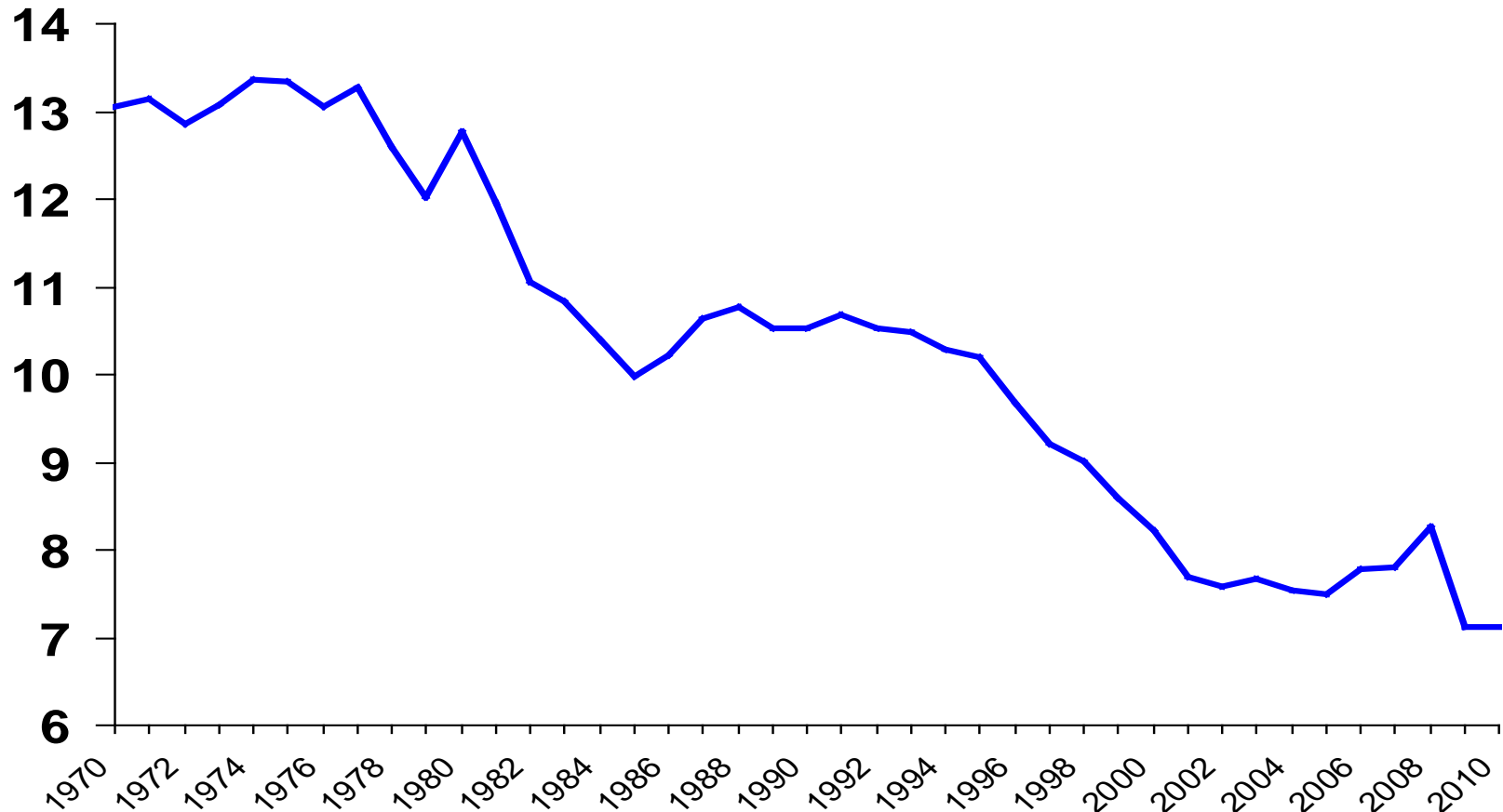


Source: ICAO/DRI

Real revenue is passenger revenue in dollars, deflated by US CPI

.... supported by falling prices

*Real international yields**



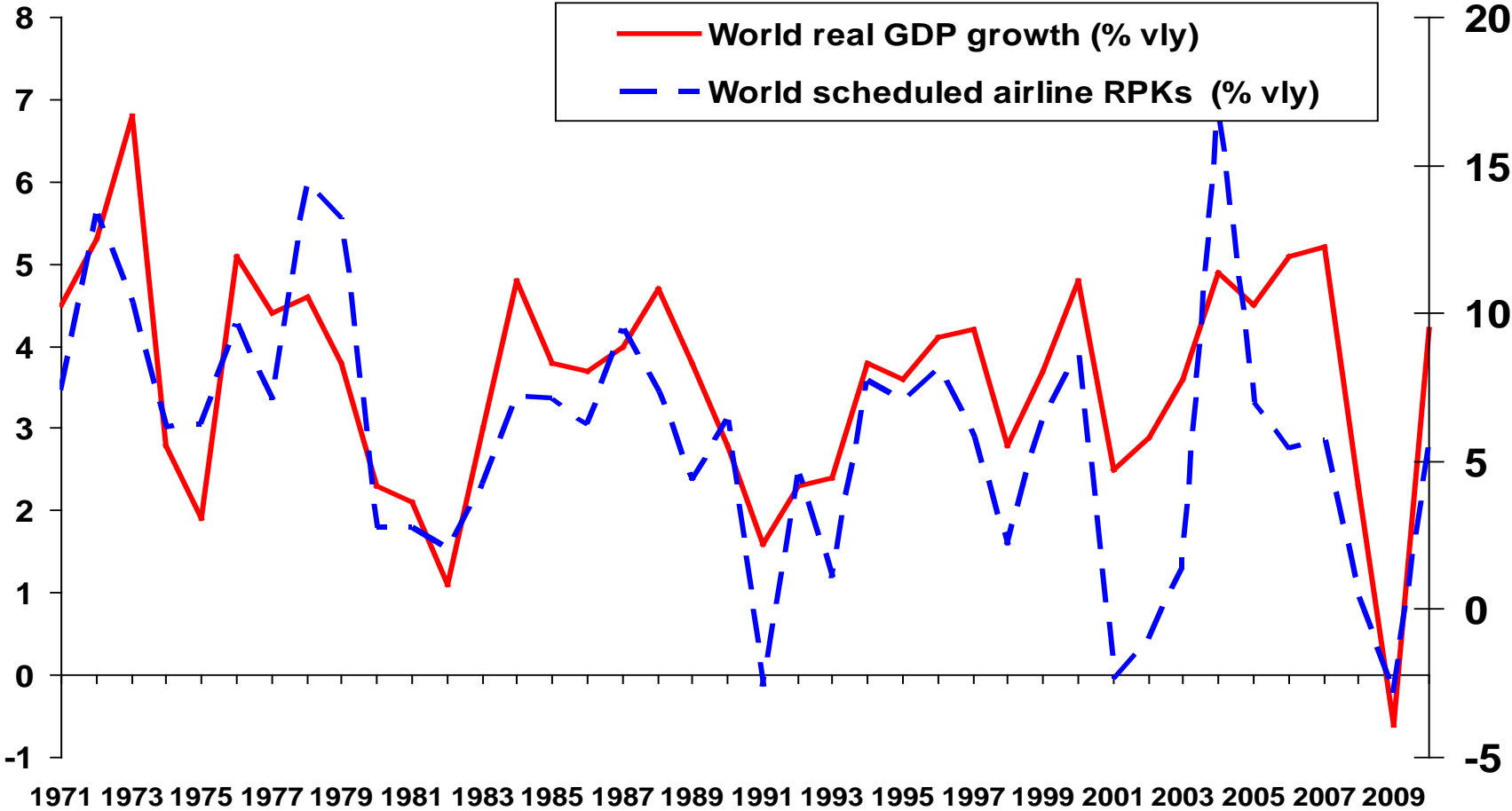
*US cents per RPK, scheduled airlines, deflated by US CPI, 1990=100

Source: ICAO/IATA; 2010 is IATA forecast

Global economic growth and air traffic

Real GDP growth, % vly

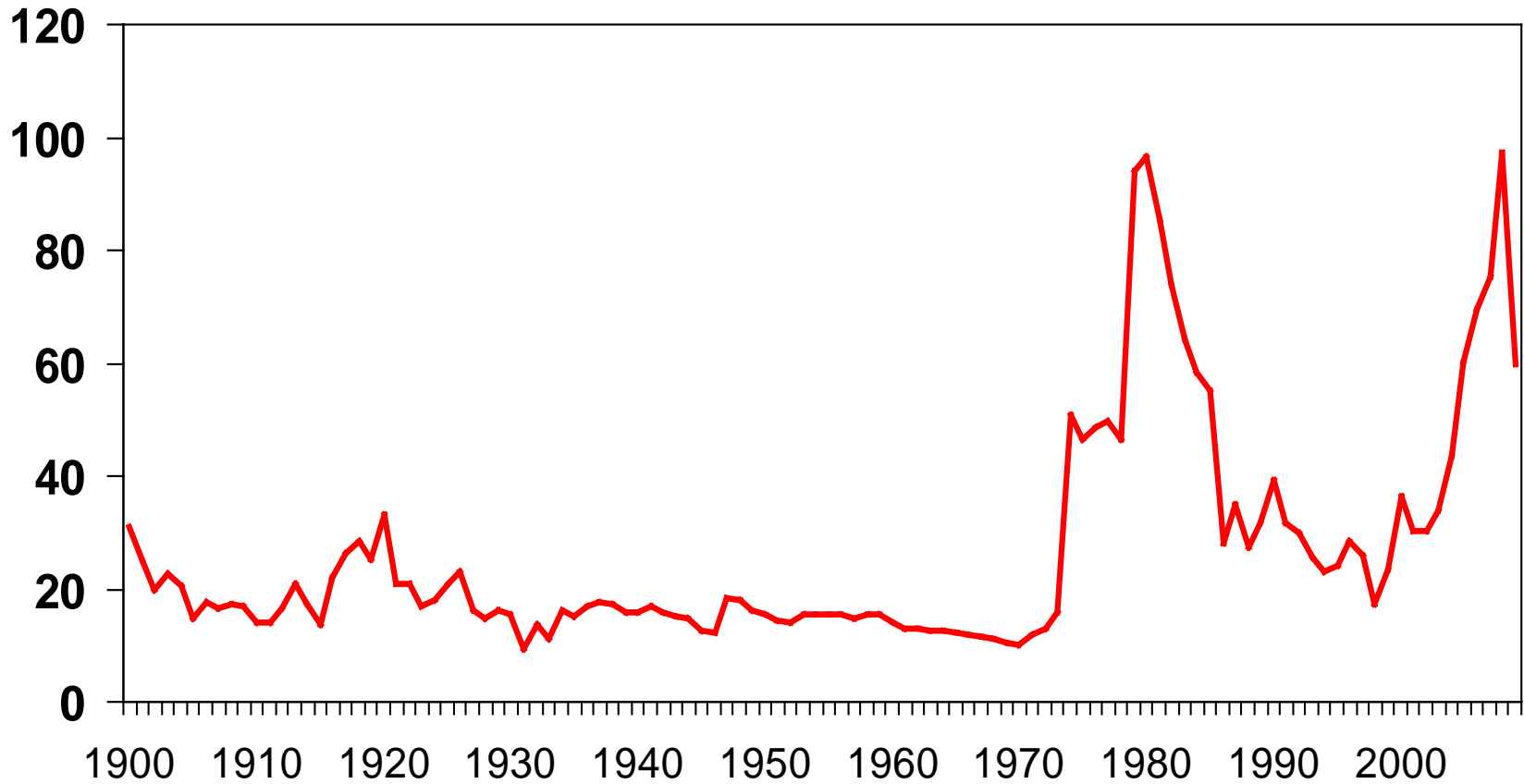
Global air traffic, % vly



Sources: IMF, ICAO, IATA; 2010 is forecast

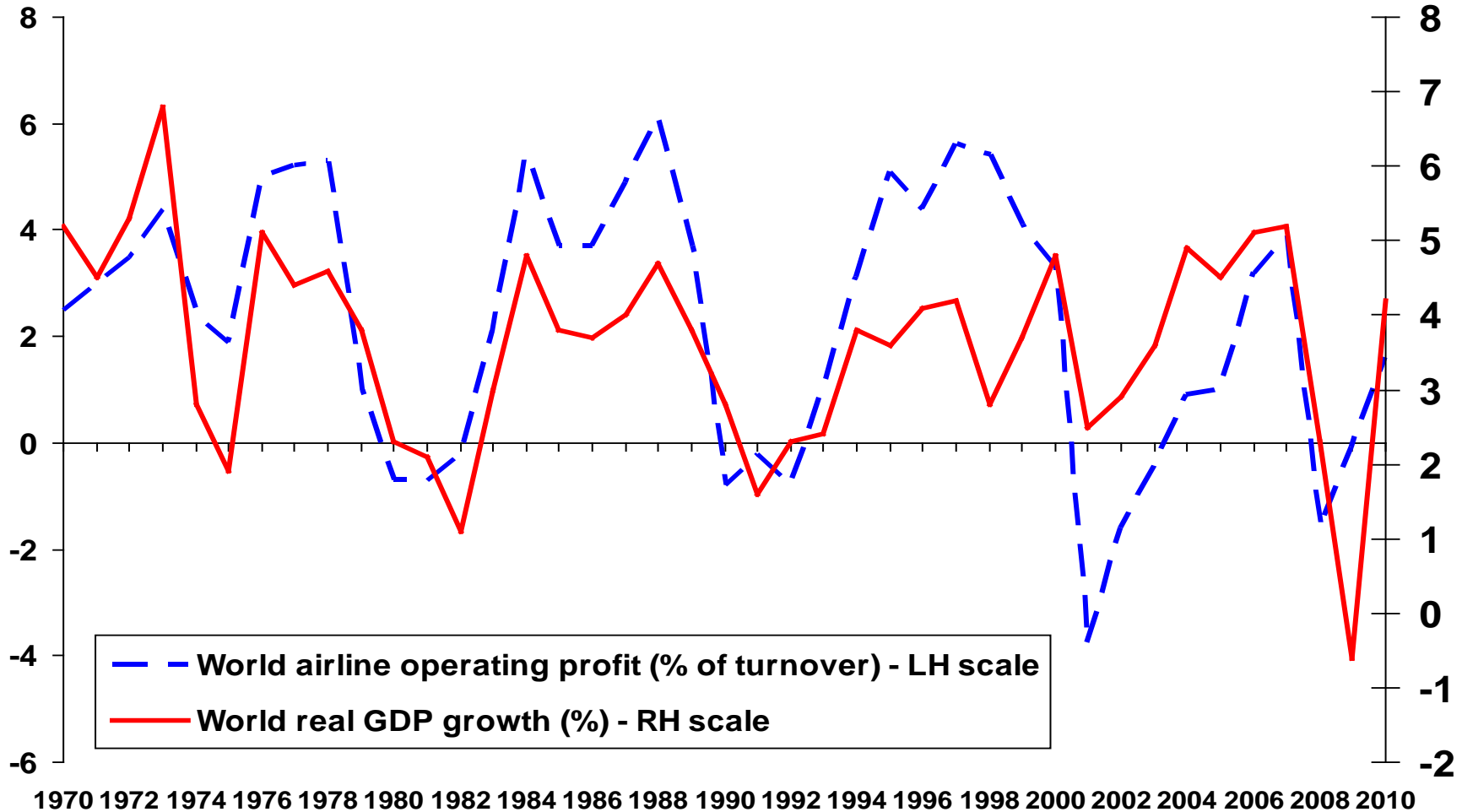
Real oil price, 1900-2009

\$/barrel at 2008 prices



Source: *BP Statistical Review of World Energy, 2009*

Low and volatile airline profits



Sources: IMF, ICAO, IATA; 2010 is forecast

Airline management - key challenges

- Coping with a volatile cycle and oil price shocks
- Maintaining/raising profitability and reducing cost
- Adapting to changing markets and new competition
- Developing a sustainable strategy for profitable growth
- Maintaining a favourable regulatory/ policy climate

“Future Size and Shape” - background

- Downturn in global economy in 2001
- Impact on demand of September 11th attacks
- US protectionism and state aid to airlines
- Structural problems of global airline industry
- BA underperformance in late 1990s, due to:
 - emergence of competing European hubs
 - misjudged response to EU liberalisation and Heathrow constraints
 - growth of “no-frills/low-cost” airlines

Heathrow – importance to BA

- Only UK internationally competitive network hub
- Generates over 80% of airline revenue
- Accounts for around 90% of longhaul capacity and flights
- Splitting network between Heathrow and Gatwick in mid-1990s was a commercial failure
- Other London/regional airports cannot support hub/spoke network expansion

BA bottom of the network/hub league

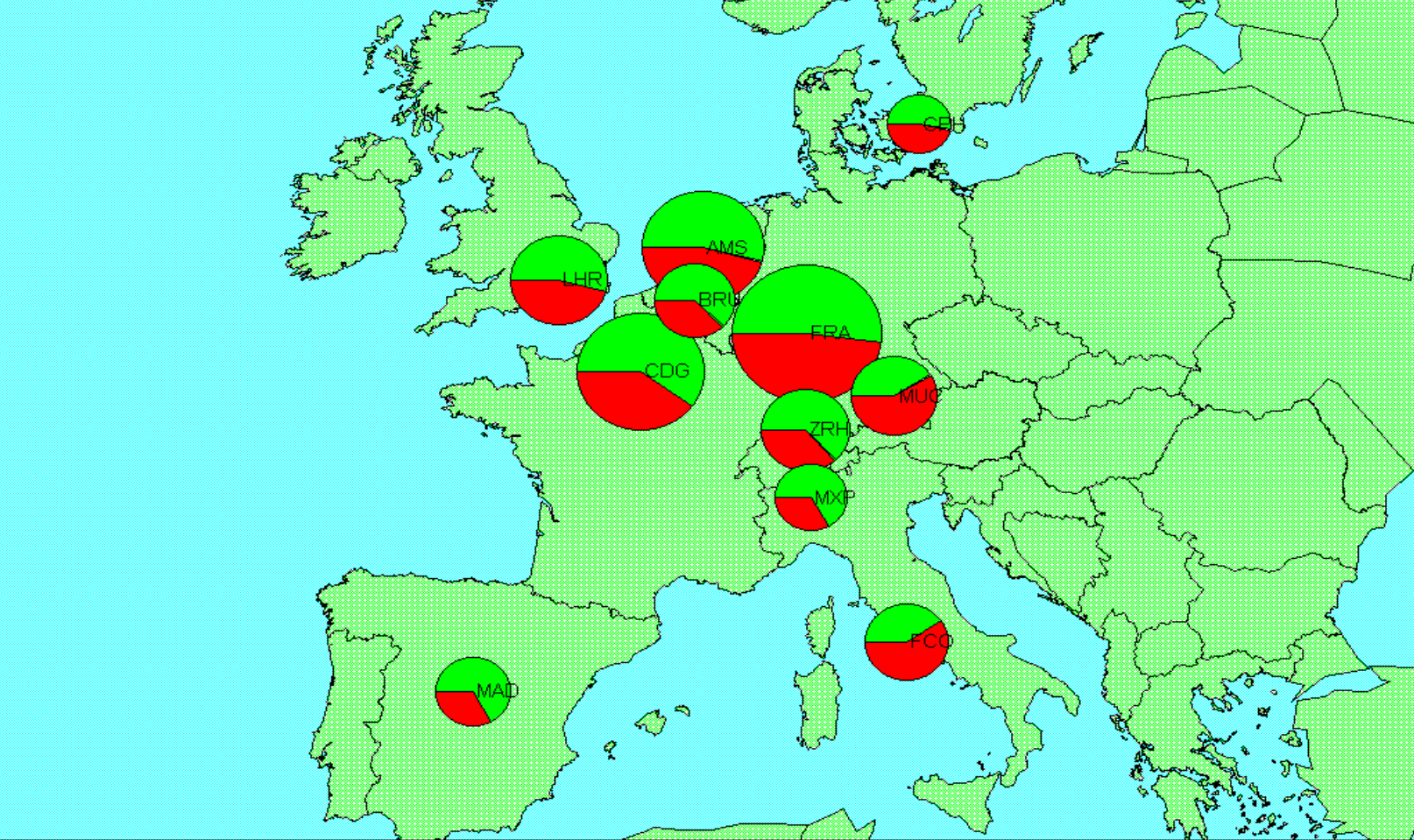
Average daily departures by hub-and-spoke airlines at major hubs

<i>Hub</i>	<i>Carrier</i>	<i>Flights</i>	<i>% of airport scheduled total</i>
Atlanta	DL	911	73
Dallas	AA	681	63
Chicago	UA	552	44
Other US	Various	c.500	40-80
Frankfurt	LH	405	60
Paris (CDG)	AF	375	55
Amsterdam	KLM	290	47
<i>Heathrow</i>	<i>BA</i>	<i>269</i>	<i>39</i>

Data relates to April 2002

Source: OAG

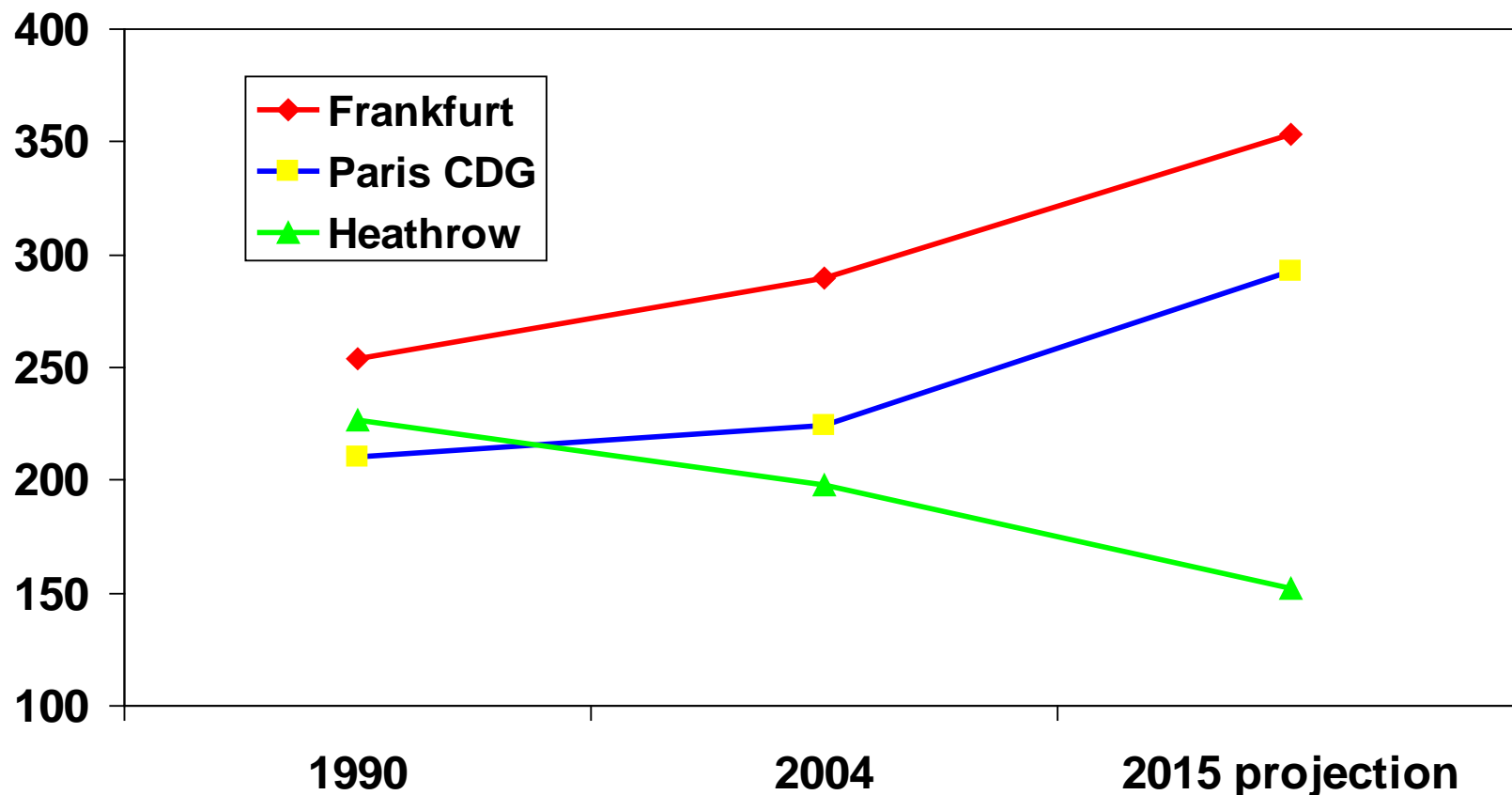
Heathrow losing ground to other hubs



Bubble size indicates number of destinations. Green segment is number served by base carrier (exc subs/partners). One-stop destinations included.

Heathrow's shrinking network

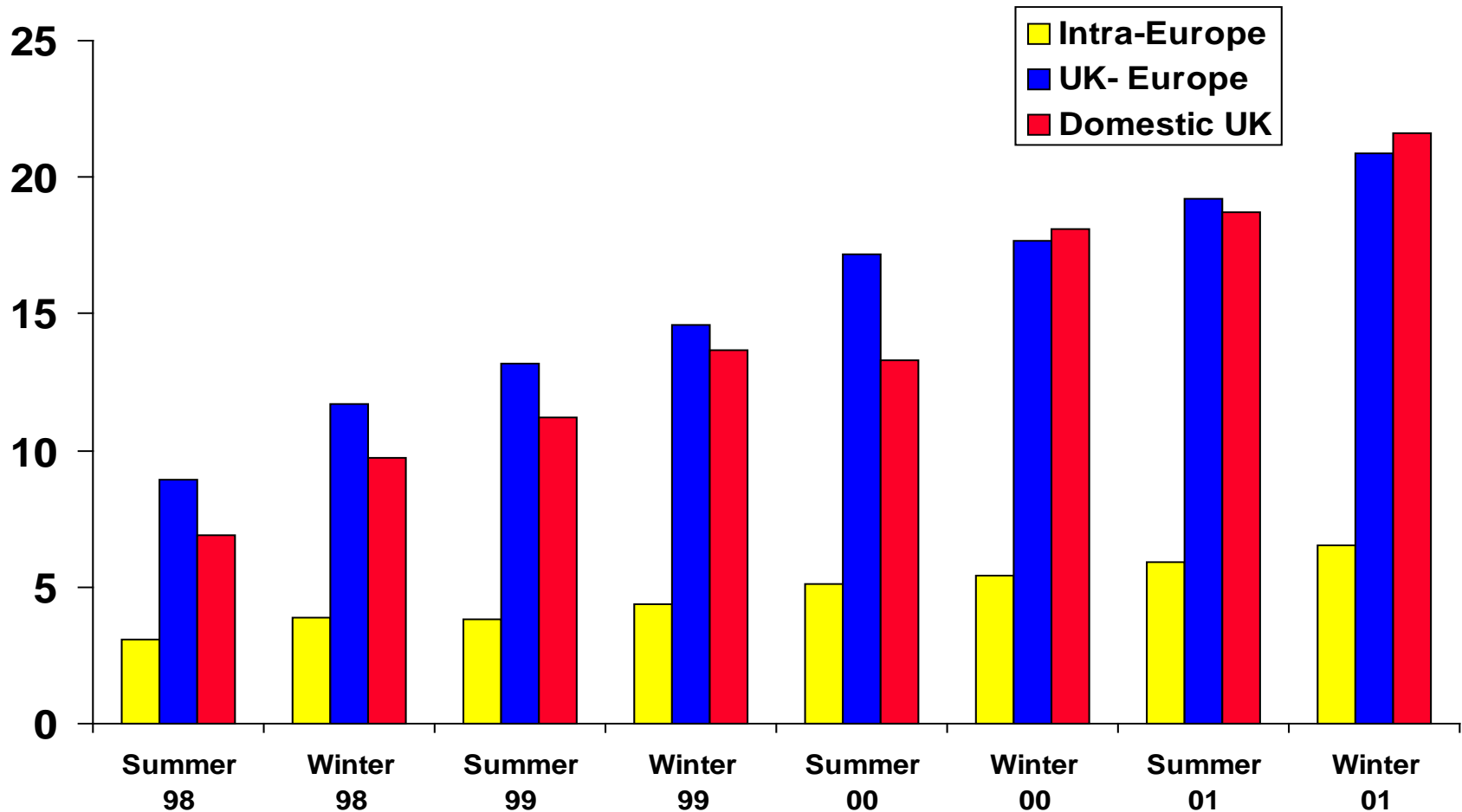
Number of destinations served by major European hubs



Source: OAG and BA projection (assumes no addition to LHR capacity)

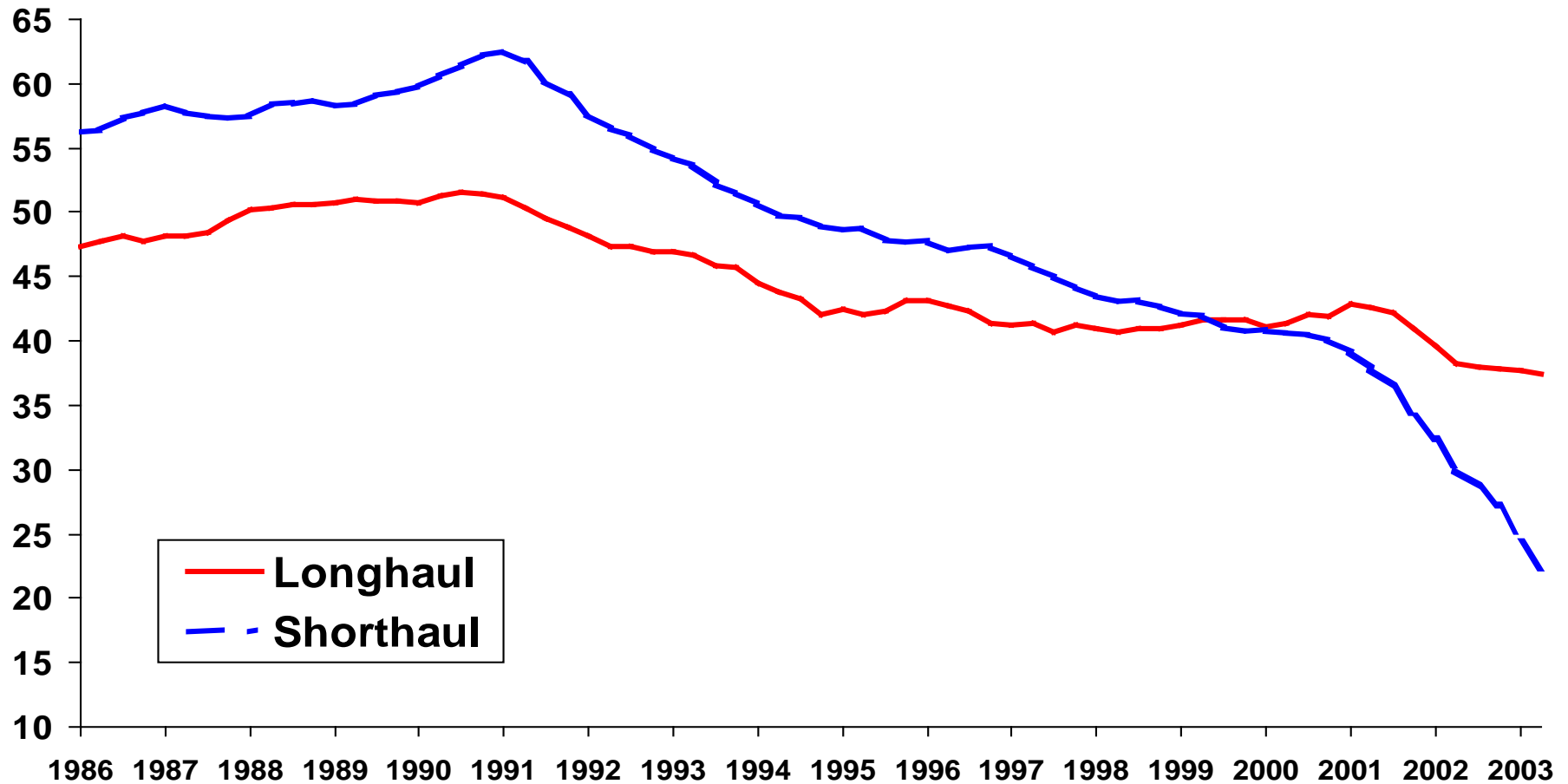
Growth of “no-frills/low-cost” airlines

% of capacity accounted for by “no-frills” airlines



Propensity to fly premium

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



Future Size and Shape – timetable

- Spring/Summer 2001 – downturn in US and other major economies affects airline markets
- 5 September 2001 – BA announces 1,800 job cuts
- 11 September 2001 – World Trade Centre attacks
- 20 September 2001 – BA initial response, including 5,200 additional job cuts (total 7,000)
- November 2001 – BA “Gang of 5” appointed to lead Future Size and Shape Programme
- February 2002 – Future Size and Shape Programme launched

Future Size and Shape – business plan

- Response to increased shorthaul competition:
 - ✓ move shorthaul economy closer to “low-cost” model – distribution, pricing, asset utilisation
- Review of fleet and network
 - ✓ confirm c.20% capacity cut from 1999 peak
 - ✓ accelerate Gatwick change programme
 - ✓ fleet simplification and network rationalisation
- Cost and efficiency improvements (£650m over 2 years)
 - ✓ 36% cut in overhead/support staff
 - ✓ c.15% improvement in front line productivity
 - ✓ procurement/IT efficiencies
 - ✓ business simplification

Future Size and Shape – key targets

	<u>Target</u>	<u>Achieved</u>
Manpower	13,000	13,082
Cost savings (£m)		
- <i>Manpower</i>	<i>450</i>	<i>481</i>
- <i>Distribution</i>	<i>100</i>	<i>257</i>
- <i>Procurement</i>	<i>100</i>	<i>130</i>
TOTAL	650	869
Disposals (£m)	900	939

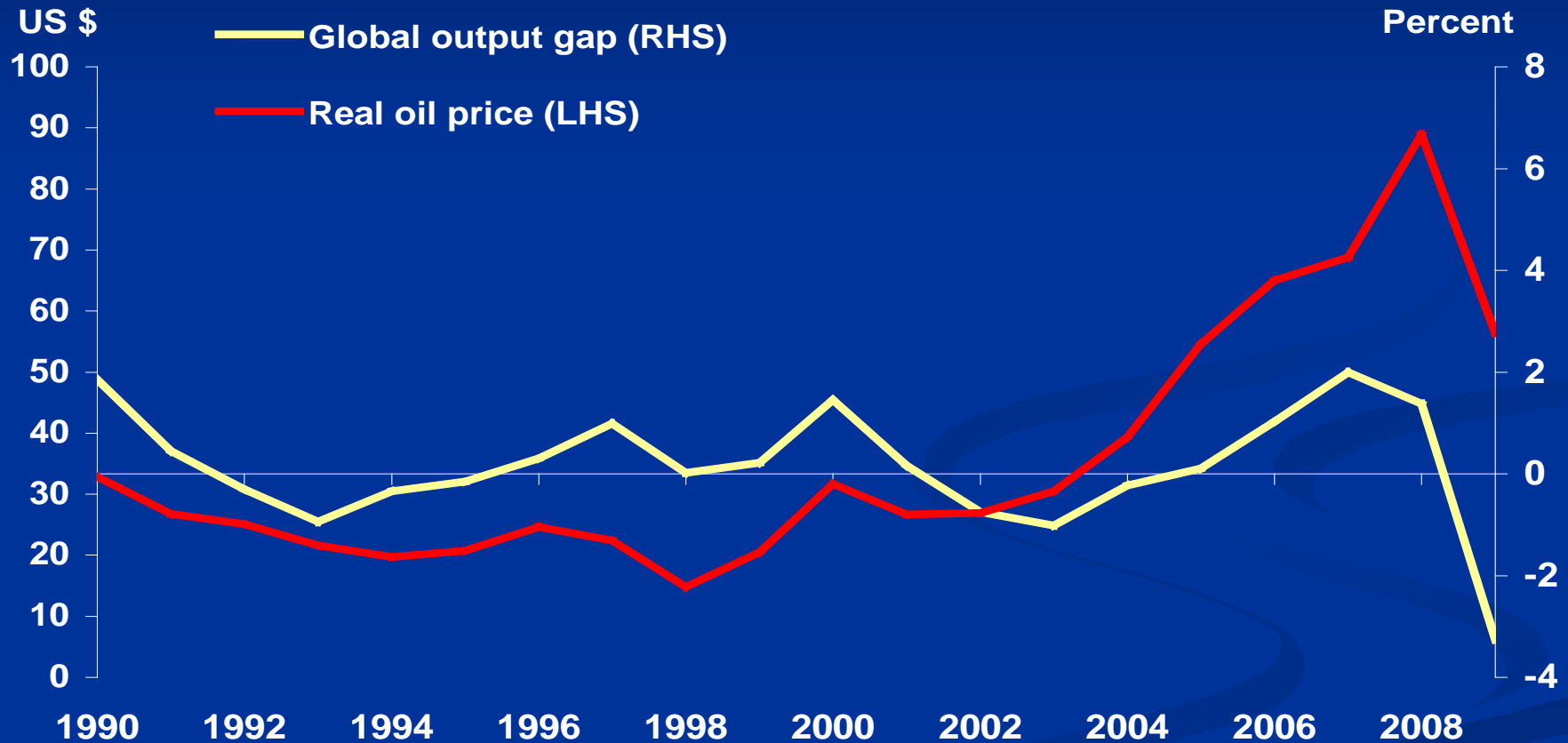
My parting advice to BA (Sept 2006)

- Don't forget the powerful influence of the economic cycle
- Never underestimate the self-destructive tendency of the airline industry
- Don't forget the monopoly power of suppliers
- Don't forget the environment

Current challenges for BA

- Recovering from latest downturn and oil price surge
- Tackling legacy of high cost from less competitive airline era
- Finding profitable growth opportunities in face of Heathrow constraints
- Participation in current round of airline consolidation

Real oil price and global output gap



Note: 2009 is an average of daily series to 9th Sept 2009; Oil Prices are deflated by US consumption deflator

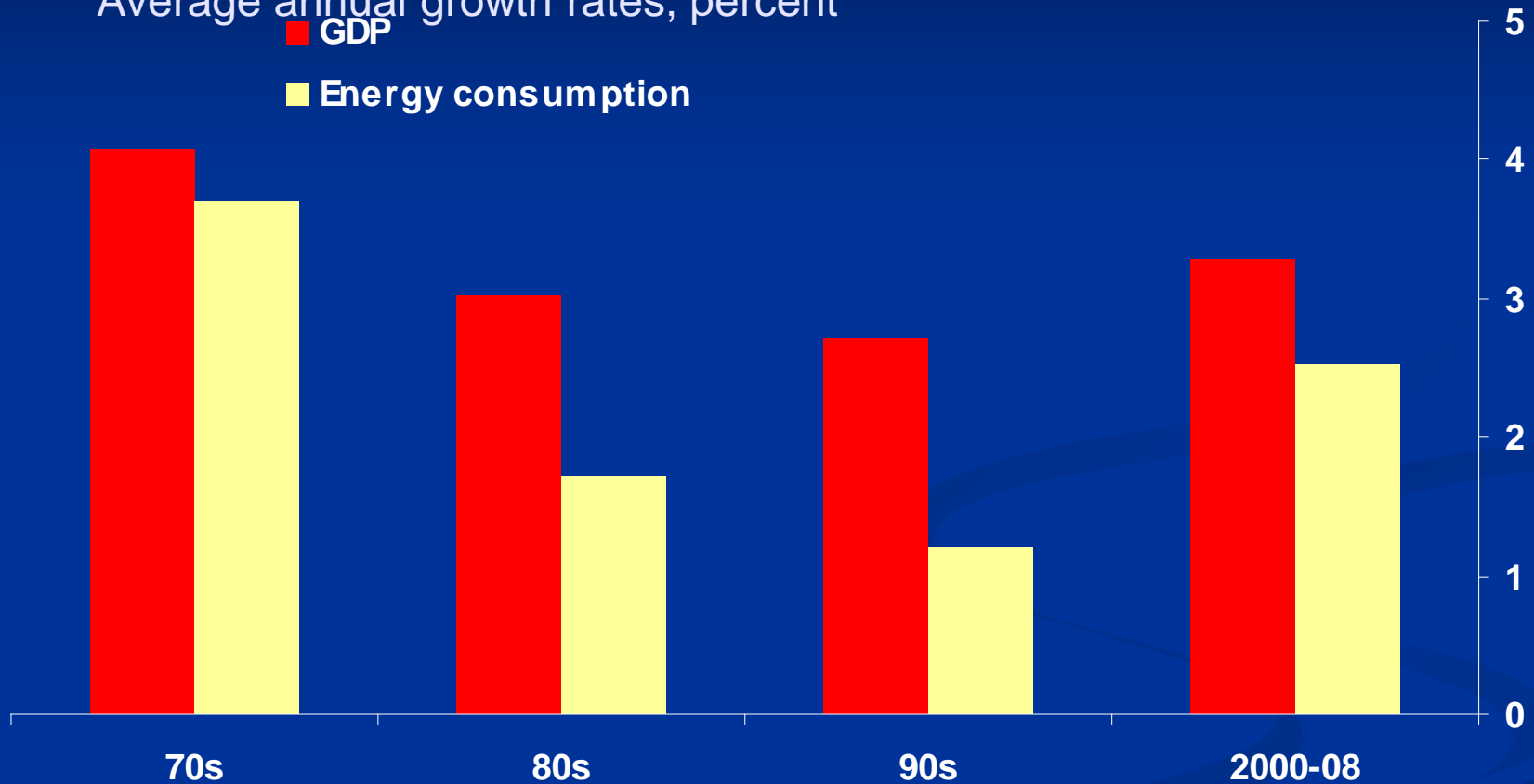
Source: IMF, Thomson Datastream, August Consensus forecast and Bank calculations

World growth and energy consumption

Average annual growth rates, percent

■ GDP

■ Energy consumption

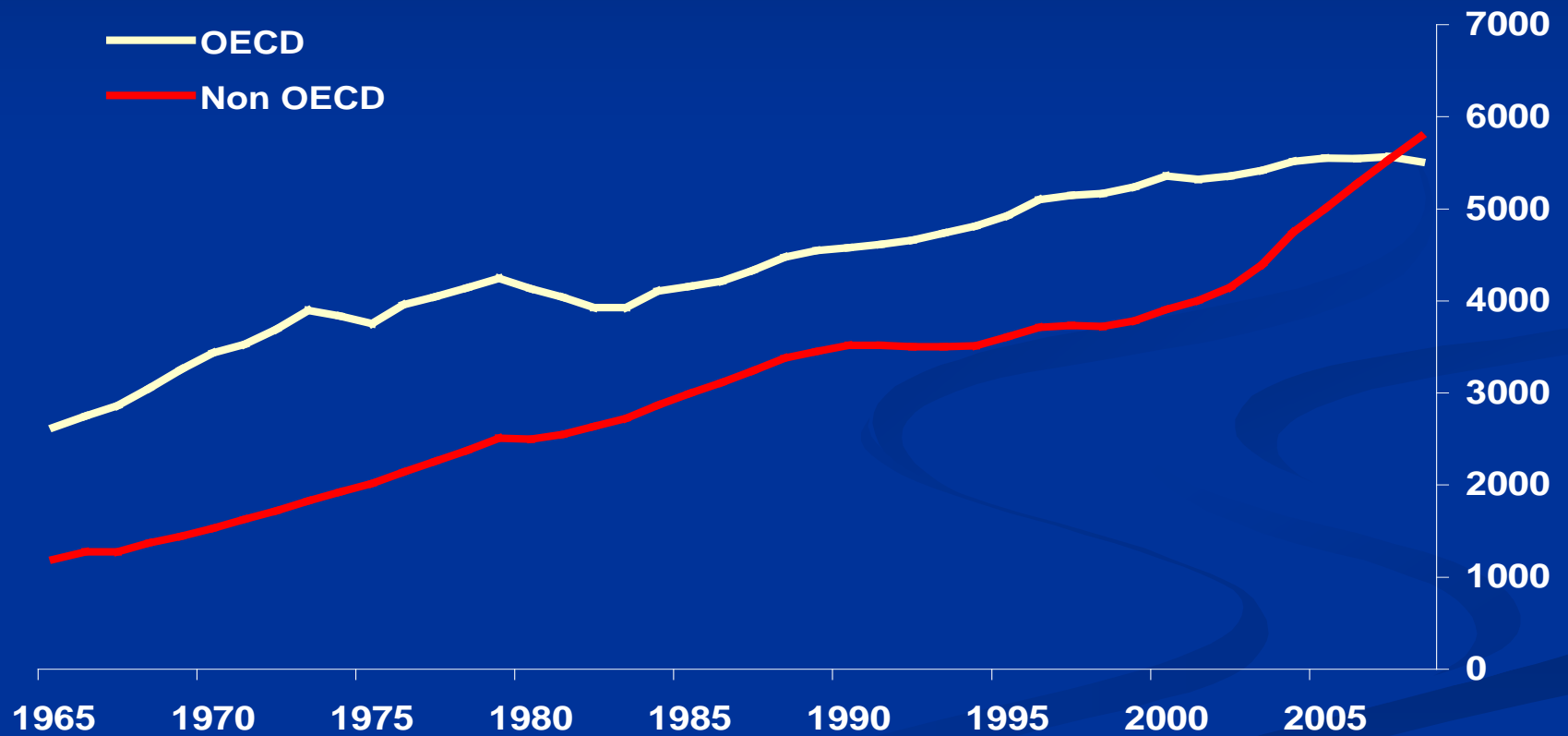


Note: Oil consumption is measured in million tonnes; other fuels in million tonnes of oil equivalent

Source: World Bank and BP Statistical Review

World primary energy use

Millions tonnes oil equivalent



Note: Oil consumption is measured in million tonnes; other fuels in million tonnes of oil equivalent

Source: BP Statistical Review

Closing thoughts

- ✓ **Don't forget the cycle!**
- ✓ **Understand industry structure, changing patterns of demand and drivers of growth and profits**
- ✓ **Forecasts are an aid to decision-taking, not a firm guide to the future**
- ✓ **Economics increasingly important in dialogue with government and regulators**
- ✓ **Importance of supporting evidence, a consistent message and good communication**