

Air Transport Management Course Universidade Lusofona

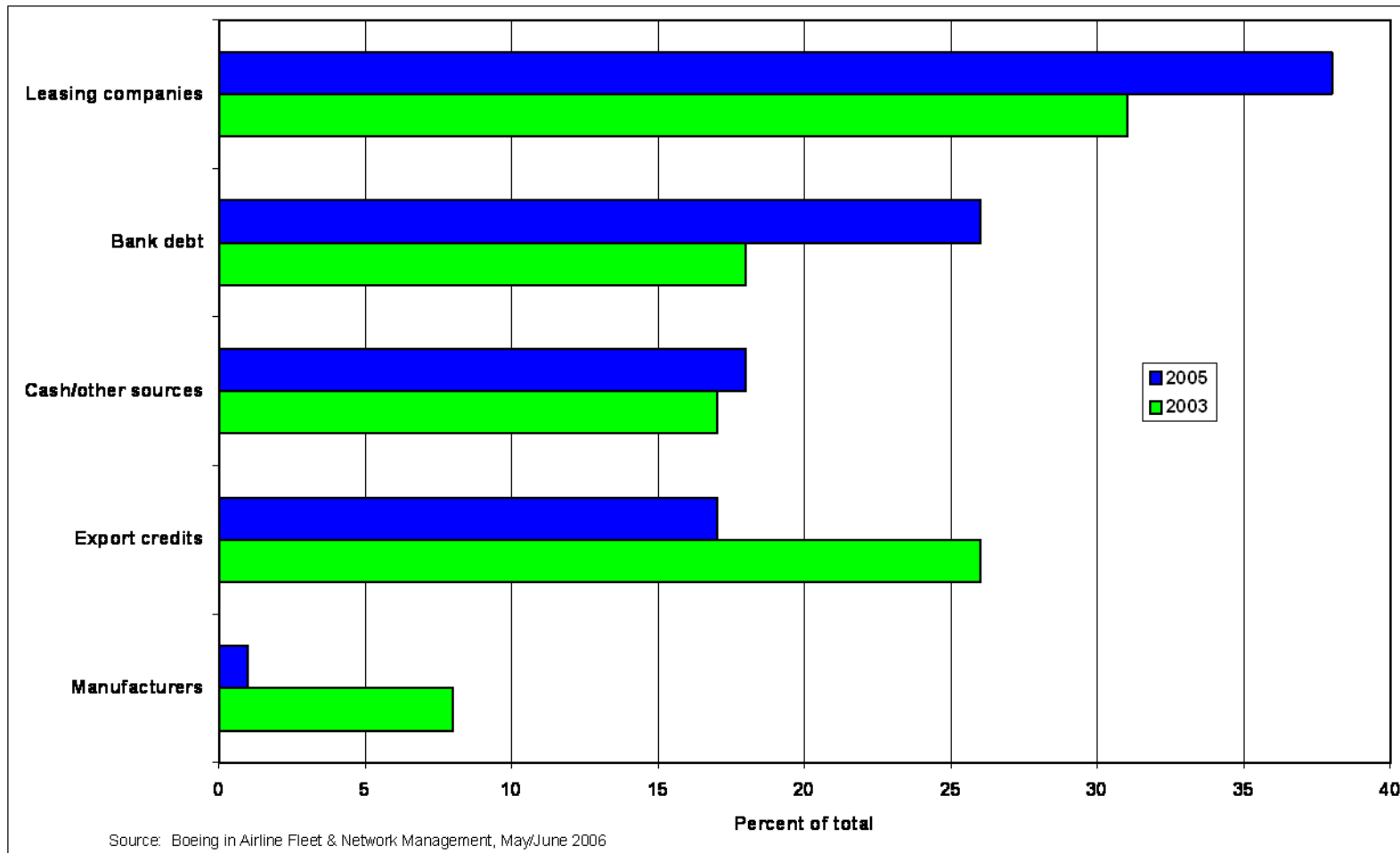
Sources of Airline and Aircraft Finance

Dr Peter Morrell

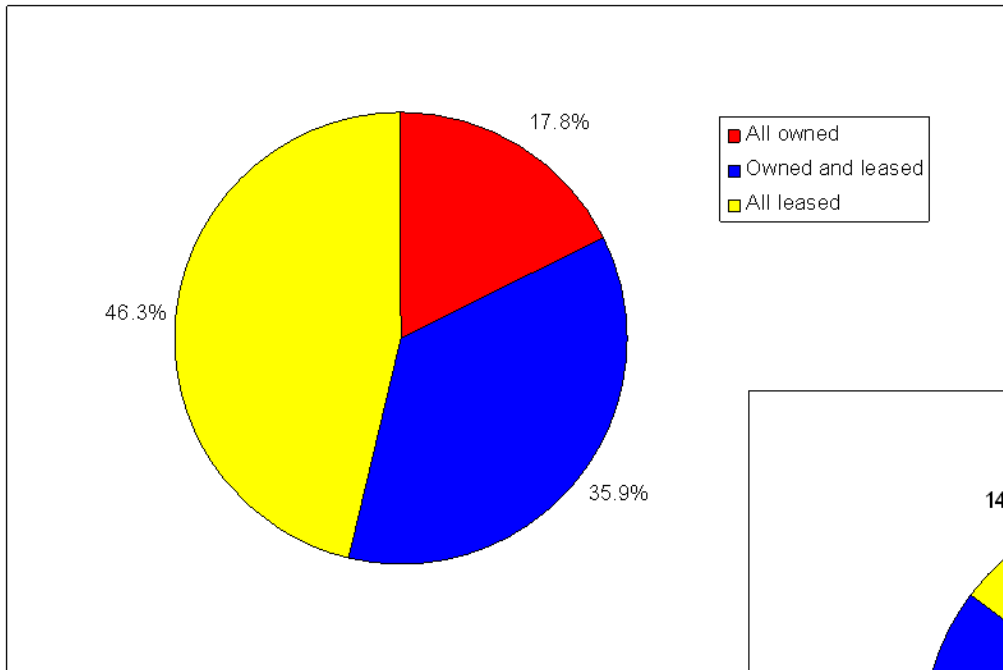
Presentation Outline

- ❑ **Internal vs external sources of finance**
- ❑ **Long versus short-term finance**
- ❑ **Bonds, debentures and convertibles**
- ❑ **The term loan**
- ❑ **Manufacturers' support**
- ❑ **Export credits**
- ❑ **Summary**

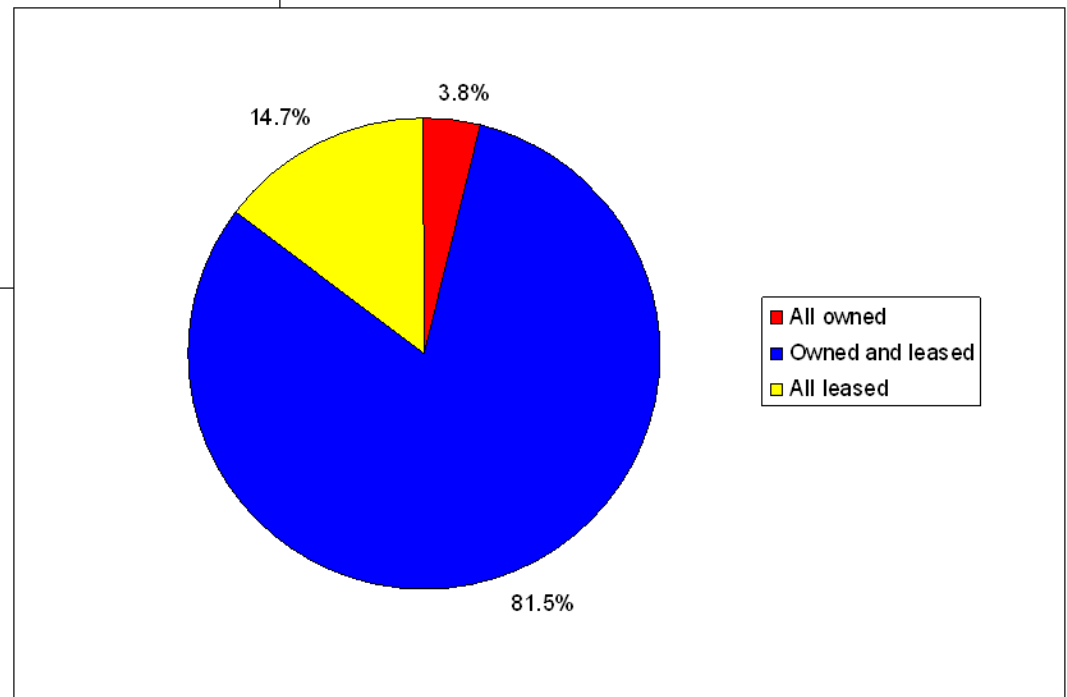
Sources of aircraft financing for Boeing deliveries, 2003 and 2005



World airlines by type of fleet (2006)



% world aircraft by type of fleet



Source: Airclaims

Internal vs External Sources

Internal:

- ❑ Operating profits before depreciation
- ❑ Asset sale proceeds

External:

- ❑ Banks
- ❑ Other (Institutional investors, individuals)
- ❑ Leasing companies

Short- vs Long-term Sources

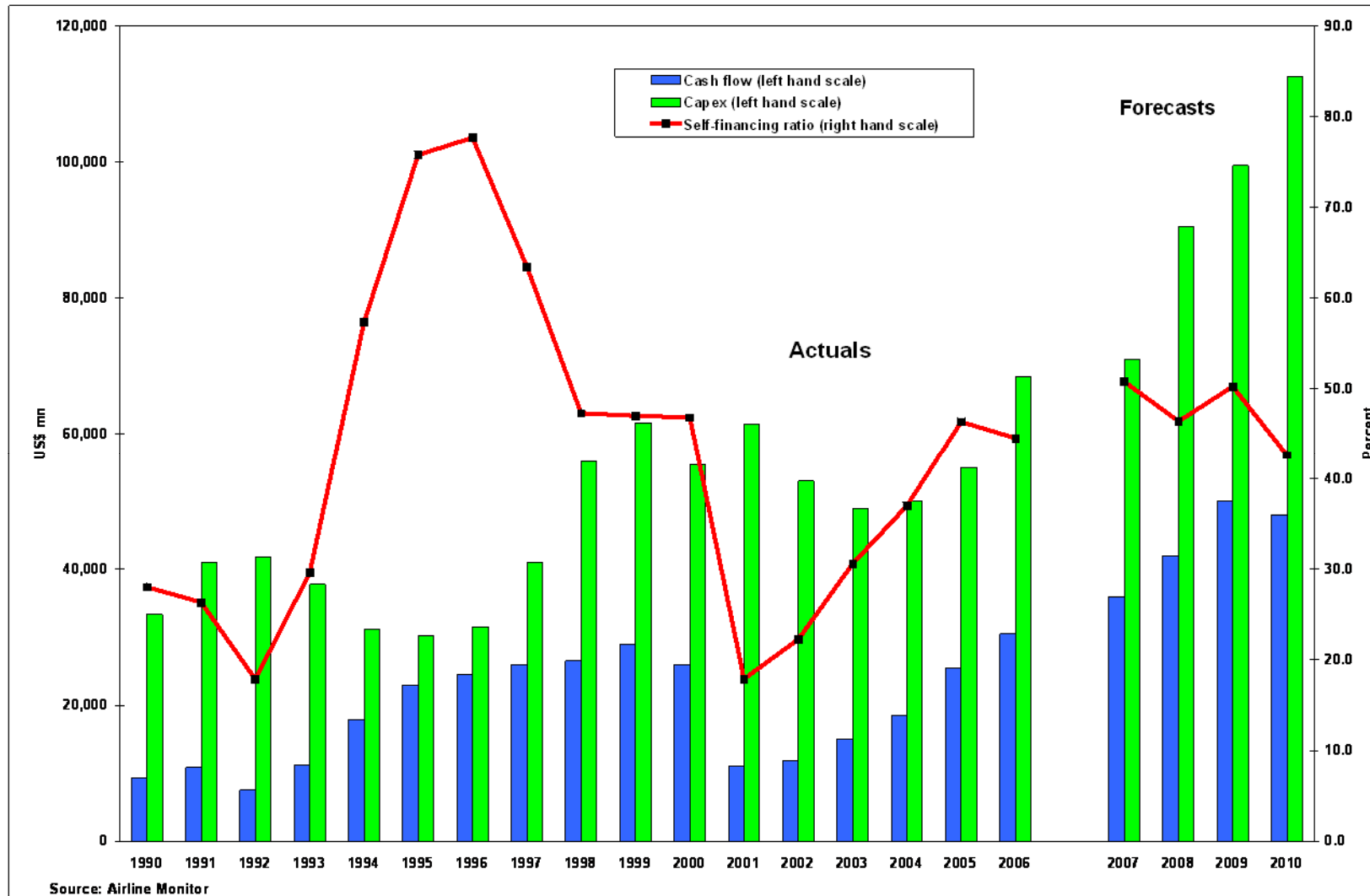
Short-term:

- ❑ Bank overdraft
- ❑ Loans
- ❑ Trade creditors

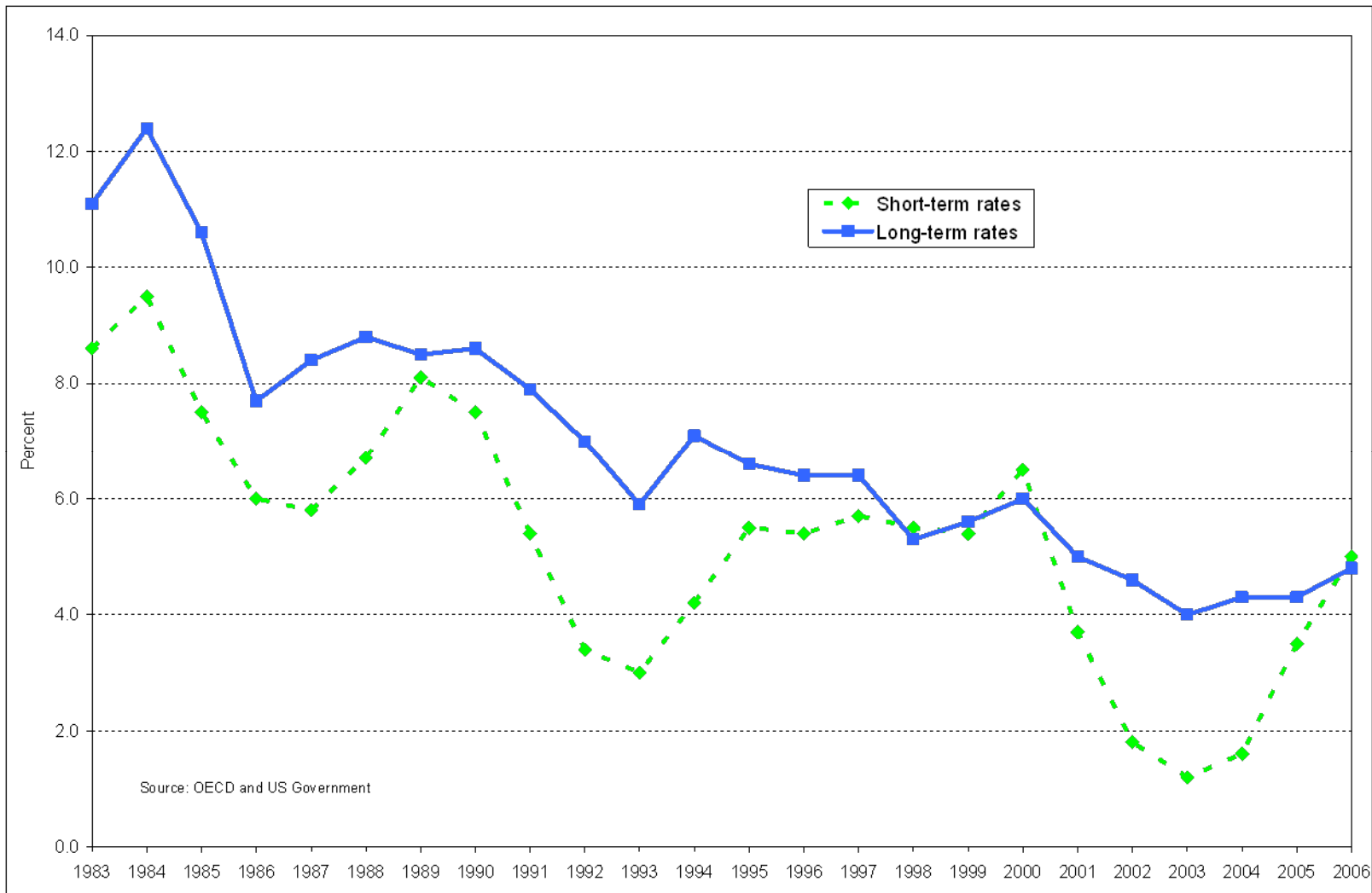
Long-term:

- ❑ Equities (shares)
- ❑ Bonds/loan stock
- ❑ Term loans and debt
- ❑ Leasing/Equipment Trust Certificates

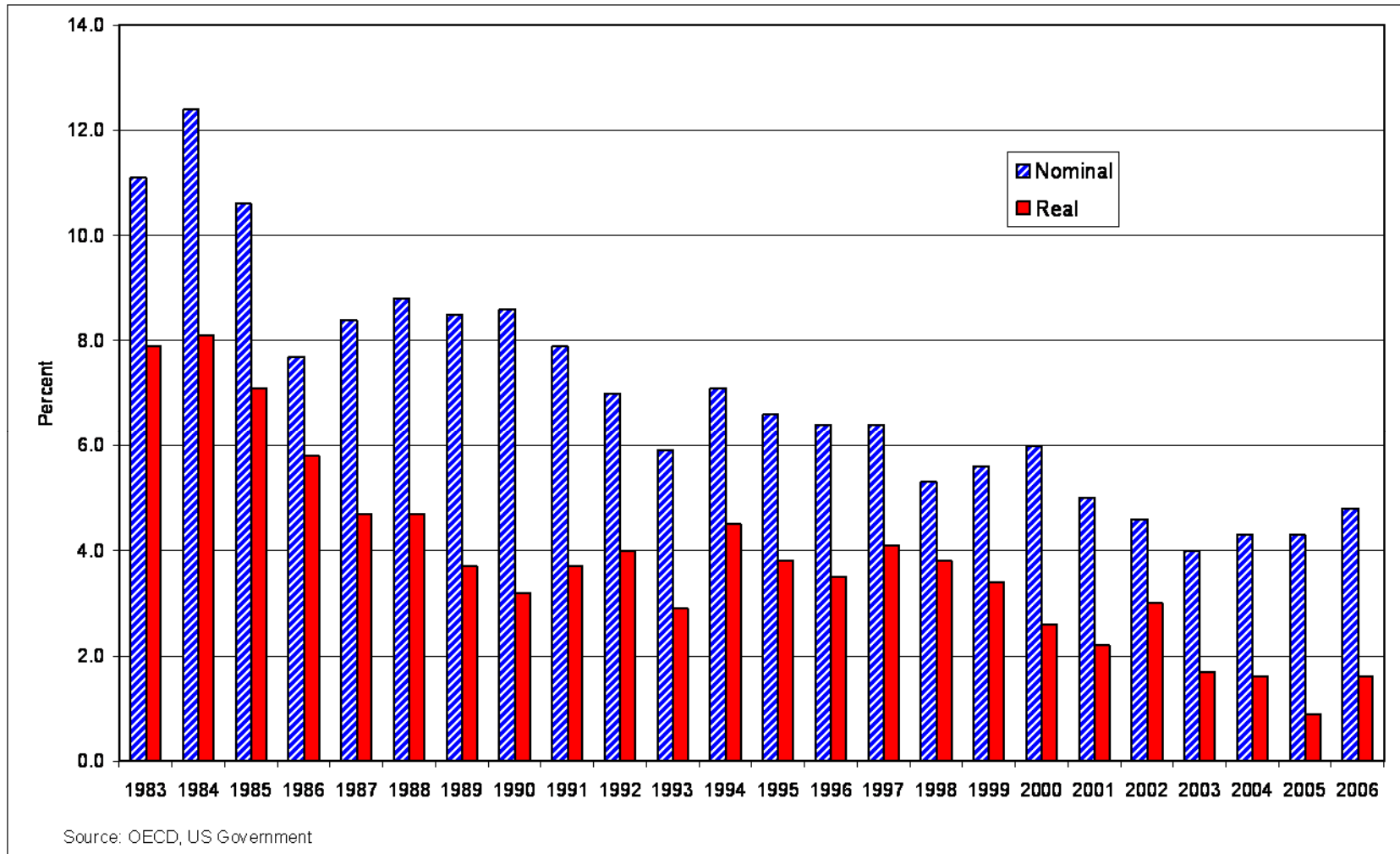
World airline finance needs



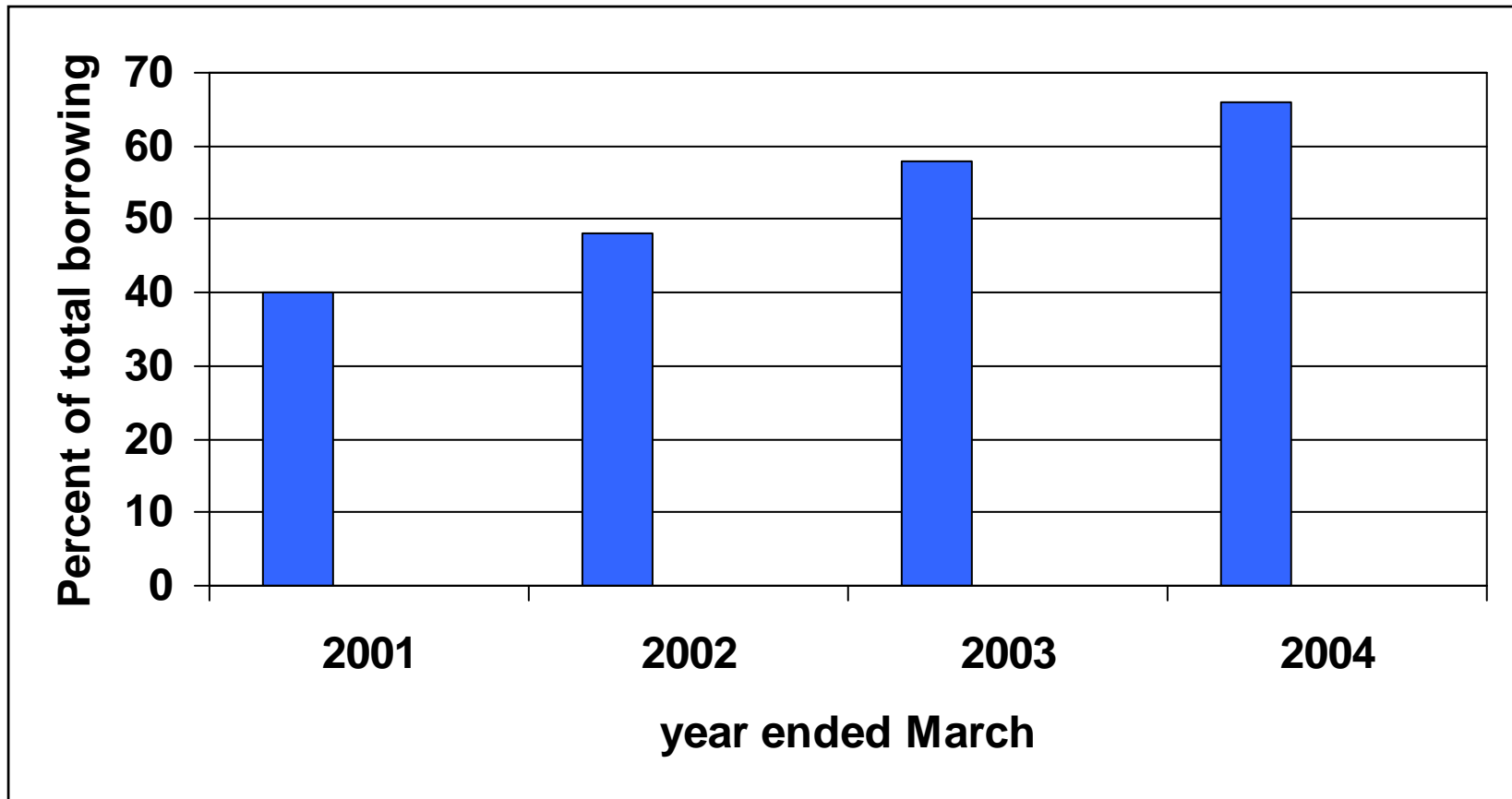
US Interest Rate Trends



Nominal vs Real Interest Rates (10 year government bond yields)



British Airways fixed interest ratio



Source: BA webcast, 17 May 2004

Airline Equity Capital

□ *Who owns the shares?*

Governments

Other airlines

Financial institutions

Employees

Other individuals

European Airlines with Equity Share Quotation

<i>Airline</i>	<i>Exchange(s)</i>	<i>Share Price*</i> <i>US\$</i>	<i>Market Capitalisation*</i> <i>US\$ mn</i>
Lufthansa	Frankfurt	14.21	5,422
British Airways	<u>London</u> , New York, Toronto	3.86	4,182
Ryanair	<u>Dublin</u> , London, Frankfurt	9.51	3,439
Air France	<u>Paris</u> , Frankfurt	14.16	3,112
Alitalia	Milan	0.81	1,262
easyJet	<u>London</u> , Berlin	6.03	1,632
SAS (SILA)	Stockholm	7.22	1,168
Iberia	<u>Madrid</u> , Frankfurt	1.00	917
Swissair	Zurich	46.73	594
KLM	<u>Amsterdam</u> , Frankfurt, New York	12.18	570
Austria	<u>Vienna</u> , Frankfurt	10.51	357
Finnair	Helsinki	4.12	349
Virgin Express	Brussels	3.62	19
City Bird	Nasdaq Europe	0.85	n/a

* As at 10 September 2001; quote based on underlined exchanges

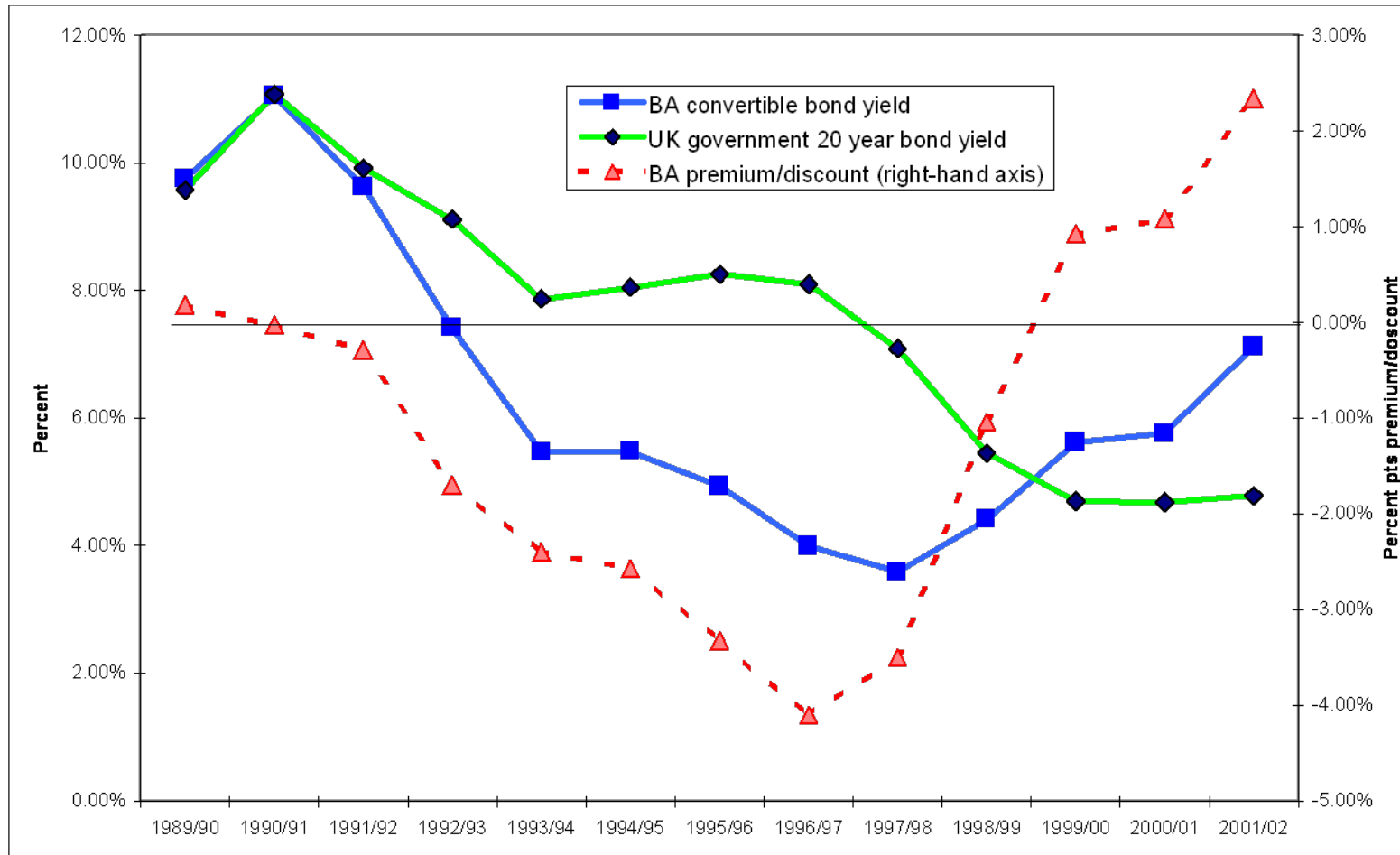
Bonds

- ❑ **Bonds are fixed or floating interest securities issued by airline for fixed term**
- ❑ **May be quoted on stock market**
- ❑ **SAS had total of SEK 2.3 bn of bonds outstanding at end 1998 in US\$, FF, DEK, SEK and Yen (but these have now all matured)**
- ❑ **SAS interest rates fixed ranging from 6.1% to 14.0%**

Convertible Bonds

- ❑ **Identical to straight bonds, but the holder is given an option to convert to equity at some defined point in future**
- ❑ **Conversion price specified in advance**
- ❑ **Have been issued by airlines such as British Airways, Lufthansa and KLM**
- ❑ **BA issued convertible capital bond in 1989: 9¾% to 2005, with conversion on basis of one ordinary shares to £2.34 of bonds held from June 1993 onwards**
- ❑ **Was shown as equity on balance sheet, but later moved to debt**
- ❑ **Lufthansa issued €750m convertible in Jan. 2001 (10 years, 1.25% @ €20.16 per share conversion price); none converted by end 2003**

BA's convertible yield vs market



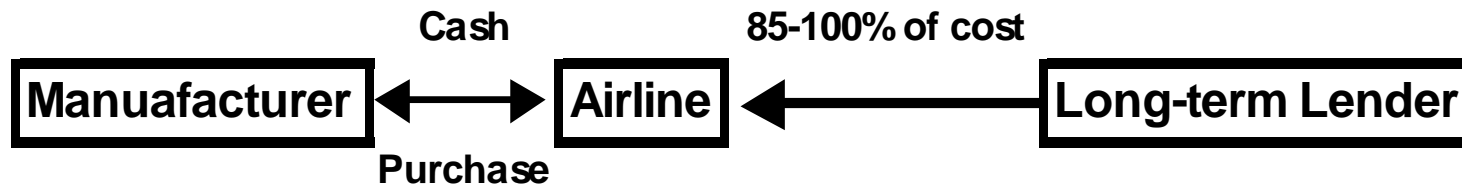
Debentures

- ❑ Debentures are unsecured bonds
- ❑ They are thus not secured on any of the company's assets
- ❑ In the event of bankruptcy they rank just above equity shareholders (subordinated debentures rank below debentures)
- ❑ Thai Airways issued two tranches of debentures in September 2003, totalling Baht 10 bn (US\$ 256m):
Baht 5.5 bn with 5 year maturity and fixed interest rate of 3.0% pa; and Baht 4.5 bn for 7 years at rate of 3.7% pa
- ❑ Can be traded on Stock Exchange of Thailand

Term Loans

- ❑ **Amount required**
- ❑ **Term of loan**
- ❑ **Interest rate: fixed or floating**
- ❑ **Manufacturer support?**
- ❑ **Export credit guarantee?**
- ❑ **Currency**
- ❑ **Conditions/terms and covenants**
- ❑ **Credit rating of airline**

Unsecured Loan



Secured Loan

- ❑ **As for unsecured loan, but lender takes a first priority mortgage on the asset or aircraft (does not need to be asset subject to finance)**
- ❑ **Lender is often a syndicate of banks (with one bank acting as lead bank)**
- ❑ **Banks take commitment fee on undrawn portion of loan, and management fee on total loan amount**

Loan Repayment

- ❑ **Level payment (annuity)**

Loan principal repayment and interest equalised over loan period

- ❑ **Level principal**

Loan principal re-paid in equal amounts on monthly, quarterly or annual basis over loan period

- ❑ **Interest only**

Loan principal re-paid at end of loan period

Airline credit ratings

	<i>Standard & Poor's</i>	
	<i>2001</i>	<i>2004</i>
<i>Southwest</i>	<i>A</i>	<i>A</i>
<i>British Airways</i>	<i>BBB+</i>	<i>BB+</i>
<i>Qantas Airways</i>	<i>BBB+</i>	<i>BBB+</i>
<i>American Airlines</i>	<i>BBB-</i>	<i>B-</i>
<i>Delta Air Lines</i>	<i>BBB-</i>	<i>CC</i>
<i>UAL Corp.</i>	<i>BB+</i>	<i>D</i>
<i>Northwest Airlines</i>	<i>BB</i>	<i>B</i>
<i>Continental</i>	<i>BB</i>	<i>B</i>
<i>Japan Airlines</i>	<i>BB</i>	<i>BB-</i>
<i>Air Canada</i>	<i>BB-</i>	<i>B</i>
<i>America West</i>	<i>B+</i>	<i>B+</i>
<i>US Airways</i>	<i>B</i>	<i>D</i>

Fitch, Moody's and S&P

S&P Investment grade:

AAA, AA, A and BBB

S&P Speculative grade:

BB, B, CCC, D

Manufacturers' Support

- ❑ **Deficiency guarantees**
- ❑ **Buy-back guarantees**
- ❑ **Loans and leasing**
- ❑ **Equity**
- ❑ **Trade credit less sales of receivables to banks**

Up 33% between 1991 and 1995 to \$28 bn

Deficiency Guarantee

- *Deficiency guarantee related to secured loan on aircraft; 'first loss' basis example:*

US\$ m	A	B	C
Outstanding debt	100	100	100
Net proceeds from			
Sale of aircraft	90	75	60
Loss on sale	10	25	40
Paid by manufacturer	10	25	25
Paid by lender	-	-	15

Boeing loans to AirTran

- **B717 acquisition financed with support from Boeing Capital Services Corp.**
 - **Support totalling \$201.4 million restated in March 2001:**
 - 11.27% senior secured notes, due 2008*
 - 13% subordinated notes, due 2009*
 - 7.75% convertible notes, due 2009 (12.27% interest if stock price falls below \$6.42 in any month) @ \$5.45/share*
 - Warrants (3m) for purchase of AirTran common stock at \$4.51 per share (expire in 5 years)*
- Boeing converted \$12m of their notes into AirTran shares in 3rd Quarter 2001, receiving 2.2m shares**

Export Credit Agencies (ECAs)

Government agencies in exporting countries:

- ❑ **Boeing**: Eximbank (USA)
- ❑ **Airbus**: Export Credits Guarantee Department (UK),
Companie Francaise d'Assurance pour la Commerce
Exterieur (Coface - France), and Hermes
Kreditversicherungs Aktiengesellschaft (Germany)
- ❑ **Other Europe**: ATR - Sace (Italy)
- ❑ **Japan**: Jexim

Export Credit Terms

- ❑ **Percentage cover 80-85% of airframe and installed engines**
- ❑ **Large Aircraft Sector Understanding (LASU)**
Interest rate (includes 50 basis points top cover ECA risk premium), currencies and term (10 or 12 years)
- ❑ **ECA fees**
- ❑ **Top-up loans from commercial banks**

ECA Bank Benefits

- ❑ **Not part of capital base**
- ❑ **Airline risk swapped for major country government risk**
- ❑ **Attractive weighted average yield on ECA-backed and commercial loan**

Airline Benefits from ECA

- ❑ **Loan available, whereas otherwise not**
- ❑ **Can choose LASU terms and take no-cost option on fixed interest rate**
- ❑ **More attractive commercial loan**

but: commitment and guarantee fees

Loan Covenants

- **Financial**

 - Maximum debt/equity ratio**

 - Minimum cash flow to debt or cash flow to debt service requirement**

- **Non-financial**

 - Disclosure of information**

- **Asset pledged as security**

 - Restrictions of sub-leasing**

BA's debt at March 2002

- ❑ **No covenants**
- ❑ **No repayment spikes**
- ❑ **Long-term**
- ❑ **89% aircraft/property financing**
- ❑ **11% unsecured**
- ❑ **50% floating rate, 50% fixed (approx.)**

Source: Presentation by John Rishton to investment analysts, March 2002

United Airlines: cost of borrowing

Debtor-in-possession (DIP): February 2003

- ❑ Secured against all unencumbered assets
- ❑ 18 month term
- ❑ Interest at LIBOR plus 650 basis points*
- ❑ Interest floor of 3%
- ❑ Sold at 95 cents to the dollar

**SIA Cargo 'vanilla' debt financing on B747-400F at LIBOR plus 70 basis points (Feb 2003)*

Summary

- ❑ **New equity easier with share quotation**
- ❑ **Term loan remains popular, in spite of increased number of leases**
- ❑ **Aircraft often pledged as security**
- ❑ **Bonds tend only to be used by larger, better known airlines**
- ❑ **ECA and manufacturers' support on part of loan reduces lender risk (and return)**