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, deentures and convertibles
- The term loan
- Manufacturers’ support
- Export credits
- Summary
Sources of aircraft financing for Boeing deliveries, 2003 and 2005

Source: Boeing in Airline Fleet & Network Management, May/June 2006

Peter Morrell, Department of Air Transport
World airlines by type of fleet (2006)

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

Source: Airline Monitor

Peter Morrell, Department of Air Transport
Nominal vs Real Interest Rates (10 year government bond yields)

Source: OECD, US Government
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

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

*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

- BA convertible bond yield
- UK government 20 year bond yield
- BA premium/discount (right-hand axis)
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

Cash 85-100% of cost

Manufacturer <-> Airline <-> Long-term Lender

Purchase
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

<table>
<thead>
<tr>
<th></th>
<th>Standard &amp; Poor’s</th>
<th>Fitch, Moody’s and S&amp;P</th>
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<tbody>
<tr>
<td>Southwest</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>British Airways</td>
<td>BBB+</td>
<td>BB+</td>
</tr>
<tr>
<td>Qantas Airways</td>
<td>BBB+</td>
<td>BBB+</td>
</tr>
<tr>
<td>American Airlines</td>
<td>BBB-</td>
<td>B-</td>
</tr>
<tr>
<td>Delta Air Lines</td>
<td>BBB-</td>
<td>CC</td>
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<tr>
<td>UAL Corp.</td>
<td>BB+</td>
<td>D</td>
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<tr>
<td>Northwest Airlines</td>
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<tr>
<td>Continental</td>
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<td>B</td>
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<tr>
<td>Japan Airlines</td>
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<tr>
<td>Air Canada</td>
<td>BB-</td>
<td>B</td>
</tr>
<tr>
<td>America West</td>
<td>B+</td>
<td>B+</td>
</tr>
<tr>
<td>US Airways</td>
<td>B</td>
<td>D</td>
</tr>
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</table>
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:

<table>
<thead>
<tr>
<th>US$ m</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding debt</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Net proceeds from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale of aircraft</td>
<td>90</td>
<td>75</td>
<td>60</td>
</tr>
<tr>
<td>Loss on sale</td>
<td>10</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>Paid by manufacturer</td>
<td>10</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Paid by lender</td>
<td>-</td>
<td>-</td>
<td>15</td>
</tr>
</tbody>
</table>
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)