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Financial intelligence for commercial aviation

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EDITOR’S LETTER

Crisis? What crisis?

The airfinance industry is in good shape, although China could still be a problem – just not yet.

If attendance at January’s 18th Annual Global Airfinance Conference in Dublin is any indicator, the commercial aircraft finance industry is in good health. More than 1,500 delegates attended the event this year. It used to be possible to accommodate all the attendees in a hotel, but the gathering of industry participants has grown to such an extent that delegates now take over the impressive Dublin Convention Centre for three days.

If the attendance provides circumstantial evidence of a thriving sector, Boeing’s Current Aircraft Finance Market Outlook 2016, published shortly before the conference, provides statistics to back up this evidence.

Boeing projects that over the next five years, the commercial aviation industry will require higher levels of aircraft financing because of healthy industry fundamentals and strong demand for new, fuel-efficient aircraft. Manufacturers are, of course, notorious for putting a positive gloss on the industry, but the figures Boeing quotes are striking.

In 2015, according to Boeing’s report, airlines and lessors took delivery of new aircraft worth about $122 billion. That total is expected to increase steadily to $172 billion by 2020. Boeing is confident that aircraft finance markets will offer a broad and balanced array of financing options at competitive prices, and that the industry will be well positioned to meet the rising funding requirements.

The US manufacturer believes the capital markets’ share of the overall financing pool will rise – a view largely supported by speakers and attendees at the conference (see More investment and innovation to come, page 32).

Commercial bank activity is expected to remain strong, with export credit usage dropping to historic lows. Boeing’s well-publicized concerns during 2015 at the possible demise of Ex-Im Bank might, however, suggest that the role of export credit in funding deliveries is far from negligible. On a panel during the Dublin conference, several bankers agreed that there would be high liquidity in the aviation finance industry in 2016, but the price to airlines and lessors would likely be higher than the previous year.

Boeing believes the role of leasing companies will continue to grow in importance, with about half of capital market funding going to what it describes as vital market participants. These positive words will no doubt be welcomed by the senior management of the leasing companies, some of whom could be heard at the conference bemoaning the undervaluing of their companies by the markets, despite consistently strong financial results. However, the consensus was that aircraft leasing stocks will rise as the market corrects itself.

But the mood at the conference was rather less euphoric than it should have been, given the booming attendance and Boeing’s outlook. Delegates had a few things on their minds: restrictive government practices, growth rates out of kilter with GDP, oil price uncertainties, high single-aisle production rates, a glut of second-hand widebodies, rising interest rates and, of course, China.

On some topics speakers put delegates’ minds at rest, but on others they notably did not. We should probably stop worrying about interest rate rises, but investing in widebody aircraft is not for the fainthearted.

China is a more complex story and opinions range from doom-laden predictions to suggestions that there is nothing to worry about because the Chinese middle-class propensity to travel is undiminished.

With close to a 15% share of the global airline fleet, China clearly matters to the aircraft industry and continued growth in the country is critical to sustaining the production rates of the western manufacturers, but is also key to the success of new models from domestic Chinese manufacturers. The consensus was that China’s growth rate is bound to continue slowing, but it is still a long way from a recession.

How these various problems impact the market in 2016 and the mood at next year’s get-together in Dublin remains to be seen, but the chances are the 19th Annual Global Airfinance Conference will not be held in a hotel.

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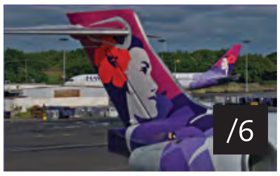
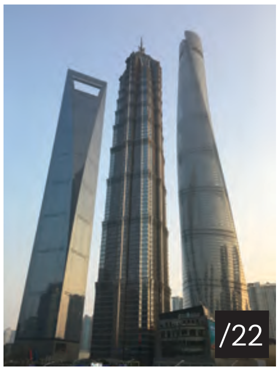
COVER STORY

NEWS





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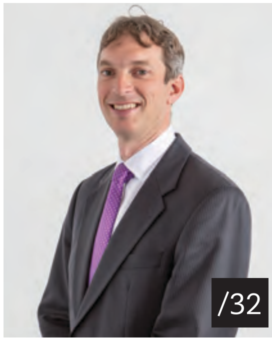

REGULARS

NEWS

People

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Nathan Leavitt makes partner

Holland & Knight has elevated Nathan Leavitt to partner in its San Francisco office.

Leavitt, who was formerly an associate at the firm, was selected in 2014 as one of *Airfinance Journal*'s Rising Stars.

Leavitt represents lessors and financial institutions, advising on the purchase, sale, lease, novation, financing and securitization of commercial aircraft, engines and parts. He focuses on cross-border transactions, often with airlines operating in Latin America.

In 2014, Leavitt completed a nine-month secondment with the Latin America and Caribbean division of Gecas.

Cumming joins Bocomm's Irish business

Greg Cumming has joined JY Aviation Leasing Ireland Company as senior vice-president, technical.

Cumming, whose previous jobs include nearly 20 years as Awas's executive vice-president, technical operations, started work at the Irish business of Bocomm Leasing on January 3.

Winter resigns as fastjet CEO

Ed Winter has resigned as chief executive officer (CEO) of pan-African carrier fastjet.

Winter will remain in the post until a new CEO is found, according to a statement from the airline.

Vedder Price names new capital markets head

Vedder Price has named Kevin MacLeod as the new head of its New York securities and capital markets group.

MacLeod joins Vedder Price from Milbank, where he was special counsel in the global securities group.

He will focus on advising the underwriters and issuers of debt securities. He has previously worked on enhanced equipment trust certificates, secured and unsecured high-yield notes, aircraft lease securitizations and Ex-Im Bank-guaranteed notes.

Gabory appointed head of leasing at ATR

European turboprop manufacturer ATR has appointed Jerome Gabory as head of leasing markets. He will be responsible for liaising with ATR's leasing customers.

Chang leaves TransAsia Airways

Ryan Chang has left his role as assistance manager at TransAsia Airways after nearly 10 years at the company, *Airfinance Journal* learns.

Eric Liu has replaced Chang, according to a TransAsia source.

Rising Star gets promoted to partner

Norton Rose Fulbright's Alyssa Vazquez has been promoted from senior counsel to partner.

Vazquez, who works in the aviation finance department of the firm's New York office, was named as a 2015 *Airfinance Journal* Rising Star. Each year, *Airfinance Journal* nominates eight of the most promising legal associates in aviation finance as Rising Stars.

She concentrates her practice on transportation finance, aviation, project finance, infrastructure and bankruptcy matters. Vazquez has negotiated and drafted leases (leveraged and operating) on behalf of lessors and lessees, and has documented and closed domestic and international asset-based financings.

Former ILFC lawyer sets up solo practice

A former ILFC lawyer has established a solo transactional law practice.

Under the name Fisher Legal, Shani Fisher will advise clients on a variety of corporate, transactional and leasing and finance matters. This includes aircraft financings, operating leases and aircraft sale agreements.

Smith's last position was in-house legal counsel at ILFC (now AerCap). She left in April 2015.

Before joining ILFC she was a senior associate at Fulbright & Jaworski (now Norton Rose Fulbright) in its New York equipment finance group.

Spirit appoints new president and CEO

Spirit Airlines has appointed Robert Fornaro as president and chief executive officer (CEO).

Fornaro has sat on Spirit's board of directors since May 2014. He was president and CEO of AirTran Holdings from 2007 to 2011, before he became a consultant to Southwest Airlines and AirTran Airways. He has also held senior positions at US Airways and Northwest Airlines.

Fornaro succeeds Ben Baldanza, who has served as president and CEO since 2006.

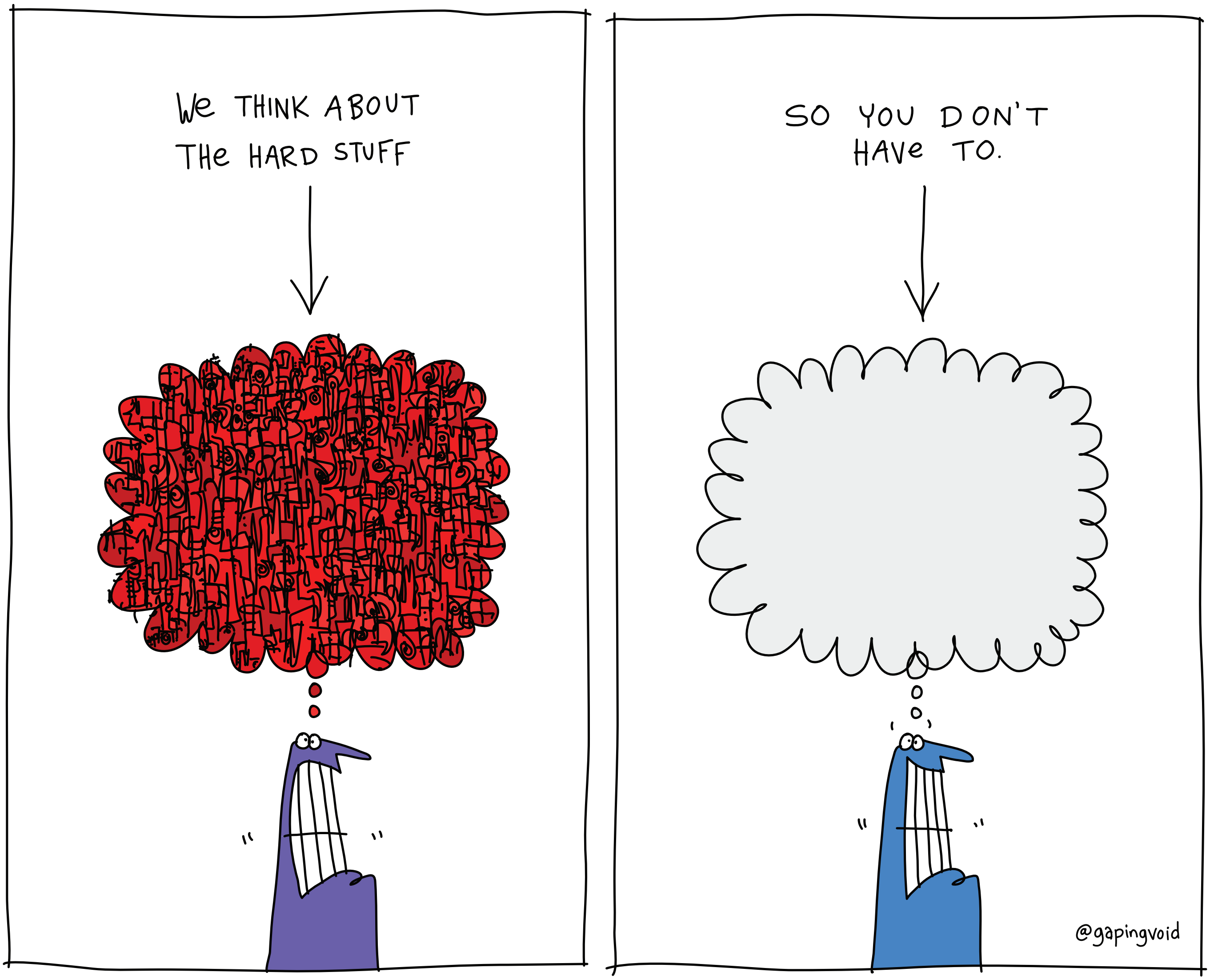
Gecas names new SVP cargo programmes

US lessor Gecas has appointed Rich Greener as senior vice-president (SVP) cargo programmes, according to a statement from the company.

Greener will have global responsibility for building on and executing Gecas' cargo aircraft strategy.

He was previously SVP of speciality markets at Gecas, which included regional aircraft. Greener joined the lessor in 2001 from BAe Systems Airbus, and has more than 25 years' aerospace experience.

In July, Gecas announced plans to convert up to 20 737-800NG passenger aircraft to freighters beginning this year.



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NEWS

Airlines

Hawaiian prepaid $124m in debt

Hawaiian Holdings, the parent company of Hawaiian Airlines, prepaid $124 million of existing debt in the fourth quarter of 2015, according to its fourth-quarter and full-year earnings report.

The company posted net income of $37.9 million for the fourth quarter, compared to $11.1 million in the same period in 2014. The net income for the full year was $182.6 million, compared to $68.9 million in 2014.

As of December 31, the company had unrestricted cash, cash equivalents and short-term investments of $560 million.

Mark Dunkerley, president and chief executive officer, says: "The strong financial results validate the decision we made to grow rapidly in the last five years. The cash flow we generated in 2015 was used to pay down a portion of the debt we took on to finance our growth and for the further strengthening of our balance sheet."

Chinese airlines expect 2015 profit increases

Chinese carrier Spring Airlines said it expects to report a 50% to 60% year-on-year increase in net profit for 2015.

The Shanghai-based low-cost carrier made Rmb884.2 million ($147 million) in 2014.

The company said in a statement that the performance growth was mainly because of low crude oil prices, as well as domestic and foreign business travel and tourism growth. Improved penetration rates in Japan, South Korea and South-East Asia also contributed.

China Southern Airlines (CSA) is also likely to report a year-on-year net profit increase, of between 110% and 130%, in 2015.

The Guangzhou-based carrier made Rmb1.8 billion ($295 million) net profit in 2014 and earnings per share of Rmb0.18.

In a filing to the Hong Kong Stock Exchange, CSA attributed the expected increase to the strength of the Chinese civil aviation transportation market and lower jet fuel prices.

CSA also reduced its debt ratio denominated in US dollars, therefore reducing the exchange losses from the recent renminbi devaluation.

IAG issues two sale/leaseback requests

International Airlines Group (IAG) has issued two requests for proposals (RFPs) for A330s and 787-9s to lessors, according to sources. The RFPs are for two of IAG's subsidiary airlines: Aer Lingus and British Airways.

The first RFP is for the financing of two A330-300s that IAG is receiving for Aer Lingus this year. The second is for the financing of British Airways' 787-9s. IAG confirmed that British Airways is taking delivery of the aircraft this year but declined to comment on the RFPs when contacted by *Airfinance Journal*.

Along with the Dreamliners, British Airways is also due to take two A380s this year. Aer Lingus will be taking a 757 on damp lease (aircraft, flight crew and maintenance), in addition to the two A330-300s.

Tigerair reports S$6.8m profit

Tigerair has reported a net profit of S$6.8 million ($4.8 million) for the third quarter of the 2016 fiscal year, according to a statement from Tiger Airways Holdings Limited.

The Singapore-based low-cost carrier reported a net profit of S$2.2 million in the same quarter of the last fiscal year.

Tigerair has a fleet of 21 A320s and two A319s. The airline said in a results presentation that this fleet composition is not expected to change before March 31.

Atlas Air agrees $110m Southern Air deal

Atlas Air Worldwide Holdings, the parent company of Atlas Air, has agreed to buy the parent company of Southern Air.

According to a company announcement, the deal is an all-cash, debt-free transaction valued at about $110 million.

The deal, which is subject to closing conditions and approval by the US Department of Transportation, is expected to close in the next few months.

As of last November, Atlas Air's fleet consisted of 56 Boeing widebody freighters. Southern Air operates five 777-200Fs and five 737-400Fs under agreements with DHL Express.

Daniel McHugh, Southern's chief executive officer, says: "By joining the Atlas Air family of companies, Southern Air Holdings will now have a strong and viable parent to enable us to continue to grow."

ANA to buy stake in Vietnam Airlines

All Nippon Airways (ANA) Group has entered into a memorandum of understanding to buy an 8.8% stake in Vietnam Airlines worth about $108 million, according to a statement from ANA Group.

ANA Group will send one member to the board of Vietnam Airlines and will also provide Vietnam Airlines with operational and management knowhow to help support service quality.

Vietnam Airlines operates 66 flights weekly on 10 routes between Japan and Vietnam. ANA operates 14 flights weekly on two routes between the countries.

NEWS

Airlines

New South Korean carrier gets AOC

Air Seoul, a new low-cost carrier in South Korea backed by Asiana Airlines, has received its air operator's certificate (AOC) from the country's Ministry of Land, Infrastructure and Transport.

FedEx's TNT takeover gains approval

FedEx's €4.4 billion ($4.8 billion) takeover of TNT Express has been approved by the European Commission (EC), according to a statement.

The EC had already signalled that it would not resist the takeover, but the recent announcement formalizes its approval.

Explaining its decision, the EC wrote that there are not any competition problems because "FedEx and TNT are not particularly close competitors and because the merged entity will continue to face sufficient competition from its rivals".

The deal is awaiting approval from other authorities, which include Brazil and China.

In a joint statement the companies wrote: "FedEx and TNT Express continue to work constructively with the regulatory authorities to obtain clearance of the transaction in the remaining jurisdictions, including Brazil and China. FedEx and TNT Express are making timely progress and continue to anticipate that the offer will close in the first half of calendar year 2016."

Local investors to buy Island Air

Two Hawaiian investment companies are set to buy a controlling stake in Hawaiian regional airline Island Air.

The buyers, PaCap Aviation Finance and Malam Investments, are both managed by local investment firm PacifiCap.

Ohana Airline Holdings (OAH) will retain a non-controlling interest in the carrier. OAH is the holding company owned by US billionaire Larry Ellison. According to Forbes, Ellison is the world's fifth-richest person with a net worth of $54.3 billion.

According to a statement from the investment companies, the sale "will support Island Air's successful restructuring and turnaround efforts with the recapitalization needed to acquire new aircraft and expand inter-island service for the people of Hawaii".

Japan Transocean Air takes first 737-800

Japan Transocean Air (JTA) has taken delivery of its first of 12 737-800s.

JTA, which is based in Naha, Okinawa Prefecture, has an order for 12 737-800s with Boeing to replace its fleet of 737-400s.

Azul receives ATR 72-600

Azul has received a new ATR 72-600 on lease from Nordic Aviation Capital (NAC). The carrier received another ATR 72-600 on lease from NAC in December.

Avianca names interim CEO

Avianca Holdings, the parent company of Colombian airline Avianca, has named Álvaro Jaramillo Buitrago as interim chief executive officer (CEO).

He will perform this role until the company finishes the recruitment process for the position, according to an announcement. It adds that the process is in its final stage.

Monarch's CFO steps down

Barry Nightingale has resigned as chief financial officer (CFO) of Monarch Airlines, according to a statement from the company.

Chris Bennett, the carrier's deputy CFO, will succeed him. Bennett was formerly CFO at bookmaker Betfred Group and UK Car Group.

Emirates extends lease for 777-300ER

UAE carrier Emirates has extended a lease agreement for a 777-300ER.

The widebody was delivered to Emirates in June 2009. It is owned by the fund Doric Flugzeugfonds 5 and its lease has been extended earlier than contractually agreed.

The lease with Emirates had an initial term of 10 years and will now run until 2021.

Allegiant reshuffles management

Allegiant Air has promoted Jude Bricker to the position of chief operating officer (COO).

The US carrier has also expanded the responsibilities of its current chief financial officer Scott Sheldon.

Bricker succeeds Steve Harfst. He will oversee flight operations, maintenance and safety, in addition to his role overseeing network and fleet strategy.

Sheldon will be in charge of the operation control centre, as well as finance, procurement and customer operations.

NEWS

Manufacturers

MRJ delay 'will not increase competition' with E2s

The delayed delivery of the first Mitsubishi Regional Jet (MRJ) will not put the aircraft in direct competition with Embraer's E2 series, a senior MRJ source claims.

The MRJ is now scheduled to deliver in the second quarter of 2017, after a one-year delay announced in December 2015. This means it will enter service at a similar time to Embraer's E190-E2 aircraft.

The MRJ source, speaking to *Airfinance Journal*, argues that because the E190 is bigger than the MRJ90, it will not compete directly with the aircraft type.

"Our real competitor is the E175-E2," says the source, who adds that this type is not expected to deliver until 2020, giving MRJ a time advantage.

A second MRJ source tells *Airfinance Journal* the company does not expect any further major delays to the MRJ's first delivery.

"Currently, we don't have any big issue to threaten that renewed delivery schedule," says the source.

Delivery of first A320neo marks new era

Lufthansa has taken delivery of the first A320neo from Airbus. The aircraft is the version powered by the Pratt & Whitney PW1100G geared turbofan engine.

The first A320neo was originally earmarked for Qatar Airways, but launch customer status was switched to Lufthansa after an incident during hot-weather testing in October.

The first A320neo powered by the competing CFM Leap-1A engine is scheduled to deliver to launch customer Virgin America later this year.

The combined A320neo order book for the two engine variants is in excess of 3,300 aircraft.

Boeing Capital predicts financing innovation in 2016

Boeing Capital Corporation expects airlines and lessors to have access to efficient sources of financing throughout 2016.

The company says that new entrants into the aircraft financing industry will boost innovation, resulting in a wider range of funding options. The manufacturer expects the industry to finance $127 billion of aircraft deliveries, compared to $122 billion in 2015.

In a statement about its 2016 Current Aircraft Finance Market Outlook, the company also said:

- it expects lessors to continue selling portfolios to capital markets participants, which will increase capacity for aircraft acquisitions;
- lessors will support about 40% of all deliveries, securing most of their leverage through the capital markets. Boeing Capital expects lessors to use issuances by parent companies, unsecured offerings and asset-backed security transactions;
- the volume of commercial debt is likely to decrease because of tighter global regulations and US dollar pressures. However, commercial bank debt will continue to play a vital role in aircraft finance; and
- the strength of commercial financing markets means that export credit usage will remain at historically low levels.

Tim Myers, president of Boeing Capital Corporation, says: "We've seen a number of new entrants in the aircraft financing industry over the past few years and we expect to see more this year as commercial aircraft continue to be seen as attractive, stable assets. One of the exciting things to watch this year will be the way existing participants respond to the new entrants, driving innovation and creating more funding options for airlines and lessors."

Brégier: we are testing A380 secondary market

Airbus is working with lessors to test the A380 in the secondary market, the manufacturer's chief executive officer told *Airfinance Journal* at the 2016 Airbus Annual Press Conference in Paris.

Asked whether Airbus will have to step in to help remarket the aircraft, Fabrice Brégier said: "We formally don't have to step in – we aren't the owners of these aircraft. But we are interested in this second-hand A380 market."

The first A380s come off their leases in 2017 from Singapore Airlines. It is not yet clear whether the carrier intends extending the leases of the aircraft, or the aircraft will be returned to the lessors.

Brégier added: "The secondary market is a new opportunity for airlines who are tempted to acquire the A380 but are a bit frightened by the cost of capital, because, of course, this is the biggest and most expensive aircraft. We are helped by some partners and leasing companies and we are testing that bit of the market."

ANA is the newest A380 customer, having ordered three A380s at the end of 2015.

>>>

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NEWS

Manufacturers

Rolls-Royce launches new service agreement

Rolls-Royce has launched a new engine maintenance service for its customers, the UK manufacturer has announced.

The new product, SelectCare, offers customers a certain number of engine overhauls at a fixed price, and also allows them to choose from a selection of other services.

The manufacturer says that SelectCare fits between its basic maintenance repair and overhaul (MRO) services and its more comprehensive TotalCare packages.

The manufacturer says about 90% of new large engine customers opt for a TotalCare arrangement. Under the TotalCare services, in return for payments from the customer on a dollar-per-flying-hour basis, Rolls-Royce bears the cost for all scheduled engine overhauls and unexpected events during the term of the agreement.

Rolls-Royce customers under the more basic MRO service agreements receive basic aftermarket support and pay for the time and materials required for each engine overhaul.

Rolls-Royce says that SelectCare customers can now decide how many engine shop visits they will require and pay for those accordingly. They can also select other engine services.

American Airlines is the launch customer for SelectCare, having chosen it to service its fleet of RB211-535 engines, which power the carrier's fleet of 757s.

Rolls-Royce has a history of launching engine services with American. In 1999, the airline became the first customer for TotalCare.

Iran in talks with Airbus to buy 127 jets

Iran is looking to strike a deal with European manufacturer Airbus to buy 127 aircraft to replace the country's ageing fleet, according to Reuters.

Asghar Fakhrieh Kashan, Iran's deputy transport minister, told the news agency that the 127 aircraft will consist mainly of new jets and will include eight A380s and 16 A350s.

He added that Iran was interested in regional aircraft, including the Bombardier CSeries and Mitsubishi's MRJ, and had been in contact with both manufacturers.

Airfinance Journal reported in September that Iranian carriers had met with Russian aircraft lessor Ilyushin Finance to discuss the potential lease of Sukhoi Superjet 100s.

International sanctions on Iran were lifted on January 16 after a watchdog confirmed it had complied with a deal that required it to cut back its uranium enrichment programme and prevent it from developing nuclear weapons.

MRO NEWS

BOC Aviation contracts for 30 A320s

BOC Aviation has placed an order for 30 A320-family aircraft.

The order comprises 18 A320neo-family and 12 A320ceo-family jets.

Gulf Air firms 29 A320neo order

Gulf Air has placed an order for 29 A320neo-family aircraft, according to a statement from Airbus.

The aircraft comprise 17 A321neos and 12 A320neos. An Airbus spokesman tells Airfinance Journal that the narrowbody aircraft will begin delivery in the second quarter of 2018.

Calc to take two additional A320s

China Aircraft Leasing Group (Calc) has ordered two additional A320-200ceo aircraft from Airbus.

The Hong Kong lessor said it entered into a second aircraft purchase agreement with the French manufacturer, after an agreement for acquiring two aircraft signed on December 31.

Calc's portfolio consists of 63 current-generation Airbus and Boeing aircraft with an average age of less than four years.

Air China goes for six more 777-300ERs

Air China has placed an order with Boeing for six additional 777-300ER aircraft, according to a statement from the manufacturer.

With this new order, Air China will increase its unfilled aircraft orders with Boeing to 90 units, which include orders for new 787-9 Dreamliners.

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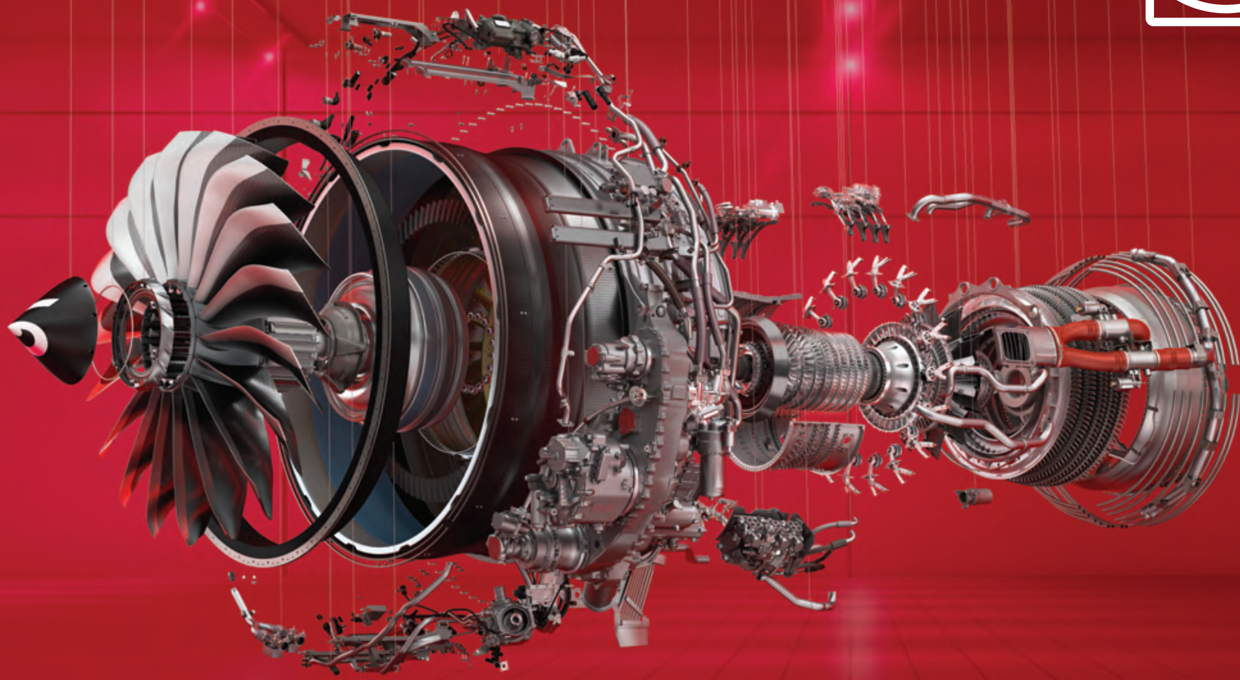

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NEWS

Financiers

Intrepid to add narrowbodies

US lessor Intrepid Aviation is looking to increase the percentage of narrowbodies in its fleet, chief financial officer Michael Lungariello tells *Airfinance Journal*.

Lungariello says the lessor's target is to increase its narrowbody exposure to about 30% of its owned fleet by the end of the first half of 2016, although he stresses that this plan is flexible.

Lungariello says Intrepid is likely to do sale/leaseback deals to purchase the extra narrowbodies, but will remain opportunistic.

According to AtlasData, Intrepid's fleet consists of about 30 aircraft, including A330-300s, A330-200s, 777-300ERs and 787-8s. It owns just one narrowbody: an A321 on lease to Taiwanese carrier Eva Air.

Airfinance Journal also understands that Intrepid has signed letters of intent with a major carrier for the placement of seven A330-300s that were on lease or planned to deliver to Skymark. The airline cancelled its lease agreements with Intrepid in February 2015.

Lungariello did not reveal the name of the major carrier when questioned, but Intrepid is expected to make a formal announcement within the next few weeks.

Veling set to take nine aircraft by end March

Mauritian lessor Veling is looking to add nine aircraft to its fleet by the end of March, according to a source.

The source adds that the aircraft will consist of a mixture of widebodies and turboprops.

The leasing company will fund the new acquisitions through its recent $1 billion investment from a US private equity firm.

AerCap closes $1.3bn of credit facilities

Dutch lessor AerCap has closed $1.3 billion of new credit facilities, according to a statement from the lessor.

The proceeds from the facilities will be used to acquire new narrowbody and widebody aircraft delivering through to the end of 2016.

An $800 million facility was signed to finance a portfolio of 13 aircraft over a nine-year term. A source on the deal tells *Airfinance Journal* that the aircraft include four 737-800s, four A320neos, three 787-9s and two A350s.

The facility was coordinated by Commonwealth Bank of Australia and Crédit Agricole Corporate and Investment Bank (CA-CIB), and was co-arranged by Bank of America, Crédit Industriel et Commercial, DekaBank Deutsche Girozentrale, ING Bank, KFW Ipex-Bank, Helaba, National Australia Bank and Santander. CA-CIB acted as facility agent.

An additional $500 million limited-recourse facility was arranged by Wells Fargo and will finance a portfolio of nine aircraft over a five-year term.

AerCap completed $6.7 billion-worth of financing transactions in 2015.

Leung: Hong Kong to become aviation finance centre

Hong Kong's chief executive Leung Chun-ying boosted the territory's ambitions to become an aviation finance and leasing hub in his 2016 policy address.

"To further strengthen Hong Kong's edge as a major regional aviation hub, the airport authority will establish a civil aviation academy to nurture local and regional aviation management talent," said Leung.

He added: "The government is formulating measures to develop Hong Kong into a centre for aerospace financing."

The Hong Kong government's economic development commission, set up by Leung in 2012, is studying how to develop the territory into an aircraft finance and leasing hub.

The commission's first victory was to secure a 2% withholding tax reduction for China-Hong Kong aircraft leasing transactions. Another proposal understood to be under consideration is a reduction in corporation tax.

Omani lessor launches $208m leasing fund

Oman Brunei Asset Management (Obam) has launched an OR80 million ($208 million) aviation-leasing fund, that will be listed on the Muscat Securities Market with 8,000 shares at OR10,000 each.

Oman Aircraft Leasing Fund 1, offered via a private placement, is a 12-year closed-end mutual fund designed for local and regional financial institutions and ultra-high net-worth individuals with OR1 million or more to invest.

The fund is sponsored by Oman Brunei Investment Company (Obic), which is a cornerstone investor with a subscription of OR7.7 million, and will be managed by Obam, which will provide fund management and lease management services.

Obic, along with other initial investors, is subscribing for 1,540 shares for OR15.4 million. The total private placement is for 6,460 units at OR10,150 a share (including offer expense).

Simon McLean, Obam's chief executive officer, says: "We have carefully structured the fund to provide the investors with an attractive stable running dividend yield of 7.5% or more secured on young and fuel-efficient in-production commercial aircraft on lease to top-tier airlines globally."

Oman Arab Bank Investment Management Group is the fund's issue manager and sole collecting bank. Obam and Obic were advised on the fund by law firm Curtis, Mallet-Prevost, Colt & Mosle.

Obam, previously known as Oman Brunei Aviation Leasing Company, is Oman's first aircraft leasing and asset management company.

NEWS

Financiers

Bohai Leasing invests $1.2bn into Avolon

Bohai Leasing will invest $1.2 billion of equity capital into its new indirect subsidiary Avolon, according to a statement from Avolon.

The commitment brings Avolon's total available liquidity to $2 billion.

Bohai, a subsidiary of Chinese HNA Group, agreed in September to buy Avolon for $31 per common share. Avolon's shareholders approved the merger the following month and the acquisition was completed on January 8.

After the completion of the merger, Avolon assumed management of Hong Kong Aviation Capital (HKAC). Avolon is now the core aircraft-leasing brand for Bohai Leasing and HNA Group.

Domhnal Slattery, the founder and chief executive of Avolon, has relocated to HKAC's Hong Kong office.

Bank of China shareholders approve BOC listing

Shareholders of Bank of China (BOC), the parent company of Singapore-based lessor BOC Aviation, have approved the listing of the lessor on the Hong Kong Stock Exchange.

After the listing, BOC will retain a substantial majority shareholding in the lessor, which will remain a subsidiary of the bank.

BOC says the proposed listing remains subject to, among other things, approval by the relevant regulatory authorities.

BNP Paribas sells three PW127 engines

French bank BNP Paribas sold three Pratt & Whitney PW127 engines to a French engine lessor in December, according to a statement from the sale arranger, Slovakian-based Aelis Group.

The engines were previously fitted on two ATR 72-500s operated by the now-defunct Kingfisher Airlines, which was once the second-biggest carrier in India.

In February 2014, Kingfisher was ordered by the Indian government to stop flying domestically and internationally after falling into financial difficulty and failing to keep up with fuel costs.

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NEWS

Deals

Aeromexico mandates financiers

Aeromexico, the flag carrier of Mexico, has mandated financiers for Japanese operating lease with call options (Jolcos) for two 787-8 aircraft, according to sources.

Sumitomo Mitsui Finance and Leasing and SMBC Aviation Capital are arranging the first aircraft. NBB and Natixis are arranging the second aircraft.

The aircraft are expected to deliver in the first quarter of 2016.

Aeromexico is a new name for Japanese investors, which typically prefer to invest in top-tier carriers. Major users of Jolcos include IAG, Lufthansa and Turkish Airlines.

A Japanese banking source commented that the recent lowering of Japan's corporate tax rate has encouraged small and medium enterprises to invest some of their extra income into Jolcos, and therefore lower-tier airlines are now able to access this market.

SkyWorks Capital is understood to be advising Aeromexico on the deal.

Finnair closes Jolco for A350-900

Finnair has closed a Japanese operating lease with call option (Jolco) financing for one A350-900, according to sources. BNP Paribas and Bank of China are arranging the deal. Century Tokyo Leasing is providing mezzanine debt. NTT Finance and IBJ Leasing are providing equity. Simmons & Simmons acted for Finnair. Clifford Chance acted for the arrangers, while K&L Gates acted for Century Tokyo Leasing. *Airfinance Journal* understands a second aircraft is also being financed with a Jolco, but that the delivery has been delayed.

"All we know is it's going to be delayed for quite some time," says a source on the deal. "I don't think it's going to close in the first quarter of this year."

Pegasus extends request deadline

Turkish carrier Pegasus Airlines has extended the deadline of its request for proposals (RFP) for A320neo aircraft, *Airfinance Journal* understands.

Pegasus is requesting offers to finance or lease 12 aircraft, according to a document seen by *Airfinance Journal*.

A source with knowledge of the process says the carrier was accepting submissions until January 28.

Biman in second stage of RFP for 777-200ERs

Bangladeshi carrier Biman Bangladesh Airlines is in the second stage of its request for proposals (RFP) to take two 777-200ERs on operating lease, a source familiar with the matter tells *Airfinance Journal*.

It is understood the carrier is considering offers from lessors and is narrowing down its shortlist.

IAG seeks backing for A320s

International Airlines Group (IAG) has issued a request for proposal (RFP) to Japanese equity providers to finance three A320-200 aircraft, according to a source who received the RFP.

It is understood that IAG is likely to have either simultaneously issued a separate RFP for the debt portion of the Jolco financing, or will later issue a debt RFP once it has received some bids for the equity portion.

Goshawk closes $470m recourse facility

Goshawk Aviation has closed a $470 million recourse facility, *Airfinance Journal* understands. The deal is secured against 17 young narrowbodies. All the aircraft are less than three years old and are on long-term leases with a range of operators, a source with knowledge of the deal tells *Airfinance Journal*.

Natixis acted as mandated lead arranger, structuring agent and bookrunner.

BNP Paribas and Bank of East Asia acted as joint lead arrangers. Crédit Agricole Corporate and Investment Bank (CA-CIB) and Mega Bank acted as joint lead managers.

Apple Bank, Chang Hwa Commercial Bank, First Commercial Bank, Hua Nan Commercial Bank and Taiwan Cooperative Bank also acted as joint managers.

Airfinance Journal understands the loan was initially intended to be about $300 million in volume, but that it was increased in size because of the large oversubscription.

Clifford Chance advised Goshawk on the deal, while Vedder Price advised the banks.

Goshawk has raised about $1.5 billion of commercial debt over the past seven months. In July 2015, the lessor closed a $605 million non-recourse secured term loan facility for a portfolio of 23 aircraft.

EMP taps Islamic and European financing

German arranger EMP structured assets has tapped Islamic and European financing for the purchase of a new A380-800 as part of a sale/leaseback to UAE carrier Emirates.

Airfinance Journal understands the widebody aircraft delivered in December and is on lease for 12 years.

Doug Brennan, chief executive officer of Aviation Finance Company, tells *Airfinance Journal* that his company was initially given the mandate to buy the aircraft, but EMP later got involved.

EMP, working with lenders in Germany and Dubai, arranged the purchase of the aircraft. EMP arranged the structured financing for its own Irish special purpose vehicle lessor which purchased the aircraft.

The deal consists of a traditional senior loan provided by Deka Bank. Dubai Islamic Bank provided a pari passu senior tranche, as well as a 40% Islamic mezzanine tranche that uses a Murabaha commodities facility to maintain compliance with Islamic law.

NEWS

Deals

Lufthansa issues Jolco RFPs for Airbus jets

German carrier Lufthansa is seeking Jolco financing for two new A321s and one new A380, according to sources.

Airfinance Journal understands the request for proposals (RFP) were issued in December for equity financing only. A separate RFP seeking debt financing for the aircraft will be issued later.

The equity RFP has been sent out to Jolco investors and arrangers.

ICBC FL agrees second joint French tax lease

ICBC Financial Leasing (ICBC FL) has closed a second joint French tax lease and commercial loan financing for a 737-800 aircraft, according to a source.

The deal is structured through a special purpose company set up by ICBC FL in the Tianjin Free Trade Zone.

Crédit Agricole Corporate and Investment Bank (CA-CIB) acted as mandated lead arranger, security trustee and facility agent. CA-CIB and National Australia Bank acted as lenders, and CA-CIB (China) Limited, Tianjin Branch, acted as account bank.

Norton Rose Fulbright advised the lenders and William KK Ho & Co advised ICBC

SAS closes financing for five A320neos

Scandinavian Airlines (SAS) has closed a predelivery payment financing (PDP) with DVB Bank for five A320neos, which the airline has ordered directly from Airbus.

The PDP facility is structured as a revolving credit facility under which SAS may draw up to $46 million.

The loans under the PDP facility will be repaid on delivery of each aircraft to SAS. The first aircraft will deliver in September, according to an airline source.

Norton Rose Fulbright acted as legal counsel for SAS, while Stephenson Harwood acted for DVB Bank.

SAS has 30 A320neos on order, of which DVB Bank has financed the PDPs of 11. *Airfinance Journal* understands SAS is not approaching the market to finance the PDPs of the remaining 19 Neos on order.

>>>

NEWS

Deals

THY agrees deal for four 737-800s

Turkish Airlines (THY) has agreed a four-aircraft Japanese operating lease with call option (Jolco) deal with two Japanese financiers, *Airfinance Journal* learns.

The debt will be fully underwritten by Bank of Tokyo Mitsubishi (BTMU), while Century Tokyo Leasing will provide the equity for all four aircraft, according to a source.

The first two aircraft are expected to deliver in February. The two remaining aircraft are expected to deliver in April.

THY also has mandated banks for 29 of its 2016 aircraft deliveries covered by two large request for proposals (RFPs) last year.

In June 2015, the carrier requested offers for 43 incoming aircraft and one spare engine. One of the RFPs sought proposals for incoming Boeing deliveries, while the other sought proposals for incoming Airbus deliveries.

The airline has now mandated banks to finance 29 out of the 43 aircraft, according to an airline source. It has also mandated a bank for the financing of one spare engine.

All the aircraft are scheduled for delivery this year.

Airfinance Journal understands that THY is in discussions with banks for the rest of the aircraft in the RFP.

Minsheng closes seven-aircraft financing

Minsheng Financial Leasing has closed a seven-aircraft portfolio financing with four banks.

The aircraft portfolio consists of three A320-200s and four 737-800s on long-term operating leases to airlines from Turkey, Spain, China and Indonesia.

DVB is acting as arranger, security trustee, facility agent and also as original lender alongside Helaba, ICBC (Asia) and Korea Development Bank.

Berwin Leighton Paisner acted for the borrower. Norton Rose Fulbright acted for the lenders.

This deal refinanced five aircraft underwritten by DVB on a bridge loan, and also marks Minsheng Financial Leasing's largest offshore portfolio financing across various lessees and jurisdictions.

SECONDARY MARKET NEWS

Bluebird Cargo seeks 737s

Bluebird Cargo is looking to acquire used 737s over the next two years, its managing director and chief executive officer tells *Airfinance Journal*.

Steinn Logi Björnsson says the carrier is looking to buy between two and four aircraft, but is also open to lease deals.

Bluebird is looking for smaller variants of the 737 family but would also consider 737-800s at the right price. He adds that the ideal aircraft would be 1993 vintage and younger.

Omni Air buys 777-200ERs

Omni Air International has entered into a sale agreement with Kenya Airways for the purchase of two 777-200ERs.

The aircraft are 2004 and 2007 vintage and are both powered by Trent 892B engines. Kenya Airways will release the aircraft in the next few months once it has completed the exit preparation. The first aircraft were expected to transfer before the end of January.

In August 2015, Kenya Airways appointed Cabot Aviation to remarket four 777-200ERs and one spare Trent engine. Mbuvi Ngunze, Kenya Airways Group's managing director and chief executive officer, says: "I am pleased that we have reached this milestone. Although we announced our intention to rationalize our fleet in line with our current position more than a year ago, it has taken a while to find a good home for our B777-200[s]."

Airstream sells ERJ145LU

Airstream International Group has arranged the sale of an Embraer ERJ145LU, the company has announced.

Airstream arranged the sale on behalf of Luxair. Regourd Aviation bought the jet.

The aircraft is the third ERJ145LU Airstream has marketed on behalf of Luxair, and the 10th Embraer regional jet that Airstream has sold or leased in 2015, the announcement added.

Amentum sells five A319s

FPG Amentum has sold five A319-100s to entities managed by Apollo Aviation Management. All five of the aircraft are on lease to easyJet. White & Case advised Apollo on the transaction, McCann Fitzgerald advised FPG Amentum and Norton Rose advised easyJet.

Airfinance Journal understands that all five of the aircraft are 2003 vintage.

DEAL OF THE MONTH

Virgin cashes in on slots

The UK airline has issued the first European bond backed against airport slots.

Virgin Atlantic is the first European airline to successfully issue a slot-backed bond.

"Regardless of the economic conditions, this sort of bond will ride the cycles and you will pay it back in year 15," says Peter Farthing, division director, head of cross-divisional projects, Macquarie. "It's addressing that concern that all airlines get into difficulty when revenue drops, when there's a macro event. This bond is really ignoring all of that, and not creating pressure on the airline during a difficult time."

Farthing is referring to Virgin Atlantic's recent £220 million ($333.8 million) bond, which is secured against the majority of the airline's take-off and landing slot portfolio at London Heathrow. The deal, which Farthing helped arrange, marked the first transaction in Europe secured against take-off and landing slots. Bonds that are secured against slots have been successfully carried out in the US and in Canada, where slots, routes and gates have been used as a package of rights by the big three US carriers in a consortium.

Realizing the potential

Virgin Atlantic wanted to diversify its funding sources, having been in operation for more than 30 years and having financed most of its fleet through operating leases. International Airlines Group (IAG), the owner of British Airways, Iberia, Aer Lingus and Vueling, previously tried to issue a slot-backed bond in 2012. The British-Spanish company later pulled out of the bond, citing lack of investor demand.

"The Heathrow slots are extremely valuable but until recently there was no real way of realizing their full financial potential," Shai Weiss, chief financial officer, Virgin Atlantic, tells *Airfinance Journal*.

"Anyone who could unleash the value of the slots in a way that creates long-term capital and value for an airline would greatly benefit. We were just fortunate to be the first airline to have come up with the structure and attracted blue-chip investors to help us out on this one," adds Weiss.

The notes were issued by Virgin Atlantic International Limited (Vail), a wholly owned subsidiary of Virgin Atlantic, which the airline established in conjunction with the completion of the deal. Vail operates flights from London Gatwick to several Caribbean destinations and will operate

"The environment is now supportive of more innovative structures and it's interesting to juxtapose this in the context of the potential expansion of Heathrow Airport into a third runway."

Shai Weiss, CFO of Virgin Atlantic.

two A330-300 aircraft.

A duly licenced airline was set up instead of a special purpose vehicle (SPV). In the extreme event of Virgin Atlantic going into default, a simple SPV will not suffice to take the slots in a worst-case scenario. Only an airline is entitled to obtain the slots.

Bond structure

The bond had a tenor of 15 years. The notes are split between two tranches: £190 million A1 notes and £30 million A2 notes. The A1 notes have a weighted average life of 12 years, while the A2 notes have a weighted average life of 10 years.

Weiss confirms to *Airfinance Journal* that the bond is "secured against the majority of Virgin Atlantic's Heathrow slots". He adds that between Gatwick and Heathrow, Virgin Atlantic has about 40 slots.

"One of the selling points here is that we have true long-term capital," says Macquarie's Farthing, "and the reason why we were able to push the average weighted life was because the asset, unlike an aircraft, is appreciating value, rather than a depreciating value. We were able to persuade investors that there was enough head room throughout the term of the bond."

This meant that the bond's amortization profile is very slow in the early years, but there is a substantial bullet at the end payable in year 15.

Shai Weiss, CFO of Virgin Atlantic.

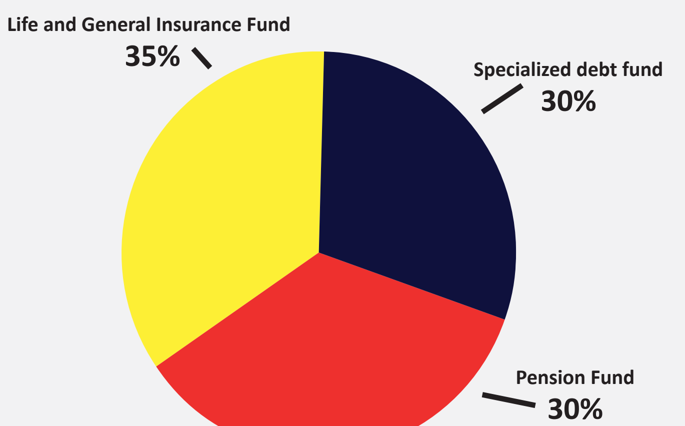
"We were comfortable that there would be enough value in the portfolio always to be covered and that the investors did not need to receive a significant amount of principle in the short term," adds Farthing.

The bond, which priced at par, has an interest that is payable semi-annually. Weiss would not reveal the overall coupon of the notes but says that Virgin paid "a very attractive rate" for a secured bond with a maturity of 15 years. Farthing describes the coupon as "super competitive" and "favourable" when compared to other capital markets products such as enhanced equipment trust certificates.

The reason why the tenor is longer on the slots deal than a typical aircraft transaction is because the deal is seen more as an infrastructure transaction, in which the tenors are often longer than typical aircraft deals.

The bond attracted blue-chip investors including Pension Insurance Corporation, a client of Hastings Funds Management (UK), Standard Life Investments and

TYPE OF INVESTOR



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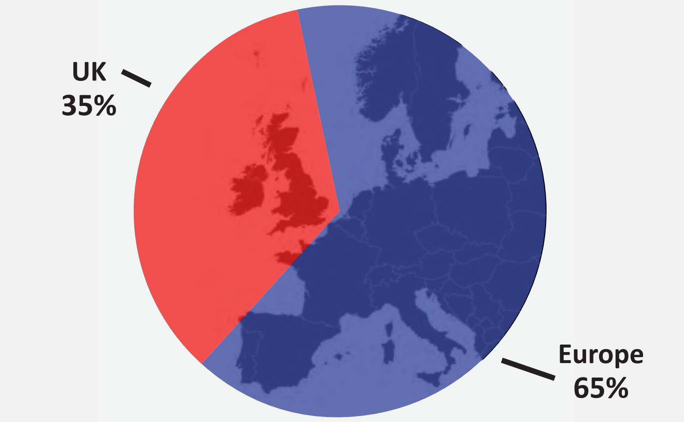

Source: Macquarie

> "This deal shows that slots are valuable assets held by airlines and that the regulators are accepting that they have a monetary value and can be used in innovative ways by airlines in the context of their financial requirements."

Rex Rosales, partner and global head, transport sector, Watson Farley & Williams.

Edmond de Rothschild Asset Management (UK) Limited.

Macquarie Corporate and Asset Finance acted as sole arranger. Moody's provided a private rating for the senior notes. IBA advised Macquarie on the slot valuations and related consultancy.

Herbert Smith Freehills advised Virgin Atlantic. Watson Farley & Williams provided legal advice to investors, as well as advice to the trustee and issuer. Carey Olsen advised on the Jersey security law.

Value of Heathrow

The slots deal required a lot of effort to close and had about 60 people involved in it at one time. Virgin and the arrangers approached the transaction in a very targeted way – they wanted investors that were looking at longer maturity, and were interested in airports and infrastructure.

"The environment is now supportive of more innovative structures and it's interesting to juxtapose this in the context of the potential expansion of Heathrow Airport into a third runway," says Weiss. "The fact that it's potentially happening, and the investors knew this, just shows you the value of Heathrow as a hub, the value of slots at Heathrow and the innovation of the structure we've come up with."

Better environment

Farthing explains to *Airfinance Journal* why they still chose to go ahead with the slot-backed bond despite IAG's previous failure.

"It is a better environment for this kind of deal now than it was back then," he says. "The global financial crisis is no longer in the forefront of people's minds. I think, in 2012, there was a lot of concern whether the Greek sovereign crisis would cause the European Union to collapse entirely. I think we understand now the risk's much better, and I think the market's probably assessed the risk and incorporated it into some of the analysis they've done."

Unlike IAG's attempted slot deal, the Virgin transaction was private, giving the airline and the arrangers more freedom to find suitable investors for the bond. The arrangers were able to produce the execution risk by speaking to sophisticated investors and were able to make sure the structure was seen as attractive to them. IAG did not have the same freedom to do that with a public issuance.

"A lot of investors said that it was great we had a private rating from an agency. It's not essential, but they were the guys who stuck around, who were doing their own analysis and understood the value of the asset. They really got their teeth into the detail," says Farthing.

"I think this transaction shows the continued liberalization of the slot regime," says Rex Rosales, partner and global head of Watson Farley & Williams' transport sector.

He adds: "It shows that slots are valuable assets held by airlines and that the regulators are accepting that they have a monetary value and can be used in innovative ways by the airlines in the context of their financial requirements. At one point it was unclear whether airlines could trade slots for monetary consideration, but that situation has evolved, and I guess this is just a continuation of that trend – that slots have a value that the airlines can tap into."

HOW DO YOU DETERMINE A SLOT'S VALUE?

When speaking to *Airfinance Journal*, one banker jokingly called slot valuation "a dark art", referring to the difficulty of determining the value on a non-physical asset. But to be able to complete the transaction successfully, Virgin and the arrangers needed to determine what the value of their slot portfolio was.

Owen Geach, chief commercial officer of the International Bureau of Aviation (IBA), explains how his company advised on the valuation of Virgin's take-off and landing-slots at Heathrow.

"To be able to value slots at an airport, slot trading has to be permitted. If it was somewhere like South Africa, where slots aren't trading, it's very hard to put a value on it. With Heathrow being the world's premier airport, the slots are in high demand – they're at 100% capacity pretty much all the time, so when an airline wants to acquire or relinquish slots, there's a robust secondary market."

IBA analyzed past slot trades, current market conditions and what factors influenced the value of the slots. Geach estimates that a slot pair at peak time at Heathrow Airport for a daily service is worth about $15 million.

"London Heathrow has peak, mid- and off-peak times – meaning values slide up and down based on the demand for a particular time of the day," says Usman Ahmed, senior aviation analyst at IBA.

Owen Geach, CCO of IBA.

"The fundamentals behind this must be fully understood to determine a slot value." He adds: "Then we have to look at potential revenue and profit that can be earned by acquiring a slot over a five-year and 10-year period. This is done for a regional route and for a long-haul route with various aircraft sizes to obtain the number of data points."

Ahmed adds that a daily slot pair having a fixed time has more value than a slot pair time that changes every day or is less frequent.

Geach believes that the potential expansion of Heathrow will not cause the slot values at the airport to depreciate.

He says: "We think that demand is greater than supply. Even if we create another runway at Heathrow, it will not have a significant impact on the trading value of slots there."

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ANALYSIS

Korean investors turn to aircraft

Michael Allen explores the trend of South Korean institutional investors increasing their appetite for aircraft investment.

South Korean institutional investors are getting fed up with the low returns available in the shipping industry and bond markets and are turning towards the more lucrative returns on offer from aircraft investment.

In 2014, KDB Daewoo Securities became the first securities firm in South Korea to undertake the sale/leaseback of an aircraft by investing in Finnair.

"There's not really much money to be made in ship financing," says Shukor Yusof, founder of Endau Analytics and a former aviation journalist.

"The margins are really thin. You're lucky to get 10 or 15 basis points, I guess."

The main players tapping the aircraft financing market are insurance companies and pension funds rather than banks. These institutional investors are more flush with cash than the banks, and insurers have more leeway to operate out of international jurisdictions than banks do.

Law firms are also tapping into the Korean financing market. White & Case opened a new office in Seoul on November 4. A company source told *Airfinance Journal* last year that the firm is looking to move into aircraft financing deals in South Korea.

Structure

Compared to neighbouring Japan, which has a robust Japanese operating lease (Jolco) market, Korean financing structures – at least for now – tend to be comparatively simple. Deals tend to take the form of "very simple finance lease structures", says Dewey Yee, the head of Bridge Partners' Aerospace Finance/Leasing Advisory.

"We're looking into potential tax leases in Korea but that's all very preliminary," he says.

Similar to the Jolco, the structure offers opportunities for investors who might not have a specific interest in aviation or aircraft. However, the structures do not share the complexity of Jolcos, which have multiple debt and equity investors.

Looking for liquidity

In March 2015, Etihad Airways agreed a finance lease deal for one A380, supported by South Korean institutional investors. Magi Partners and its South Korean associates Youjee Partners arranged the transaction for the Abu Dhabi-based airline. The deal provided 100% financing for the aircraft through a 15-year fixed coupon full payout finance lease.

The financing of Etihad's A380 with South Korean institutional investors was a significant deal, but financings of this asset class may be limited in future as investors become more knowledgeable about the industry.

Airfinance Journal understands that assets like A380s would not typically be considered as ideal an investment as other asset types, but for now at least Korean investors seem more concerned about the airline credit than the asset class.

Focus on South-East Asia

South Korea's immediate neighbours China and Japan do not present the best opportunity for investors in the country. China already has well-established sources of financing from both local and international banks. Japan also has this, coupled with the problem of historical animosity and cultural issues between Japan and South Korea.

South-East Asia, with its burgeoning low-cost carrier market, is a more attractive option for Korean investors.

Endau Analytics' Yusof mentions the Vietnamese market – and specifically low-cost carrier VietJet – as a place where Korean investors are keen to put their money.

"[Korean investors] seem to have found an interest in the Vietnamese market at the end of the last quarter," he says.

"If you look at Vietnam and VietJet, they're taking delivery on average every quarter easily five or six aircraft. The Koreans have traditionally a long relationship with Vietnamese corporates not just in aviation but also infrastructure and shipping."

Sources close to Vietjet have told *Airfinance Journal* that, while the carrier is certainly eyeing the South Korean financing market with interest, this is only one of a range of financing options the airline is looking at. It has even tentatively considered Islamic financing, though sources are sceptical of the viability of this financing source for the airline.

"VietJet are incredibly hungry for capital," says one source.

"They are developing a finance strategy which involves tapping into all different kinds of the market. It's all about the cheapest financing available. Their chairwoman is very much of the view that they spread their finance risk by tapping all the kinds of financing in the market."

A second source adds: "VietJet only works on sale/leasebacks with lessors.

"Owning aircraft goes against what VietJet wants to do. Korean financing would mean VietJet having to take aircraft on their own balance sheet. It's not an immediately obvious product for VietJet. It starts to become a little bit too complicated."

An embryonic stage

While there is certainly a good deal of appetite in the market for Korean money, it should be seen as a supplement to other forms of financing – it is still sufficiently small that it cannot be treated as a cure-all for the financing requirements of airlines.

Mario Jacovides, global head of Allen & Overy's structured and asset finance group, says the South Korean aircraft finance is still in an "embryonic" stage and he does not think Korean investors can solve all the finance requirements of the market.

"I don't think they're the shining white knight that's coming to the rescue," he says. "They're just another new player that's interested in the market and it's good to see new entrants coming in."

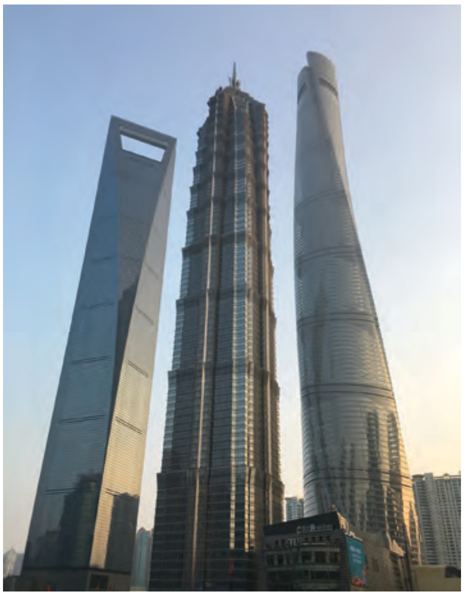
But Bridge Partners' Yee thinks Korean investors are fast learners and could quickly become savvy.

"Koreans are going to become very smart investors," he says. "I think they're becoming very quickly sophisticated – at least they're asking me a lot of questions."

CHINA

Chinese lessors at risk from foreign debt reforms

Michael Allen explains how the Chinese government's reforms to foreign debt raising could inadvertently affect Chinese lessors with offshore subsidiaries.



For Chinese companies, raising foreign debt has never been as simple a task as it has been for their counterparts in more financially liberal jurisdictions. The country's financial system is highly regulated and at least three government bodies monitor foreign debt raising: the National Development and Reform Commission (NDRC), the Ministry of Finance and the State Administration of Foreign Exchange (SAFE).

In September, the NDRC issued new guidelines (Circular 2044) which offered some hope that cumbersome regulations requiring companies to seek NDRC approval for each instance of foreign debt raising would be lifted. A report by law firm Linklaters describes these old regulations as "the principal obstacle for direct issuances by Mainland entities in the international capital markets".

Under the new regulations, companies would no longer be required to apply for NDRC approval for mid- to long-term debt; rather, they can register certain information with the NDRC before incurring a foreign debt. The information includes an application report and a plan setting out the currency, size, interest rate, term, purpose of the debt and remittance detail, says a report by law firm Clifford Chance.

When the aggregate registered foreign debt reaches the stipulated annual national quota, the NDRC will make a public announcement stating that the filing of foreign debts will no longer be accepted for that year. *Airfinance Journal* understands that the NDRC has not yet set the threshold at a specific number because it first wants to monitor the situation, although it is possible that the NDRC has set the quota internally without publicising the information yet.

Uncertainty

Despite promising to liberalize foreign debt raising by Chinese companies, making it easier for them to access the financing they need, lawyers say that uncertainty lies in how these regulations are put into practice by the NDRC and that offshore subsidiaries of Chinese companies could inadvertently be hit by the new regulations.

Yao Zhou, a partner at Run Ming Law Offices in Beijing, says she has received many calls and emails from financial leasing companies and offshore banks engaged in aviation finance asking for advice about and clarification of Circular 2044.

One of the main issues that has arisen is that, although offshore subsidiaries of Chinese companies previously did not have to seek permission from the NDRC for foreign debt raising, Circular 2044 suggests they now have to. Zhou says that this could cause problems with the bond-issuing process because "time is of the essence".

"No one knows what the NDRC had got in mind when they were drafting these guidelines," she says.

"My personal guess is they didn't foresee the implications that the Circular is now having on offshore borrowing transactions when they were drafting the Circular. There's still a possibility that the NDRC from day one wanted to target and cover the offshore borrowing transactions; that possibility cannot be ruled out completely.

REQUIREMENTS FOR RAISING FOREIGN DEBT

	Pre-Circular 2044	Post-Circular 2044
People's Republic of China domestic companies as borrowers	• mid-/long-term debt: NDRC approval required • short-term debt: State Administration of Foreign Exchange (Safe) approval required	• mid-/long-term debt: NDRC approval no longer required (it is replaced by a national quota system and pre-incurrence filing with NDRC) • short-term debt: Safe approval required

Source: Clifford Chance

"No one knows what the NDRC had got in mind when they were drafting these guidelines"

Yao Zhou, Run Ming Law Offices

FIEs

Foreign investment enterprises (FIE's) could also be affected by these new regulations. These are companies that have one or more non-Chinese investors, such as AerDragon, which was established in 2006 by China Aviation Supplies Holding Company (CAS), AerCap and CA-CIB.

Harvey Lau, a partner at Baker & McKenzie's Shanghai office, says that foreign investment enterprises (FIEs) could be hit.

"FIE's overseas borrowing has not [been] subject to NDRC approval, so the new NDRC requirement (if applicable to FIE) would add another administrative hurdle to the overseas borrowing activities of the FIE," he says.

"For the domestic entities, the replacement of NDRC approval with NDRC registration should not make much difference to them as far as the administrative process goes."

Runming's Zhou says that previously FIE's have been free to borrow foreign debt below a certain quota without requiring NDRC registration. However, following the issuing of Circular 2044 FIE's are now required to register.

CIRCULAR 2044

Law firm Clifford Chance has summarized the main points of circular 2044 and pointed to a number of uncertainties and potential difficulties.

Highlights of Circular 2044

- it requires the issuer/borrower to register certain information with the National Development and Reform Commission (NDRC) before incurring a foreign debt. Documents to be submitted to NDRC include an application report and a plan setting out the currency, size, interest rate, term, purpose of the debt and remittance details;
- it imposes a standard timeframe for reviewing the pre-incurrence filing applications;
- eligible issuers and borrowers are required to meet certain requirements, such as having a good credit track record and a sound corporate governance and risk-control system;
- when the aggregate registered foreign debt reaches the stipulated annual national quota, NRDC will make a public announcement stating that the filing of foreign debts will no longer be accepted for that year; and
- it requires the issuer/borrower to report foreign debts to NDRC in the form attached to Circular 2044 within 10 working days of the drawdown/issuance of the foreign debt.

Uncertainties and challenges remain in relation to Circular 2044:

- it does not eliminate the current requirement of registering foreign debts with the State Administration of Foreign Exchange (Safe);
- it does not override the current restrictions on utilization of foreign debt proceeds prescribed by Safe;
- it remains to be seen if NDRC will take a restrictive or a liberal stance when determining the annual national quota for foreign debts; and
- it is unclear whether the pre-incurrence filing system will be a procedural matter or will involve any discretionary review.

Clarification

In December, NDRC issued a clarification of the reforms, stating that offshore borrowing by an enterprise should be registered with the government body in advance of the borrowing as in accordance with the September guidelines.

Relevant information required by NDRC with regard to the borrowing should be filed with it after the occurrence of the borrowing. Enterprises include domestic enterprises (including financial institutions) and their controlled offshore enterprises or branches. From the NDRC's perspective, foreign borrowing includes – but is not limited to – ordinary bonds, senior bonds, financial bonds, perpetual bonds, convertible bonds, preferred stock and other foreign debt financing instruments.

The NDRC says that some companies have failed to register their offshore borrowing both before and after the transaction. It therefore set a deadline of end of January 2016 for registration formalities.

If this deadline is not met – or if companies "maliciously" apply for and report their foreign debt quotas or provide false information – the NDRC will enter a bad credit record in an "integrity blacklist", as well as the unified national credit information sharing and exchange platform. It adds that it will carry out "joint discipline and punishment" with the relevant departments. The punishment – whose exact nature is not specified – can be meted out not only to the borrower but also to the underwriters, law firms and "other intermediary agencies" involved in the transaction.

Runming's Zhou says, however, being assigned to the blacklist is unlikely to mean that companies will be banned from raising foreign debt. Rather, it is for the benefit of financial institutions that are thinking of lending to the companies

"If they find any enterprises on that [list] they might think twice before lending to them," she says.

Zhou says that her firm has sought advice from the NDRC to sound out its opinion as to how that regulation should apply to offshore lending and borrowing.

The NDRC reportedly told Run Ming that if the lending takes the form of a commercial loan, then the offshore borrowers do not need to register the loan unless the loan proceeds will be repatriated to China. If the lending takes the form of a bond issuance, then all the lending should be registered regardless of whether the loan proceeds will be repatriated.

However, Zhou cautions that this could be subject to change.

"It only stands for the current practice of the NDRC and there is a chance that this practice will be changed in the near future," she says.

Yao adds that the NDRC may think of issuing further follow-up guidelines or publishing their procedures on their website.

Given the current uncertainty surrounding the reforms, though, Chinese lessors – particularly those with offshore subsidiaries – will be closely watching the NDRC's every move in the coming months.

Q

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TURBOPROPS

Fuel price proves a challenge

Low fuel costs are good for the airline industry, which should be good for commercial aircraft manufacturers. For turboprop producers, however, they are a mixed blessing.

Recent years have been good for turboprop manufacturers, because operators faced with high oil prices have ordered more of the fuel-efficient aircraft in preference to similarly sized regional jets. However, falling fuel prices are eroding the operating cost advantages over their regional jet competitors.

The 50-seat regional aircraft market has become virtually the exclusive territory of turboprops when it comes to new orders. ATR, as the sole remaining manufacturer of this size aircraft, has monopolized this niche. In the 70-seat market there is much more of a contest, but there is no doubt that there has been a resurgence of the turboprop. Both Bombardier and ATR have garnered significant numbers of orders.

ATR figures suggest that turboprops have taken 48% of the 50- to 90-seater regional aircraft market over the period 2010 to 2015. The recent success has been in part because of the high price of fuel but also owes much to improved interior comfort levels and greater acceptance of turboprops by passengers.

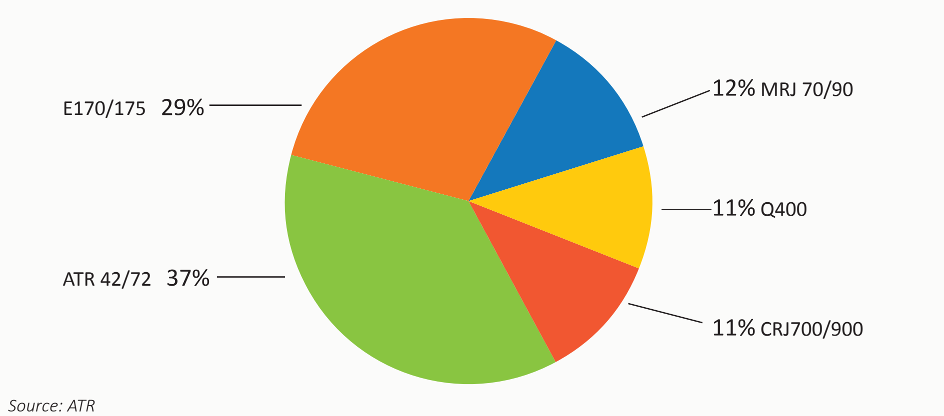
ATR satisfied

Speaking at his company's annual press conference in January, Patrick de Castelbajac, ATR's chief executive officer, acknowledged that a low fuel price environment had reduced the competitive advantage of the ATR models over their regional jet competitors.

He also cited the high value of the US dollar as a challenge that had made life difficult for operators, particularly in regions historically important to ATR. These factors combined with moderate growth in key markets such as China, Brazil, India and Russia are making life difficult for the Toulouse-based manufacturer.

When asked by *Airfinance Journal* to quantify how much the current fuel price had eroded ATR's competitive advantage, Castelbajac declined to give a specific figure. He suggested it was difficult to be precise because the situation was complicated by currency fluctuations and other factors.

50 TO 90 SEATER REGIONAL AIRCRAFT ORDER SHARE 2010-2015



Source: ATR

ATR delivered 88 aircraft in 2015

Airfinance Journal's own figures suggest that at the peak fuel price of $3 per US gallon, a generic turboprop has a direct operating cost advantage of between 25% and 30% over an equivalent sized current-generation regional jet on a 200-nautical mile sector. At $1 per US gallon, *Airfinance Journal* estimates the cost advantage is reduced to somewhere between 15% and 20%. These advantages will be eroded by the new generation of 70-seat regional jets.

Despite the challenging market environment, ATR achieved a new record turnover in 2015 of $2 billion. During the year, the manufacturer delivered 88 aircraft – the highest number in the company's history – although it fell slightly short of its target of 90 aircraft.

However, sales figures reflected a more difficult environment than previous years. The company obtained firm orders for 76 aircraft plus 81 options last year. This compares to the record year of 2014, when the company sold 160 aircraft.

Castelbajac said he was satisfied with the results and added that the company planned to deliver just over 90 aircraft in 2016 and expected to sell about 100 aircraft. He expressed confidence in the long-term prospects of the turboprop. Castelbajac regarded the sale to Japan Air Commuter in 2015 as a key breakthrough in a market that ATR believes is well suited

> "Higher fuel prices appear to have put paid to the prospects of a stretched Bombardier or ATR turboprop in the foreseeable future. "

to its products. He also highlighted the major potential of India, where government policy is focused on improving regional air links (see India's new aviation policy, page 24).

However, ATR's experiences with Kingfisher, might give the manufacturer some concerns about placing aircraft in the country, and financiers will be keen to ensure they can recover their assets in the event of payment difficulties.

Turboprops here to stay

ATR's rival Bombardier shares the European manufacturer's positive outlook. Speaking at the Annual Global Airfinance conference in Dublin, Ross Mitchell, vice-president, commercial operations, Bombardier Commercial Aircraft, insisted that the turboprop has a future.

He said that, as a manufacturer of both regional jets and turboprops, Bombardier was uniquely placed to judge the relative merits of the two types of aircraft. Apart from an undoubted cost advantage on shorter routes, Mitchell said there were routes on which only turboprops could operate.

Bombardier received a boost for its turboprop product at the end of 2015 when Ethiopian Airlines placed an order for an additional two Q400s (see box).

No need to stretch

Higher fuel prices appear to have put paid to the prospects of a stretched Bombardier or ATR turboprop in the foreseeable future. Both manufacturers were already backing away from any commitment to a larger aircraft, although Castelbajac insisted that ATR was still in discussion with customers and engine manufacturers.

The ATR chief executive officer said that any new model would likely be a 100-seater rather than a 90-seat variant, not least because the ATR 72 is now capable of accommodating 78 passengers after the development of a high-density configuration. The development is in response to customer demand, particularly in Asia. Bombardier already offers an 86-seat Q400, the first of which was delivered to Bangkok-based Nok Air in 2014.

ETHIOPIAN ADDS Q400S

Bombardier Commercial Aircraft and Addis Ababa-based Ethiopian Airlines announced at the end of December that they had signed a firm purchase agreement for two additional Q400 turboprops that will bring Ethiopian Airlines' Q400 fleet to a total of 19 aircraft, the largest in Africa.

Based on the list price of the Q400 aircraft, the transaction is valued at about $63 million. *Airfinance Journal* estimates the deal to be worth about $44 million, based on current market values provided by Istat appraisers. "The Q400 aircraft continues to be an integral part of our expansion strategy in Africa." says Tewolde Gebremariam, group chief executive officer, Ethiopian Airlines.

Fred Cromer, president, Bombardier Commercial Aircraft, says: "Some 69 Q400 aircraft are now in service with more than 20 operators on the [African] continent."

In 2013, Ethiopian Airlines joined Bombardier's global network of authorized service facilities for commercial aircraft and performs line and heavy maintenance on Q400 aircraft at its facilities at Bole International Airport in Addis Ababa. Including Ethiopian Airlines' purchase agreement, Bombardier has recorded firm orders for a total of 547 Q400 aircraft.

CHINA A KEY MARKET

Western commercial aircraft manufacturers tend to draw attention to the potential of China.

Comments by Tom Anderson, senior vice-president commercial and customer support for ATR, on the occasion of the turboprop manufacturer's opening of its representative office in Beijing, are typical.

He said: "As China boosts short-distance regional air transport among small and medium-sized cities, fuel-efficient turboprops are being recognized as the perfect solution to China's dispersed yet large population."

But as with the single-aisle market, Chinese manufacturers, with government backing, are keen to grab a share of their own domestic market.

Aviation Corporation of China (Avic) claims it has received 185 orders for its MA700 regional turboprop from 11 customers.

The MA700 is a stretched version of the 60-seat MA600, which entered the market

in 2013. The -700 features increased seating capacity for 70 to 90 passengers.

According to Avic, the MA700 will come off the final assembly line and will have its inaugural flight in 2017. It is scheduled to get an airworthiness certificate and be delivered to its first customer in 2019.

Chinese commercial aircraft do not have a great track record of delivering on time, but any erosion of their market share will be a cause for concern for ATR and Bombardier.

INDIA

Government makes its pitch

The government's new initiatives are generally helpful for aircraft manufacturers and financiers, but frustrations remain.

Along with China, India has long been heralded as a potentially huge market for commercial aircraft. GDP growth is a key driver for air travel and, at about 7%, India's growth continues to be among the best in the world. In its latest commercial aircraft forecast, Boeing suggests that India has started unlocking its potential and is on its way to becoming the fastest-growing large emerging market in the world.

Airbus's global market forecast (GMF) draws attention to India's growing middle class as a key driver of demand for air travel. The GMF forecasts passenger traffic to and from India to grow five fold in the next 20 years.

However, India has not been a success to the same degree as China, the country with which it is frequently bracketed in terms of potential. A failure to develop infrastructure, such as airports and air traffic system, is often cited by commentators as a major restriction on growth.

Bureaucracy and poor government policy have also frequently been raised as issues that limit development. However, industry participants are generally encouraged by policies of the new government of Narendra Modi.

The increase of limits on foreign direct investment is an example of general government policies that potentially benefit the airline sector, but improvements to specific aviation sector legislation are taking longer. The so-called 5/20 rule that limits which airlines can fly internationally is seen by many in the industry as a brake on expansion *(see Indian carriers seek 5/20 rule change,* Airfinance Journal, *November 2015, page 26)*. The rule's detractors were hoping that the long-awaited Draft National Civil Aviation Policy would recommend its abolition.

The draft policy, which was published at the end of October, does address the issue, but does not provide a definitive proposal. The draft introduces the concept of domestic flying credits (DFC) to replace the 5/20 rule, but leaves open the possibility of continuing or abolishing the rule. The DFC system is intended to act as part of a policy that encourages carriers to increase and improve services to non-trunk destinations, which remains a key goal of the government.

Another key government target, outlined in the draft, is to limit the cost of tickets on non-trunk services to about Rs2,500 (less than $40) per flying hour.

Indigo has been India's only consistently profitable airline

The perceived importance of improving services to domestic destinations is reflected in the draft policy. If it becomes law, domestic air travel will not be left to the free market. The document states that a Regional Connectivity Scheme (RCS) will be effective from April 1. The scheme includes what the draft refers to as viability gap funding. Central and local government will subsidize routes, with central government providing 80% of the funds.

The Ministry of Civil Aviation intends raising its share of the subsidy fund by levying a 2% fee on all domestic trunk routes and international commercial flights.

The policy also proposes to develop no-frills airports at about 400 unused airstrips across the country.

It also sets out a more liberal approach for international travel. There is an intention to liberalize the bilateral regime for route approvals by permitting open skies between India and members of the South Asian Association for Regional Cooperation. This liberalization would also apply to countries beyond a 5,000-kilometre radius of Delhi. Open-skies arrangements with countries within the 5,000km radius will be considered after 2020.

The Draft National Civil Aviation Policy 2015 also sees the maintenance, repair and overhaul industry as a key element of the industry and outlines a number of potential actions to support the growth of the sector and attract foreign business *(see Long-term growth over short-term taxes, page 27).*

“The airline industry broadly welcomes the government’s proposals.”

Airline profitability
The airline industry broadly welcomes the government’s proposals, but the administration’s policy has to deal with the problems of the still state-owned Air India, which has been generating sizable operating losses for several years, and has had large and persistent operating cash-flow deficits. It has received repeated rounds of support from the Indian government in the form of equity infusions and government guarantees.

Although India today boasts several independent private carriers, only two: Indigo and Jet Airways – have fleets of a comparable size to Air India’s. Many of the independent carriers, including Jet Airways, have a chequered financial history, including takeovers and mergers or equity infusions from both foreign and domestic investors. There have been several bankruptcies.

Indigo has been India’s only consistently profitable airline and is now the country’s leading carrier in terms of domestic market share, accounting for about 40%.

INDIAN CARRIER FLEETS

Current operator	Size of fleet	Average age (years)
Air India	136	9.7
Jet Airways	108	7.3
Indigo	100	4.8
SpiceJet	36	5.9
GoAir	19	5.1
Vistara	9	1.6
AirAsia India	5	4.0
Blue Dart Aviation	5	21.6
Air Costa	4	5.0
Others	10	n/a
Total	**432**	

Source: AtlasData

Manufacturer presence
Airbus has a lead over Boeing in terms of their respective in-service fleets in India. But that lead is dramatically increased if the order backlogs are included.

IndiGo has a history of placing very large aircraft orders. It started operations in 2006 with an order for 100 Airbus aircraft, followed it up with a 180-aircraft order in 2011, again from Airbus. In 2014, it broke all records by signing a memorandum of understanding for 250 A320neos for $25.7 billion, Airbus’s largest order to date. The order, which also includes purchase rights for 100 aircraft, was confirmed in August. This gives IndiGo an order book of 430 aircraft and skews the battle between the big two manufacturers for market share in India.

Boeing needs to win some big orders from the remaining carriers if it wants to catch its rival. Jet Airways’ order for 75 737 Max 8 aircraft at the 2015 Dubai Airshow in November has gone some way to redressing the balance, but the prospects for sales to other airlines are mixed.

IN-SERVICE FLEET BY MANUFACTURER

Manufacturer	Fleet
Airbus	208
ATR	32
Boeing	167
Bombardier	17
Embraer	8
Total	**432**

Source: AtlasData

ORDER BACKLOG BY MANUFACTURER

Manufacturer	Fleet
Airbus	528
Boeing	136
Embraer	53
Total	**717**

Source: AtlasData

Air India is clearly not in a strong financial position when it comes to ordering aircraft, although it still has six 787-8s on order from 2005.

SpiceJet, another low-cost carrier, placed a $4.4 billion order for 42 737 Max aircraft in February 2014. In July 2015, the carrier announced it intends acquiring 100 more aircraft as part of its long-term fleet plan and could soon place an order with either Boeing or Airbus.

Air Costa announced a $2.9 billion order for 50 Embraer E2 aircraft (plus 50 options) in 2014. The order comprises 25 E190s and 25 E195s. The airline followed that up with another order for three E190s in May 2015.

GoAir’s last major order was in 2011 when it ordered 72 A320neos for $7 billion as part of its long-term fleet-expansion plan. All of the aircraft are yet to be delivered to the airline.

Vistara and AirAsia India have adopted the strategy of leasing aircraft from their airline owners instead of making big-ticket purchases.

The policy of these two airlines may be adopted by others as the two big manufacturers face added competition from leasing companies with large A320neo and 737 Max order books looking to place aircraft. About 55% of India’s commercial fleet is leased.

ORDER BACKLOG BY AIRLINE

Operator	Fleet
Indigo	430
Jet Airways	90
GoAir	72
Air Costa	53
SpiceJet	42
Air India	23
Vistara	7
Total	**717**

Source: AtlasData

Growth market
The transition from an extensively regulated and government-controlled sector to a liberal one that welcomes private players has taken 25 years, so perhaps it is unsurprising that the pace of change of government policy is not as fast as many would like. The development of an effective judicial system for owners and lessors placing aircraft into India with Indian airlines continues to face hurdles at the bureaucratic level.

Despite this, the forces driving the growth of the airline sector in India look irresistible, and financiers will find it difficult to ignore an increasingly significant market.

INDIA'S MRO INDUSTRY

Long-term growth over short-term taxes

Jack Dutton sits down with Sanjeev Munjal, vice-president, strategy and M&A, at Air Works, India's largest independent MRO company, to talk about how the country's new aviation policy is likely to affect the industry.

***Airfinance Journal:* What stage are we at with the maintenance repair and overhaul [MRO] industry in India?**

Sanjeev Munjal: It's maturing. Over the last three or four years, we've certainly grown considerably as Air Works, but there are obviously those that are also trying to make a mark. Air India recently announced that they will be finalizing the setup of their facility in Nagpur, which Boeing set up for them many years ago. It's taken them a bit of time to get it operational but I think that they are almost there. I think they'll probably continue to concentrate on their own fleet for the moment.

A lot of the airlines still do their own work as well – SpiceJet does. IndiGo does a lot of its own regular maintenance and goes to Sri Lanka for heavy maintenance. We've been doing a lot of work for the new airline that's set up, Vistara.

With India having drafted its new civil aviation policy, how do you expect it to impact the MRO industry when the policy is issued in full?

The policy draft talks about removing a lot of the heavy tax burden on MROs providing services, either independently or if they are a captive of an airline. They've talked about taking service taxes away; however, they need the approval of both the prime minister's office as well as the finance ministry. It does impact their revenue to some extent, but the long-term benefits of taking it away is that it makes the MROs more competitive. Any shortfall in revenue taking service taxes away will be more than made up in the long run by increased business.

In some places they've already taken the taxes away. There's two pieces to it: if you're providing an MRO service, there's a service component and a spares and parts component. Service tax applies on the service component, which is the actual manpower doing the job, and then the VAT applies to spares and parts being installed in the aircraft, which the MRO provides.

The VAT might be taken away, because one or two states have already done it. There's the State of Maharashtra in the west, where Mumbai is located and Delhi's looking at it seriously. These are obviously the two major hubs, so if they do it, then hopefully the other states will follow suit to allow more regional connectivity and more MROs being set up regionally.

So service tax, VAT and customs duty have been taken away on parts being imported by MROs. It's a little bit of an anomalous structure because if an airline imports parts, they don't have to pay customs duty under the Indian rules. But if an MRO imports the parts and installs them on the same aircraft, they would charge customs duty. But that was three years ago, and since then the rules have been relaxed and now they're talking about doing away with it all together for practical purposes.

The concept of the new policy is: let's grow the industry instead of worrying about short-term taxes. Because in the long run, if the industry grows, more MROs come up – that would more than make up for any short-term loss of revenue. Overall, the policy is quite positive – it is one of the more comprehensive policies that have come out of India recently.

Air Works has been doing a lot of work for new airline Vistara.

How much potential does the MRO industry have in India? Is it lagging behind the airline industry?

Absolutely. The total MRO business in India is meant to be worth just short of a billion dollars. Of that, and depending whose estimates you believe, around 80% to 90% of the work is being performed outside of India, which is criminal.

To be fair, capability has not existed until recently. We've made a lot of investments in building hangarage and doing the training of the personnel who are required to do the aircraft maintenance, training them on new types of aircraft such as the Neos, the Maxs and new widebody aircraft.

Indian carriers couldn't actually go to an Indian MRO five years ago because there was no capability, but now the capability exists in some decent measure, not fully, but as far as basic airframe maintenance – C checks, or the heavier checks – there is now capability within a few of the MROs. Capability has to fully catch up for the airlines to say: "Yes, it does make sense for me to now do this".

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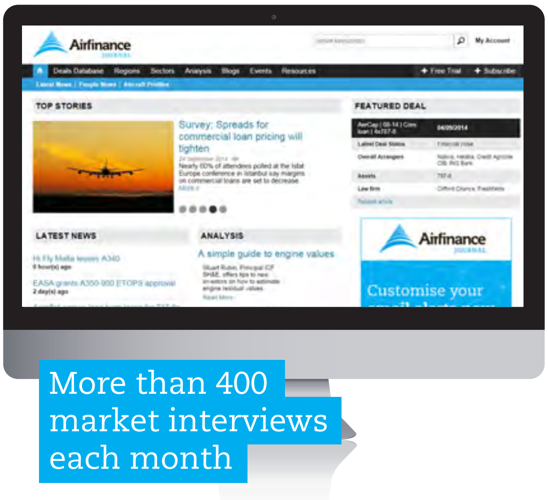

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Airfinance JOURNAL

CFO INTERVIEW

Flybe aims for long-term profitability

Jack Dutton speaks to Philip de Klerk about Flybe's restructuring and his airline's fuel hedging strategy.

In 2014, UK regional carrier Flybe wanted to cancel its order for 24 E175s. "When our new management came in two years ago, the business was under quite some pressure and had a bit of a balance sheet and P&L [profit and loss] issue," Philip de Klerk, the airline's chief financial officer tells Airfinance Journal. "So we launched a capital raise, but also, we looked at what type of routes we are flying and what type of aircraft we needed."

In February 2014, the carrier issued a £150 million ($214 million) capital raise to help revamp its fleet. It also relaunched its brand two months later – changing the livery on its aircraft from blue to purple.

In year 2014/2015, the UK airline reported a £35.6 million loss before tax, more than £40 million lower than the previous year, when the carrier made a profit of £8.1 million.

Flybe was unable to cancel its 24-aircraft Embraer order, so it found another solution: US carrier Republic Airlines would lease 20 of the 24 E175s and in return, Flybe would sublease Republic's 24 Q400s. It is subleasing those aircraft for, on average, another five years. Flybe's four remaining E175s from the original order of 24 deliver from March 2018.

De Klerk says that the subleased Q400s from Republic are better suited for Flybe's needs. "They were also better value in the market than other Q400s on lease," he says. "So we solved an issue with the firm commitment and we have the aircraft we like."

The airline has 50 Q400s, 11 E175s and nine E195s – and is adding five ATR 72-600s. The average age of its fleet is 7.3 years.

The airline is leasing the ATRs as part of white label operation (when the aircraft is flown under another brand) with Scandinavian Airlines (SAS) – the aircraft are leased by Flybe, but will fly under the SAS livery. By the end of this fiscal year, Flybe will have taken all five ATRs from Singaporean lessor Avation. The ATRs are on six-year leases.

Flybe has previously worked on white label operations with other airlines, such as Brussels Airlines, Olympic Air and Finnair.

Growth hampered by terrorism

Despite Flybe having a shaky first half of 2014/15, recording a £3.3 million loss before tax, the first half of 2015/16 looked brighter, with the airline making a pre-tax profit of £22.9 million. But recent terrorist attacks have thrown the airline's turnaround off course, with Flybe's load factor falling to 68.9% in last year's final quarter from 74.3% the year before. The airline's chief executive, Saad Hammad, attributed the drop in load factors and revenues to "a significant hiatus in airline bookings" following terrorist attacks in France as well as higher capacity in the market.

De Klerk is wary of the risks in the aviation industry. "The first risks we are seeing are the macroeconomic risks. For example, what happened in Egypt and Paris – those kinds of terrorist attacks – it's not helpful for the travel industry. We hope they don't repeat. Not only is it terrible anyway, but it also potentially impacts the comforts of people flying to destinations they like to fly to."

He adds: "Secondly, there is quite a lot increasing capacity across the industry. Combined with the lower fuel environment, this might have an impact on yields across the industry."

Philip de Klerk, Flybe's chief financial officer

Thinking a few steps ahead

De Klerk is also wary of fuel prices. With prices at their lowest since 2009, he comments on how a potential rise in oil price could affect Flybe.

"We are hedged 60 to 90% at 12 months out, so we don't benefit this year from the former price. But if the oil price goes up today, we would have hedged for the next year. The impact on ourselves is delayed depending on our hedges. I know some airlines don't hedge – some because they can't afford it and others because it's their policy. But those who can't afford it, if suddenly the oil price goes up, they might have a bit of a cost issue."

FINANCIAL SUMMARY

	H1 2015/2016	H1 2014/2015	Change
Group Revenue	£339.6m	£307.8m	£31.8m
Adjusted total cost	£318.5m	£308.8m	£(9.7)m
Adjusted profit/(loss) before tax	£21.1m	£(1.0)m	£22.1m
Revaluation of USD loans	£1.8m	£(2.3)m	£4.1m
Profit/(loss) before tax	£22.9m	£(3.3)m	£26.2m
Discounted business	nil	£(12.0)m	£12.0m
Total cash	**£197.2m**	**£171.0m**	**£26.2m**

Source: Flybe

"We think turboprops are better value for money, from a capital outlay and also from an operating cost."

Philip de Klerk, CFO of Flybe.

De Klerk is less concerned about a potential rise in interest rates than a rise in oil price. He adds that a lot of his leased aircraft are on a fixed-interest rate and, because of that, he does not expect a rise to affect his business too quickly.

"One main challenge is being able to think beyond two years ahead," he says. "If the oil price doubles again, then what might the impact be on the market? Or if the oil price stays on this level, what might be the impact on the market? And making sure your own business model supports potentially either scenario."

Owning more aircraft

De Klerk believes that owning a greater proportion of the fleet will help Flybe meet its turnaround targets.

"Ignoring the ATRs, in our core fleet, we own 20% of the aircraft and lease 80%," he says. "Over time, we want to go more and more like 50-50. It tends to be more cost effective to own aircraft. Of course, you've got the residual value risk – that's why we probably don't want to go to 100% owned. It's a cash investment as well for the bit we don't finance. This operationally gives you the flexibility and it is cost effective."

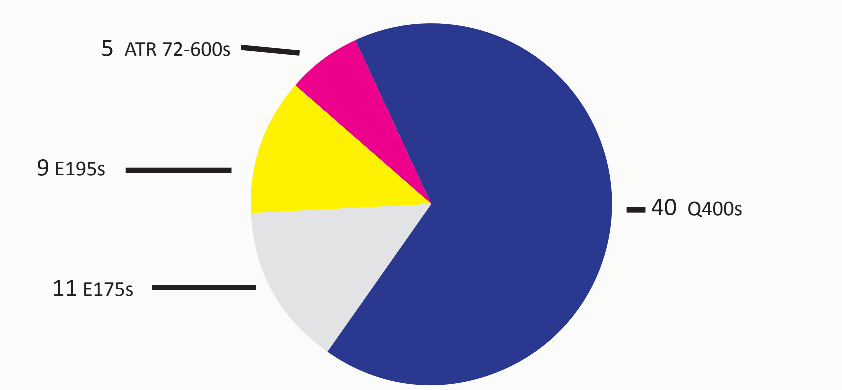
The Exeter-based airline will take eight of the Republic Q400s by March. It is due to take another eight in the next fiscal year and another eight in the fiscal year after to make up the 24.

"From our growth plan, those Republic Q400s are coming in overtime, and to balance that as well, we have leases that expire as well. In full-year 17/18 we will have eight Q400 lease expiries, in 18/19 another six and in 19/20 another two. We will have 23 Q400s with leases expiring in 20/21," says de Klerk.

"That gives us quite a lot of flexibility if we continue to go and extend the lease, and if we extend the lease of course you can start negotiating the price or consider buying them."

All of the 20% of the fleet owned by Flybe is financed through commercial debt, up to 10 years from the age of the aircraft. On average, 70% of the value of each aircraft is financed externally through bank debt while the remaining 30% is financed through the airline's own cash flow.

THE FLYBE FLEET



Source: Flybe

Keeping it simple

Asked whether he was considering adding the CSeries or other jets to the Flybe fleet, de Klerk says: "We think turboprops are better value for money, from a capital outlay and also from an operating cost. If you serve the markets we are serving, the thinness is best served on the Q400, so we are not looking very actively into the CSeries or other jets. But, of course, we are talking to Bombardier and Embraer about their fleet and aircraft development."

Flybe is not looking to tap Japanese operating leases with call options or the bond markets in the near future to finance its aircraft.

"I like to keep it relatively simple," says de Klerk. "I'm not into the Japanese market, etc. We did a capital raise in March 2014 of £150 million, so some of it we will use to purchase our own aircraft. Our own part, we finance 30%, so some of the capital raise will be used to finance that part of the transaction. I'm keen to keep it simple and relatively straight forward on the financing."

Flybe's business model is different to that of, say, easyJet and Ryanair – 50% of Flybe's passengers are business passengers. The airline uses smaller, regional UK airports including Exeter, Southampton, Aberdeen and Belfast as its bases rather than larger airports such as Heathrow or Gatwick. Its main bases are at Manchester and Birmingham airports.

Flybe flies around the UK and Europe from UK bases, and operates smaller aircraft to serve thinner markets on routes that might not be profitable for the likes of easyJet and Ryanair to fly.

Increasing frequency and new routes

"As part of our turnaround, we have changed quite a few routes over the last two years," says de Klerk. "We have become significantly more stable and, with the capacity we've been bringing on recently, we have put more on our existing routes to increase the frequency. One of the key benefits for business travellers is that there's a lot of frequency on certain routes, so they adjust their schedules accordingly. So we have to increase the frequency of certain routes that we serve."

Flybe is looking to cancel all of its routes flying from Bournemouth by March, having started cutting back in January. This will allow the airline to concentrate more on Southampton.

"We are launching new routes and we have already more than 50% of the share in the UK domestic market, whether we are looking to fly more into Europe from some of our UK bases. We have launched one or two routes into Rotterdam, for instance, and that's what we try to do more and more."

Despite recent terrorist attacks negatively affecting travel demand and subsequently aviation revenues, the outlook is slowly getting more positive for Flybe. No one can predict when another attack will happen, but with current low fuel prices and a change of fleet strategy, hopefully de Klerk can help lead his airline back to long-term profitability.

FRONTIER AIRLINES

Will there be an IPO?

Amid rumours of a Frontier Airlines initial public offering, Joe Kavanagh looks at the carrier's position and asks how likely it is.

Frontier Airlines has done a good job of turning itself around in recent years. After filing for Chapter 11 bankruptcy in April 2008, the airline went through a restructuring process that saw it reduce lease commitments, cut out unprofitable routes and reduce the number of smaller-capacity aircraft in its fleet.

Frontier has posted consecutive yearly profits since 2011, when Republic Airways, the then owners, began a restructuring plan. After passing into the hands of private equity firm Indigo Partners, the carrier is now being positioned as an ultra-low-cost carrier.

Frontier hit the headlines at the end of 2015 when it was reported that airline executives had met with bankers to discuss plans for an initial public offering (IPO). However, speaking to the local press at the end of last year, Barry Biffle, its president, said that the airline had not hired any bankers to discuss an IPO.

When asked about IPO plans by *Airfinance Journal*, a Frontier Airlines spokesman would not comment on the matter.

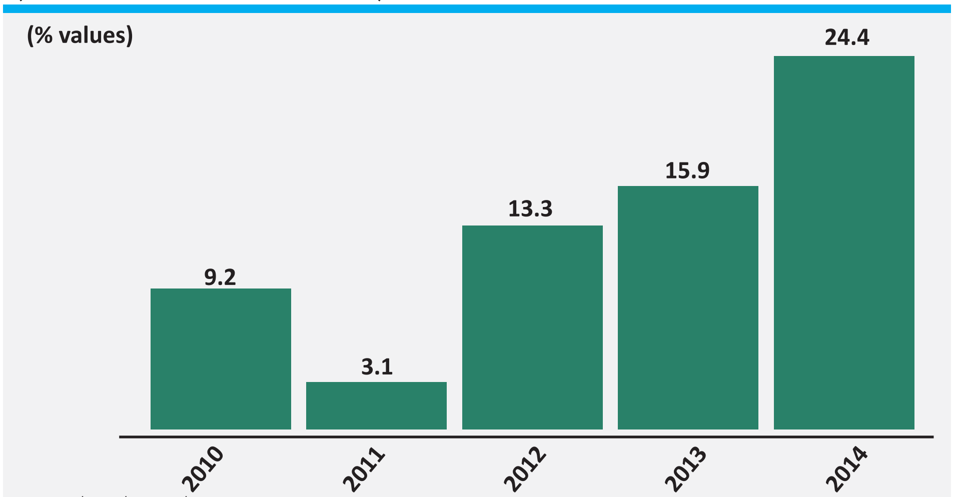
So would an IPO make sense?

An IPO may well be a good move for Frontier Airlines – but not right now.

It is no secret Indigo Partners, the present owners of Frontier, has a history of investing in ultra-low-cost carriers and taking them public. Having previously done so with Spirit Airlines, Indigo will be keeping an eye on the market to gauge the right time for a public offering.

However, given the volatility in the stock market this quarter, a public share offering would be a risky move. At the time of going to press, the S&P 500 index, which tracks the stock performance of the top 500 US equities, shows a drop this year of 6.7%. Meanwhile, not a single company has gone public on the New York Stock Exchange or the Nasdaq Stock Market.

FRONTIER AIRLINES EBITDAR MARGIN
(EBITDAR / TOTAL REVENUE)



Source: The Airline Analyst

Increasing profitability could help IPO plans

Several companies seem to be waiting for more stability in the markets before launching their IPOs. Tom Farley, president of the New York Stock Exchange, admitted in January that it might take months for companies to warm up to the idea again.

Indeed, at The 18th Annual Global Airfinance Conference in Dublin last month, a lot of delegates observed that the first quarter of 2016 would not be an ideal time for any company to go public.

But, assuming the market settles down, then there are a number of reasons why an IPO could eventually make sense for Frontier Airlines.

Increasingly profitable

The airline's financial statements show that since its bankruptcy it has made great strides. Under the guidance of Indigo Partners, the carrier is reforming its business model to become an ultra-low-cost carrier. With an order for 80 next-generation jets with Airbus, the carrier plans to operate a uniform, fuel-efficient fleet.

Frontier Airlines has also achieved record levels of profitability since its takeover by Indigo Partners, which might bode well in the event of an IPO. A key strength for the airline is its recent record of posting strong profits and good profit margins (earnings before interest, tax, depreciation and amortization, or Ebitdar).

In 2014, the last full year for which a financial statement is available, the carrier's Ebitdar margin Frontier Airlines EBITDAR margin (EBITDAR / total revenue).

In 2013, the margin was 15.9% and in 2013 it was 13.3%.

“From Q3 2016, the carrier is expected to begin taking delivery of the next-generation jets it has on order with Airbus.”

In fact, the airline has become more profitable every year since it was bought by Indigo in 2011. By way of comparison, in 2008, the year Frontier filed for bankruptcy, the company posted a loss of more than $133 million.

What about a merger?

The other rumour doing the rounds this year is that Frontier plans to carry out a merger with fellow ultra-low-cost carrier Spirit Airlines – but, at this point, it seems a less likely option.

On paper, the deal looks highly possible: the two carriers use similar business models, operate very similar fleets and have links to the same private equity firm, Indigo Partners. The merger would also give the carriers an opportunity to compete against the legacy US carriers.

The rumours about this option were fuelled when Spirit Airlines announced the appointment of Robert Fornaro, its new chief executive officer, last month. Fornaro has experience of overseeing airline mergers. He was chief executive officer of low-cost carrier AirTran from 2007 until its merger with Southwest in 2011. After the merger, he remained as a consultant to the airline to help with the integration.

By appointing a chief executive with experience of airline mergers, Spirit's board of directors may have been paving the way for a merger. On the other hand, they could have just been opting for an executive with a clear history of running a successful carrier.

While the merger makes for a good story, and looks likely on paper, a senior source close to the airline tells *Airfinance Journal* that this is less attractive than it first appears. There are a number of obstacles to the merger.

For starters, there is a substantial difference between the business models of Spirit and Frontier: Spirit offers its passengers unbundled fares (with which customers pay a base fare and then choose any extras they may want), while Frontier offers bundled fares – an option that it has labelled The Works. Merging the two systems would be a challenge.

The other hurdle is that Spirit is publicly listed and Frontier is not. In the event of a merger, this means there would be difficulty deciding the valuation of the new company. While this would not prevent a deal going ahead, it could make the option seem less attractive.

TIMELINE

1994 Begins operations as Frontier.

2008 Files for Chapter 11 bankruptcy.

2009 Republic Airways wins bankruptcy auction with Southwest Airlines and buys out Frontier Airlines. The airline pays $109 million to acquire the struggling carrier. Frontier Airlines exits bankruptcy.

2010 Merged with Midwest Airlines and given its present name, Frontier Airlines.

2011 Republic begins restructuring the airline by returning A319s and reducing lease commitments.

2013 Indigo Partners buys Frontier Airlines for $145million.

FLEET PLANS

Frontier's fleet consisted of 60 aircraft with an average age of 8.5 years at the time of going to press. This includes A319-100s, A320-200s and A321-200s, according to the Airfinance Fleet Analyst.

From the third quarter of 2016, the airline is expected to begin taking delivery of the next-generation jets it has on order from Airbus. Its next-generation backlog consists of 80 aircraft: 62 A320neos and 18 A319neos.

Frontier currently leases the aircraft in its fleet. Asked whether it has any plans to take aircraft on balance sheet, the carrier did not respond before *Airfinance Journal* went to press.

However, data from the Airfinance Fleet Analyst suggests that it leases the aircraft in its fleet from a number of lessors, including SMBC, Apollo Aviation, Gecas, Macquarie, BOC Aviation and AerCap.

The airline took delivery of its first A321 last year, after signing a sale/leaseback deal with Gecas in September for nine of the aircraft. The larger narrowbodies are replacing some of the A319s in Frontier's fleet.

CAPITAL MARKETS OUTLOOK 2016

More investment and innovation to come

The capital markets saw new entrants and structural changes last year. Joe Kavanagh takes a look at the year ahead to ask if we should expect more of the same.

Crystal ball gazing is a favourite pastime in aviation. In a cyclical industry that is hugely prone to external shocks, the ability to predict future trends can make the difference between success and failure.

However, some events are practically unforeseeable. Public health scares, terrorism and international conflict can scupper even the most careful plans. Virtually nobody predicted, for example, that the price of Brent crude would drop from $110 a barrel, in early 2014, to about $30 a barrel today. A certain economist and regular contributor to the back page of *Airfinance Journal* is an honourable exception.

But at the *Airfinance Journal* conference in Dublin last month, industry figures spent time looking forward over the next 12 months. Here is a summary of what they expect to see.

Importance of the capital markets

The capital markets were responsible for an increased share of new aircraft deliveries last year. At the start of 2016, all the signs are that they will continue to support the industry at similar if not higher volumes.

In its 2016 Current Aircraft Finance Market Outlook, released last month, Boeing Capital Corporation said the capital markets will finance a greater share of aircraft in the coming year. It noted that in 2015, the capital markets accounted for 34% of the $122 billion of new aircraft deliveries. In 2016, however, it predicts this share to rise to 36%, of $127 billion of new deliveries.

In other words, the capital markets are expected to finance an even larger share of an ever-increasing pool of new aircraft.

The capital markets are also expected to innovate. Financiers say that existing structures will be tweaked, new structures will appear in the market and new players will enter the aviation finance industry as they realize that there are good returns to be made.

EETCs: more innovation, more issuers

It seems as if the enhanced equipment trust certificate (EETC) market will remain open to airlines this year. Although the EETC market accounts for just a fraction of the total financing activity of airlines, it remains a crucial structure for those that can do it.

The EETC allows carriers to tie up financing for large numbers of incoming aircraft, helps them to diversify their sources of financing and, after the first issuance is completed, is relatively simple to repeat.

EETCs have historically been issued only by the US legacy carriers and a handful of other issuers. In recent years, however, non-US issuers have begun to tap this market, with successful results. Last year saw an increase in the number of non-US airlines in this market, as well as a couple of debut issuers.

Financiers and airlines expect this trend to continue in 2016, with more non-US issuers tapping this market to finance their incoming aircraft deliveries.

Speaking at the 18th Airfinance Conference in Dublin last month, Andy Nelson, managing director and assistant treasurer at Delta Air Lines, said: "The EETC is still probably the most efficient way to finance a large number of aircraft in a long-term, cost-efficient manner."

He added that issuers do not get a floating interest rate for an EETC, which can be a downside, but that the typically low coupons mean that it is still a strong option for the airlines that can do it.

Looking ahead over the next 12 months, he said: "I think it's always going to be a mainstay, but I think you will start to see, just like you saw last year, some improvements around the edges."

In particular, Nelson mentioned the AA tranche. This was an innovation created on Delta's EETC issuance of August 2015, on which Morgan Stanley was the sole structuring agent. The AA tranche added more security by offering a loan-to-value (LTV) in the mid-40% range. By comparison, the senior-A tranche on most EETCs is about the mid-50% range. Thanks to this change, the airline achieved the very low coupon of 3.625% on this tranche. Sources tell *Airfinance Journal* that it is aimed at insurance investors, who like highly rated products.

EETCs have historically been issued only by the US legacy carriers

At the same Dublin event, Helen Kotsovos, director of financing at Air Canada, expressed an interest in modifying the EETC structure by denominating a tranche in Canadian dollars.

She said: "Ideally I would hope, in the next year or two, to be able to do one tranche in the Canadian dollar, or be able to add some kind of flexibility to it." She added that Air Canada's EETCs in 2015 – the second and third issuances by the airline – got closer in terms of pricing to those issued by the US legacy carriers.

Andres del Valle, the senior director of corporate finance at Latam, said that the airline would begin a financing campaign in the second half of this year. The EETC will be one part of this campaign, which will also include commercial debt and sale/leasebacks.

American Airlines hit the ground running in January with the first EETC issuance of the year, worth $1.07 billion, which also featured an AA tranche.

ABS: more standardization, debut issuances

The five asset-backed securities (ABS) deals that closed in 2015 reached a total value of $3.7 billion, which was the highest level of new issuances since 2008.

“As investors become more confident in the aviation sector, more and more entrants have become involved in the space.”

Two trends emerged over the year, the first of which was a string of inaugural issuances. DVB, Element Financial Corporation, Awas and BOC Aviation all entered the market with ABS deals for the first time.

BOC Aviation closed the first ABS by an Asian issuer in December. Asked whether the market can expect more Asian ABS issuers in the future, Steven Townend, chief operating officer (Europe, Americas, Africa) of BOC Aviation, said that he thinks so. He added: “I think we will, for two reasons. Firstly, you are seeing more Asian lessors but also I think the combination of that along with the combination of greater investor awareness and acceptance of the structure, you will, over time, see more deals.”

The second major trend of the year was that ABS deals were secured increasingly against older aircraft. Awas’ first ABS deal, for example, which priced in July, was secured against a fleet of 30 aircraft with a weighted average age of 16.5 years. Sources say we might see more deals of this nature, where the average life of the collateral pool is higher than the historical average.

One thing that might delay future issuances is the legacy of SMBC’s cancelled ABS at the end of last year.

Airfinance Journal understands that SMBC’s deal did get to an advanced stage. However, SMBC chose to cancel it, citing market volatility.

Financiers say this may present a challenge to future issuers. Although multiple leading lessors are rumoured to be in discussions with banks about ABS issuances, the failed SMBC deal might cause hesitancy in this market in the near future. However, financiers say they expect the total volume of 2016 issuances to reach a similar level to last year.

Speaking about the SMBC deal, Ricardo Toro, managing director at BNP Paribas, notes that the high issuance volumes of other aircraft ABS deals in 2015 may have disadvantaged SMBC. He says: “It’s clear that a lot of the larger investors had deployed a lot of their capital already.”

Toro notes that ABS deals for other asset classes are often more standardized, which makes them more attractive to a wider class of investors. He adds that one way for aviation ABS issuers to attract more investors would be, at the structuring stage, to “come up with something that is more similar to other classes of assets”.

Private placements

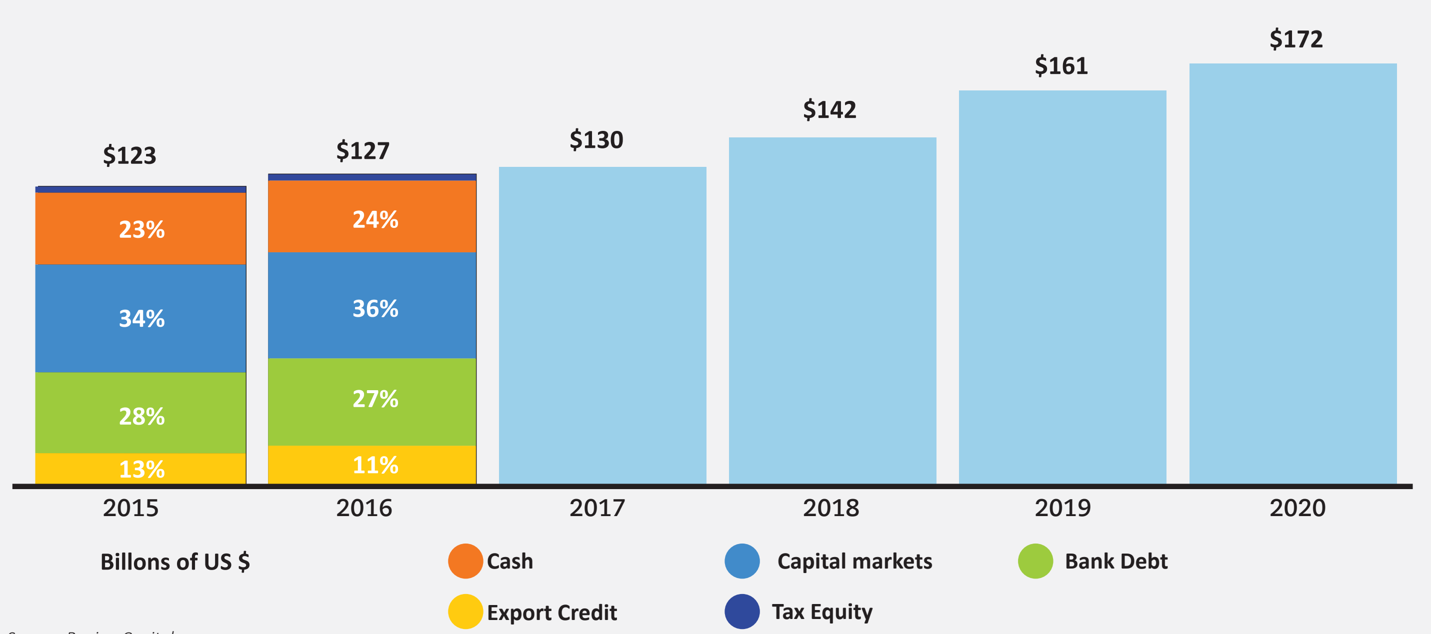
Most respondents that *Airfinance Journal* spoke to believe the private placement market will continue to grow this year. As investors become more confident in the aviation sector, more and more entrants have become involved in the space. The signs are that they will continue to do so.

Boeing Capital’s report mentions private placements as one of the most interesting areas to watch in the capital markets. After stating that it expects 2016 to be another “blockbuster year”, the company writes: “Innovative structures and new funding sources continue to emerge, with the growth in private placement activity and non-US EETCs being notable examples.”

Last year saw a number of significant deals, among them: Falko Regional Aircraft raised a $415 million fund in November, having targeting about $300 million; Alitalia raised €375 million ($408 million) in July to fund aircraft deliveries; and Delta announced a $647 million refinancing arranged by investment bank Burnham Sterling.

This year has already got off to a busy start. In January, Oman Brunei Asset Management launched a $208 million aviation-leasing fund, tap-

BOEING PREDICTED FINANCING REQUIREMENTS



Source: Boeing Capitol

"One of the exciting things to watch this year will be the way existing market participants respond to the new entrants, driving innovation and creating more funding options for airlines and lessors."

Tim Myers, president of Boeing Capital Corporation

ping local financial institutions and high net-worth individuals.

Similarly, *Airfinance Journal* learned in Dublin that a major US carrier closed a private placement deal last month with Babson Capital Management and BNP Paribas. The deal closed early in January, according to sources close to the matter. Although the sources did not reveal more about the size of the deal, it may be a sign of more to come in the market.

Meanwhile, in Europe, the German Schuldschein (private placement) market is attracting some carriers. A new structure, the ACNSV, is set to close for the first time in 2016, having gained a BBB rating from Standard & Poor's (S&P) in November. The structure is a private placement that is similarly structured to the EETC. *Airfinance Journal* understands that, as the magazine went to press, at least seven carriers in the US and Middle East are in discussion with banks over potential issuances.

Unsecured debt

It looks likely that more airlines and lessors will tap the unsecured market this year.

Last year, several airlines and leasing companies received ratings upgrades from S&P, Fitch and Moody's. The likelihood is that these companies will continue to access the market for unsecured debt, because higher ratings mean that companies can issue bonds at tighter spreads.

Southwest, for example, received a ratings upgrade from Fitch in October. The agency bumped up the airline's corporate rating from BBB to BBB+, on the back of stable leverage and a strong free cash flow position.

With a stronger rating, Southwest went to market and closed a $500 million unsecured offering with a 2.65% coupon. This was lower than the debt it issued in 2014, which carried a coupon of 2.75%. The chief financial officer, Tammy Romo, told *Airfinance Journal* that the airline treated this deal as a refinancing.

The year also saw airlines tapping new markets. In December, Norwegian expanded its investor base by issuing its first eurobond: a €125 million unsecured offering. Listing on the Oslo Stock Exchange, the four-year bonds carried a coupon of 7.25%. Admittedly, this is higher than the unsecured eurobonds issued by Southwest in 2015, or Ryanair in 2014, but Norwegian may have felt that the high coupon was a price worth paying to expand its access to the international capital markets.

If airlines continue to receive ratings boosts, there is no reason to think they will not take on more unsecured debt this year.

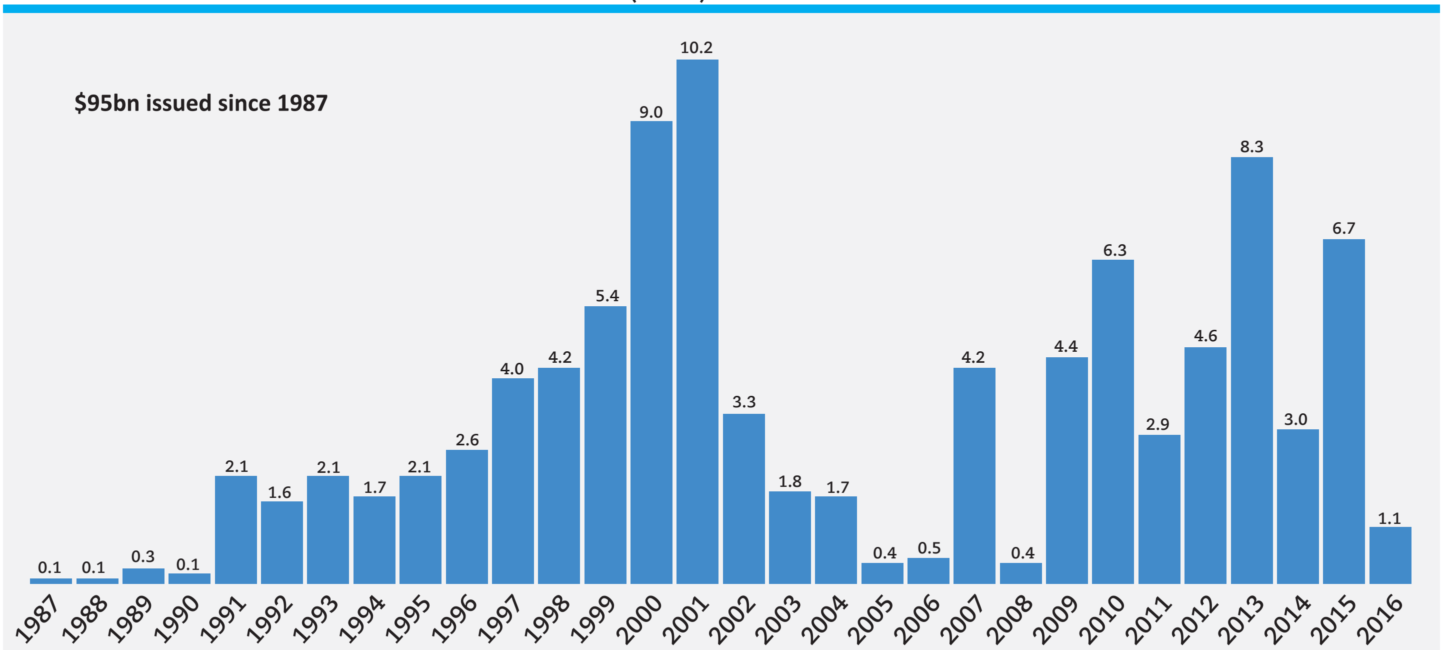
Sources say that Turkish Airlines is considering a eurobond issuance in 2016, although *Airfinance Journal* understands that the airline has not yet made a decision. Norwegian may do another eurobond this year after the successful first issuance.

Across the capital markets, there will doubtless be more innovation this year. Boeing Capital Corporation concluded as much in its annual outlook. Its president, Tim Myers, said the introduction of new players will drive through some changes in the next 12 months.

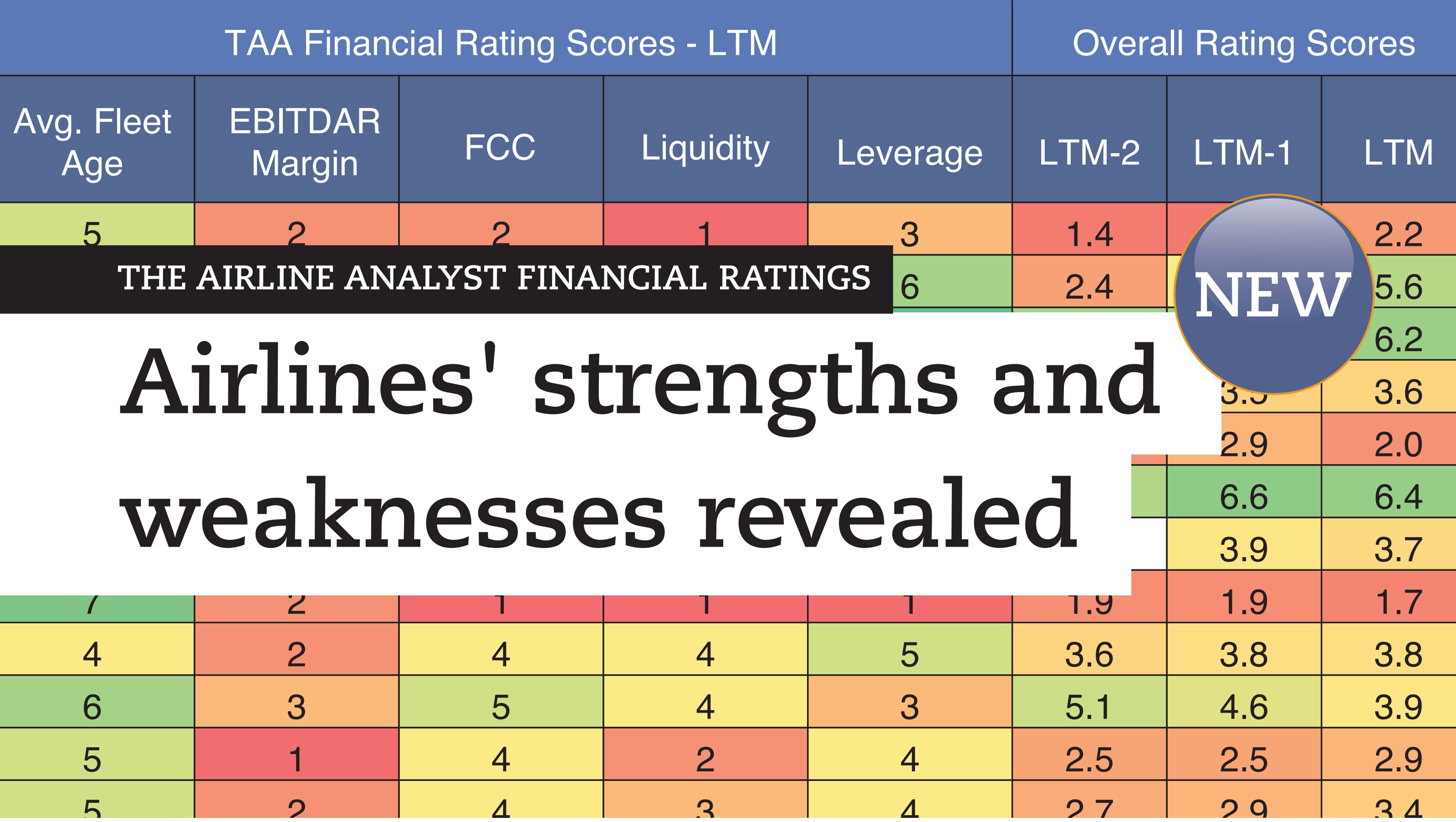
"One of the exciting things to watch this year will be the way existing participants respond to the new entrants, driving innovation and creating more funding options for airlines and lessors," he said.

Aviation's crystal ball-gazers often find themselves surprised, but it does seem likely that more players will enter the capital markets in 2016.

HISTORIC LEVELS OF EETC ISSUANCE ($BN)



Source: Morgan Stanley, Boeing, J.P. Morgan



THE AIRLINE ANALYST FINANCIAL RATINGS

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AIRCRAFT PROFILE

747-8 – a jumbo problem

In its latest incarnation, Boeing's iconic jet is failing to match the popularity of its predecessors.

The Boeing 747-8 is a stretched version of the successful 747-400 variant of Boeing's largest aircraft. The latest generation of the 747 incorporates a new wing design and shares some of the technology of the 787 family. Four General Electric GEnx-2B engines power the 747-8.

Boeing offers the aircraft in two main variants: the 747-8 passenger or Intercontinental version, which is sometimes designated as the 747-8I, and the 747-8 Freighter (747-8F). Delivery of the first freighter aircraft occurred in October 2011 and the passenger model began deliveries in 2012.

The 747-8 competes with the A380, although the Boeing aircraft is significantly smaller than its Airbus rival. Boeing claims that the 747-8 is about 10% lighter per seat and typically has a trip-cost reduction of 21% compared to its larger competitor. Neither aircraft has been particularly successful. The 747-8 and, to a lesser extent, the A380 are vulnerable to new twin-aisle models, such as the A350 and 777X, which offer competitive seat-mile costs despite being smaller aircraft.

Developments

Boeing has introduced some performance enhancements since the 747-8 entered service, but further significant developments look unlikely because production rates are being decreased.

ISTAT APPRAISERS' VIEWS

Collateral Verifications (CV)
Gueric Dechavanne, vice-president, commercial aviation services

In the past 12 months, CV has seen values decline for the 747-8 passenger and freighter versions because of the lack of demand for both types and the continued weakness in the cargo market. Boeing's recent decision to reduce the production rate of this aircraft is a strong indication of the current market conditions. We believe the 747-8 is a niche aircraft for the few operators who are able fully to utilize its capability. Almost 30% of the in-service aircraft are leased, which in our view is very telling of the future demand for the type.

Historically, we have found that operators of large freighter aircraft tend to operate the aircraft for the long term. However, the high proportion of leasing may indicate that current operators are planning to replace the 747-8 freighter sooner rather than later.

AIRCRAFT CHARACTERISTICS

Seating/range	
Max seating	605
Typical seating	467 (three-class configuration)
Max range with 410 passengers	8,000 nautical miles (14,815km)
Capacity/range freighter version	
Max payload	140 tonnes
Max range with full payload	4,390nm (8,130km)
Cargo volume	858 cubic metres
Technical characteristics	
MTOW	448 tonnes
OEW (passenger version)	213 tonnes
OEW (freighter version)	190 tonnes
MZFW (passenger version)	295 tonnes
MZFW (freighter version)	330 tonnes
Fuel capacity (passenger version)	239,000 litres
Fuel capacity (freighter version)	228,000 litres
Engines	4 x GEnx-2B
Thrust	66,500 lbf (296 kN)
Fuels and times	
Block fuel 1,000nm	20,370kg
Block fuel 2,000nm	38,760kg
Block fuel 4,000nm	79,910kg
Block time 1,000nm	146 minutes
Block time 2,000nm	265 minutes
Block time 4,000nm	501 minutes
Fleet data	
Entry into service	2011
Delivered	106
Operators (current)	12
On order	24
Average age	2.4 years

*Source: AeroTransport database/*Airfinance Journal *research*

Indicative maintenance reserves	
C-check reserve	$155-$160 per flight hour
Higher checks reserve	$115-$120/flight hour
Engine overhaul	$165-$170/ engine flight hour
Engine LLP	$255-$260/engine cycle
Landing gear refurbishment	$160-$1655/cycle
Wheels, brakes and tyres	$750-$755/cycle
APU	$105-$110/per hour
Component overhaul	$505-$510/flight hour

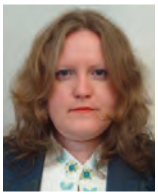
"The 747-8 is the latest and, in all likelihood, the last generation in the venerable 747 family."

Olga Razzhivina, senior Istat appraiser, Oriel

On a more positive note, there is not another aircraft type that offers the same payload/range characteristics as the 747-8. For operators requiring its niche characteristics, the 747-8 is the only game in town, which could help stabilize the long-term value trend for the type.

For the passenger variant, the market is becoming more limited, because many operators prefer to operate Boeing 787/777- and Airbus A330/A350-size aircraft for most of their routes.

With very few aircraft on order, the current market trends do not bode well for the type.



Oriel
Olga Razzhivina, senior Istat appraiser

The 747-8 is the latest and, in all likelihood, the last generation in the venerable 747 family. Comprised of two variants – passenger and freighter – it was Boeing's low development-cost response to the Airbus A380. Despite being stretched and re-engined with the latest technology GEnx engines, the 747-8 is not enjoying the popularity of its predecessors. Production rates are now cut to six a year, and construction of the presidential flight aircraft will likely herald the end of the programme.

The passenger variant – the 747-8I – has achieved only 38 orders from four airlines after losing Transaero's backlog following the airline's bankruptcy. With only a niche fleet its residual value future is bleak. Freighter conversion is unlikely because the converted version would have a different fuselage configuration than the factory-built freighter, its payload would suffer from the larger top deck of the passenger model and it could not offer the nose-loading capability of the 747-8F.

The 747-8F has had more success than its passenger sibling. The freighter version has accumulated 68 orders from nine airlines, and the only order cancellations have been by lessors. However, these numbers are below the 164 sales of the previous generation 747-400F/ERF models and are indicative of the current levels of demand for large freighters. The 747-8F is the only in-production nose-loading large freighter suitable for oversized cargo operations. However, demand for such lift has reduced significantly since the withdrawal of Nato troops from Iraq and Afghanistan, and there have been many failures among the dedicated cargo airlines which would have been potential customers for a factory-built freighter.

The value retention of the 747-8F is expected to be superior to the passenger version, as often is the case for cargo aircraft. The freighter's unique outsized cargo capability should also help value retention.

GENX-2B ENGINE

The sole power supply for the Boeing 747-8 is General Electric's GEnx-2B. The engine manufacturer says the new engine delivers up to 15% better specific fuel consumption than its predecessor, the CF6, which was one of the powerplants offered on the previous generation of 747s.

The GEnx engine was originally developed for Boeing's 787 family, where it competes with the Rolls-Royce Trent.

The version used on the 747-8 has a smaller overall diameter and there are a number of technical differences, but General Electric says the engines on the two different aircraft families are based around an identical core and use similar materials, which the manufacturer claims gives synergies for operators of mixed fleets.

VALUES

747-8F current market value ($m)

Build year	2012	2013	2014	2015	2016
CV view	119.6	129.2	154.0	164.1	180.4
Oriel view	123.0	129.0	137.0	161.0	187.0

Assuming standard Istat criteria.

747-8I current market value ($m)

Build year	2012	2013	2014	2015	2016
CV view	114.7	119.1	123.1	127.7	149.7
Oriel view	93.0	97.0	102.0	123.1	147.3

Assuming standard Istat criteria.

747-8F indicative lease rates ($m/month)

Build year	2012	2013	2014	2015	2016
CV view	1.000	1.100	1.200	1.300	1.400
Oriel view	1.075	1.175	1.275	1.375	1.500

Assuming standard Istat criteria.

DEAL WATCH

LOANS/FINANCE LEASES

Borrower	Country	Asset	Amount	Structure	Arranger	Debt
January 2016						
Goshawk	Ireland	17/ac	$470m	Recourse facility	Natixis	
ICBC FL	China	1x737-800	$48m (2015 CMV*)	French tax lease	CA-CIB, National Australia Bank	
THY	Turkey	4x737-800	$188m (2015 CMV*)	Jolco	BTMU/ Century Leasing	BTMU/ Century Leasing
Minsheng Financial Leasing	China	3xA320, 4x737-800	Undisclosed	Secured loan	DVB	DVB, Helaba, ICB, Korea Development Bank
SAS	Sweden	5xA320neo (PDP)	Up to $46m	Revolving credit	DVB	
December 2015						
Intrepid	US	1xA330-300	$105.6m (CMV*)	Secured commercial loan	Erste Bank	
Intrepid	US	1xA330-300	$105.6m (CMV*)	Secured commercial loan	DVB	
November 2015						
Emirates	Dubai	2x777-300ER	$334m (CMV*)	Jolco	BRED Banque Populaire, Natixis and Société Générale	
ICBC FL	China	8x737-800	$380m (CMV*)	French tax lease	BNPP, CIC, Natixis	
Qatar Airways	Qatar	1xA380	$428m/$222m (List/CMV*)	French tax lease	CA-CIB, HSBC	CA-CIB, HSBC
Harvest International (Juneyao Airlines)	China	1xA320	$97m/$44m (List/CMV*)	Commercial Loan	CCB	

EXPORT CREDIT DEALS

Borrower	Country	Asset	Amount	Structure/ECA	Arranger	Debt
November 2015						
Air India	India	A320 (fifth of five)	$97m/$44m (List/CMV*)	ECA-guaranteed loan/UK Export Finance	Crédit Agricole CIB, TD Securities, ING, Wilmington Trust	Bank of Tokyo-Mitsubishi UFJ, Sumitomo Mitsui Trust

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CAPITAL MARKETS

Borrower	Country	Asset/Security	Amount	Structure/Term	Arranger	Coupon/Rating
December 2015						
Norwegian Air Shuttle	Norway	Unsecured	€125m	Eurobond	Danske Bank Markets, DNB Markets and SEB	7.25%
Air Canada	Canada	5 Boeing widebodies	$537m (AA:$295m, A:$121m, B:$121m)	EETC	Morgan Stanley, Credit Suisse	AA:3.75%, A:4.125%, C:5.0%/AA:A1, A:A3, C:Ba1 (Moody's)
November 2015						
Castlelake	US	54 aircraft	$713.21m (A:$529, B:$105.7m,C:$78.5m)	ABS	Deutsche Bank, Goldman Sachs	A:A, B:BBB, C:B+ (Kroll)

* Current market value - see page 50

DEAL WATCH

SALE/LEASEBACKS

Borrower	Country	Asset	Lessor/Arranger	Amount
January 2016				
Emirates	Dubai	1xA380	EMP	$222m (2015 CMV*)
December2015				
Aegean	Greece	1xA320	Awas	$44m (CMV*)
November 2015				
Wizz Air	Hungary	11xA321ceo	CCB Financial	$481m (CMV*)
Flydubai	Dubai	2x737-800	Standard Chartered	$192m/95m (at list/CMV*)
Oman Air	Oman	1x737-900ER	Obam	$102m/51m (at list/CMV*)
Lion Air	Indonesia	6x737-900ER	Stellar	$611m/305m (at list/CMV*)

Airfinance DEALS DATABASE

DEAL PIPELINE (MANDATES)

Borrower	Country	Asset	Structure	Amount	Arranger/Advisor	Status
November 2015 to January 2016						
Biman Bangladesh	Bangladesh	2x777-200ER	Undisclosed	$131m (2015 CMV)		RFP issued
IAG (Vueling0	UK/Spain	3xA320	Jolco	$131m (2015 CMV)		RFP issued
Lufthansa	Germany	1xA380, 2xA321	Jolco	Undisclosed		RFP issued
THY	Turkey	29 aircraft	various	Undisclosed		Mandated
Latam	Chile	3xA350-900, 2xA32neo	ECA- supported	$1.13 bn (at list)		Shortlist imminent
Lufthansa	Germany	1xA380	Jolco	$428m/222m (at list/ CMV*)		RFP issued

* Current market value - see page 50

RATINGS

AIRLINE FINANCIAL RATINGS

Airline	Fitch	Moody's	S&P
Aeroflot	B+(neg)	-	-
Air Canada	B+(stable)	B1(stable)	B+(stable)
Air New Zealand	-	Baa2(stable)	-
Alaska Air Group	BBB-(stable)	-	BBB-(stable)
Allegiant Travel Company	-	Ba3(stable)	BB(stable)
American Airlines Group	BB-(stable)	Ba3(stable)	BB-(stable)
Avianca Holdings - IFRS	BB-(neg)	-	B+(stable)
British Airways	BB+(pos)	Ba2(pos)	BB(pos)
Delta Air Lines	BB+(pos)	Ba2(pos)	BB+(stable)
Etihad Airways	A(stable)	-	-
GOL	B-(stable)	B3(neg)	B-(stable)
Hawaiian Airlines	B(pos)	B2(stable)	B+(stable)
jetBlue	B+(stable)	Ba3(stable)	BB-(stable)
LATAM Airlines Group	BB-(stable)	Ba2(stable)	BB(neg)
Lufthansa Group	-	Ba1(pos)	BBB-(stable)
Qantas Airways	-	Ba1(pos)	BBB-(stable)
Ryanair	BBB+(stable)	-	BBB+(stable)
SAS	-	B3(stable)	B-(stable)
Southwest Airlines	BBB+(stable)	Baa1(pos)	BBB(stable)
Spirit Airlines	BB+(stable)	-	BB-(stable)
Turkish Airlines	-	Ba1(stable)	BB(stable)
United Continental Holdings	BB-(pos)	Ba3(pos)	BB-(pos)
US Airways Group	BB-(stable)	B1(stable)	-
Virgin Australia	-	B2(Stable)	B+(stable)
WestJet	-	-	BBB-(stable)

Source: Ratings Agencies - 12th January 2016

AVIATION COMPANY RATINGS

Company	Fitch	Moody's	S&P
Airbus Group	A-(stable)	A2(stable)	A(pos)
Boeing	A(stable)	A2(stable)	A(stable)
Bombardier	B(neg)	B2(neg)	B(neg)
Embraer	-	Baa3(stable)	BBB(stable)
Rolls-Royce	A(stable)	A3(stable)	A(stable)
United Technologies	A-(stable)	A3(stable)	A-(stable)

Source: Ratings Agencies - 12th January 2016

LESSOR CREDIT RATINGS

Lessor	Fitch	Moody's	S&P
AerCap	BB+(pos)	Ba2(pos)	BB+(pos)
Air Lease Corp	-	-	BBB-(pos)
Aircastle	-	Ba2(pos)	BB+(stable)
Avation PLC	B+(stable)		B(stable)
Aviation Capital Group	BBB-(pos)	-	BBB-(pos)
AWAS Aviation Capital Limited	-	Ba3(stable)	BB+(neg)
BOC Aviation	A-(stable)	-	A-(stable)
CIT Group Inc	BB+(stable)	B1(pos)	BB+(stable)
DAE Aviation Holdings	-	-	B-(stable)
Fly Leasing	-	B1(pos)	BB(stable)
ILFC (Part of AerCap)	-	Ba2(pos)	-
SMBC Aviation Capital	BBB+(stable)	-	BBB+(stable)

Source: Ratings Agencies - 12th January 2016

Airfinance
DEALS DATABASE
For more extensive deal coverage and lawyers details
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AIRCRAFT ORDERS

COMMERCIAL AIRCRAFT ORDERS BY MANUFACTURER

	Gross orders 2015	Cancellations 2015	Net orders 2015	Net orders 2014
Airbus	1139	103	1,036	1,456
Boeing	876	108	768	1,432
Bombardier	35	0	35	93
Embraer	165	0	165	122
ATR	76	8	68	160
Based on manufacturer year-end announcements				

COMMERCIAL AIRCRAFT ORDERS BY CUSTOMER

Customer	Country	Quantity/Type
November 2015 to January 2016		
Gulf Air	Bahrain	29xA320neo
Calc	China	2xA320ceo
Air China	China	6x777-300ER
BOC Aviation	Singapore	18xA320neo, 12xA320ceo
IAG	UK/Spain	15xA320neo
China Express	China	10xCRJ900
Ethiopian Airlines	Ethiopia	2xQ400
Braathens	Sweden	5xATR72-600
Spring Airlines	China	60xA320neo
AirBridgeCargo	Russia	2x747-8
Easyjet	UK	6xA320ceo, 30xA320neo
ACG	US	A320neo
TAP	Portugal	14xA330-900 neo, 39 A320 neos
VietJet	Vietnam	30xA321

CURRENT PRODUCTION AIRCRAFT PRICES AND VALUES ($ MILLIONS)

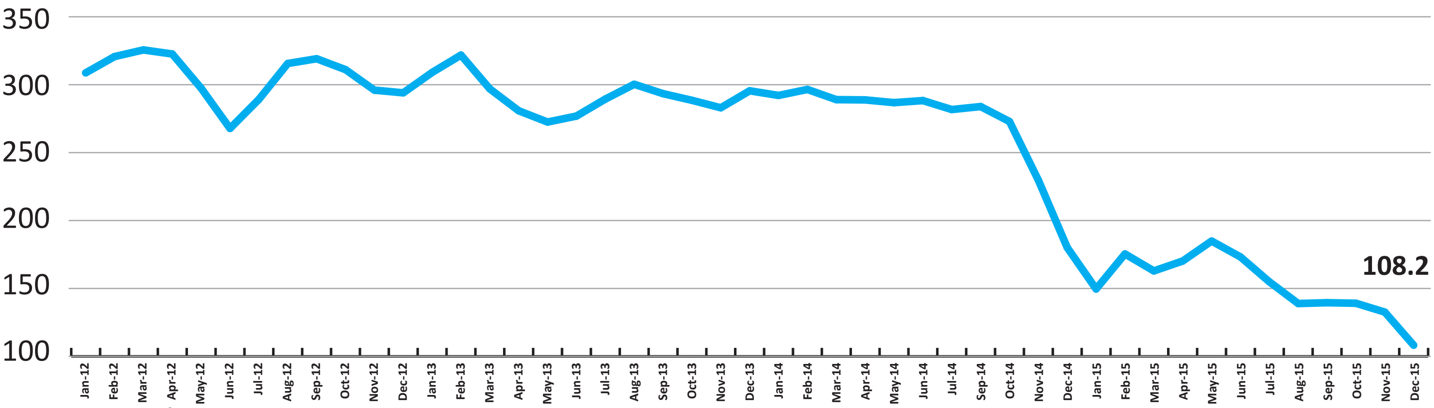
Model	List price	Current market value*
Airbus (2016 price)		
A319	89.6	37.0
A320	98.0	44.2
A321	114.9	52.6
A330-200	231.5	92.3
A330-300	256.4	104.4
A350-900	308.1	144.5
A380	432.6	221.4
ATR (2015)		
ATR42-600	21.6	16.4
ATR72-600	25.9	20.4
Boeing (2015)		
737-700	80.6	36.7
737-800	96.0	47.5
737-900ER	101.9	49.5
747-8 (passenger)	378.5	164.0
777-200LR	313.8	N/A
777-300ER	339.6	163.1
787-8	224.6	118.2
787-9	264.6	136.2
Bombardier (2015 Avitas BlueBook)		
CRJ700	41.0	22.3
CRJ900	46.0	26.3
CRJ1000	49.1	28.1
Q400	30.0	21.8
Embraer (2016)		
E170	41.2	26.9
E175	44.4	29.0
E190	49.1	33.1
E195	52.0	35.1

*Based on Istat appraiser inputs for Air Investor 2016

AIRCRAFT LIST PRICES - NEW MODELS

Model	$ millions
Airbus (2016 prices)	
A319neo	98.5
A320neo	107.3
A321neo	125.7
A330-800neo	252.3
A330-900neo	287.7
A350-800	272.4
A350-1000	355.7
Boeing (2015)	
737 Max7	90.2
737 Max8	110.0
737 Max9	116.6
777-8X	371.0
777-9X	400.0
787-10	306.1
Bombardier (2015)	
CS100	71.8
CS300	82.0
Embraer (2016)	
E175-E2	50.8
E190-E2	58.2
E195-E2	65.6

US GULF COAST KEROSENE-TYPE JET FUEL (CENTS PER US GALLON)



Source: US Energy Information Administration

LEASE RATES ($000S)

Model	Low	High	Average
Airbus			
A319	230	240	235
A320	280	389	335
A321	360	460	410
A330-200	640	859	750
A330-300	900	1,242	1,071
A350-900	1,050	1,300	1,175
A380	1,175	2,028	1,602
ATR			
ATR42-600	135	167	151
ATR72-600	165	216	191
Boeing			
737-700	225	340	283
737-800	315	421	368
737-900ER	355	435	395
747-8 (passenger)	1,150	1,425	1,288
777-300ER	1,150	1,450	1,300
787-8	850	1,100	975
787-9	1,050	1,250	1,150
777-300ER	1,050	1,550	1,300
787-8	850	1,110	980
787-9	1,190	1,340	1,265
Bombardier			
CRJ700	175	214	195
CRJ900	190	240	215
CRJ1000	210	260	235
Q400	180	240	210
Embraer			
E170(AR)	180	210	195
E175(AR)	200	260	230
E190 (AR)	225	290	258
E195 (AR)	230	300	265

Based on Istat appraiser inputs for Air Investor 2015

PILARSKI SAYS...

Can dismal science lead us to optimism?

Increasing capacity does not have to be bad news, just follow economics, writes Adam Pilarski, senior vice-president at Avitas.

Airlines are finally making real money, just like businesses should. In the US, majors made record profits. Often this is linked in headlines to the price of oil: "Cheap fuel helped Delta set record profits." Ticket prices coming down and traffic going up are related to increased airline profitability. We hear the same sentiments worldwide. Even Lufthansa and Air France, which have not been doing so well recently, recorded significant profits.

The International Air Transport Association, commenting on the sudden surge of airline profits, summarized the situation in the following way: "[There is] softening in global economic growth but there is no sign of adverse impact on RPKs [revenue passenger-kilometres]."

Similar sentiments can be heard globally. For example: "The Canadian economy is technically in recession, but Air Canada reports strong demand." All this does not imply that the traditional strong link between a country's economy and traffic is broken. In Brazil, for example, airlines are losing money because of the deep economic recession. To understand what is happening, we have to tie a number of factors together: traffic, state of the economy and oil prices.

Mathematically, the relationships are straightforward. Profit is revenue minus cost, with revenue being the product of traffic and yield (ticket prices). Lower oil prices automatically lower costs. The revenue side is more complicated. Traffic is tied positively to the economy and negatively to yields. Assuming lower oil prices stimulate the world economy, they should lead to higher traffic growth. They also should lead to lower yields, further stimulating traffic. The product of lower yields and higher traffic cannot be theoretically forecast.

Lower costs lead airlines to increase capacity and lower ticket prices. Interestingly, this message is misunderstood, misinterpreted and irrationally feared. Let us start with straightforward economics. Price is a function of demand and supply, which together determine an equilibrium price and quantity produced. Even if demand is the same as oil prices fall, the supply curve shifts right because airlines can now produce the same quantity of ASMs (capacity) at a lower price. This results, theoretically, in higher quantity produced at a lower price (more traffic at a lower ticket price), exactly what is happening around the world right now. Following simple economics, this is the only rational outcome that should have been predicted as oil prices fell last year.

So why do some people believe, or want to believe, that this will not happen (lower oil prices leading to increased capacity and lower fares)? One group does not believe oil prices will stay low. As a matter of fact, when oil prices started to fall the industry waited to act until the lower oil prices became a fact. Most chief executive officers of major airlines expressed doubt, as stated by Doug Parker of American Airlines, in February 2015: "Oil has been over $100 for four years and it has been under $100 for four months… we are going to operate American as though we are still operating with $100 oil."

Michael O'Leary of Ryanair, on the other hand, quickly understood what was happening and acted. The reality of lower oil prices is sinking in and most airlines accept this fact now.

The second element is highly related to the peculiar thinking of some Wall Street analysts. Their almost religious belief is that airlines historically did not make money because they sinned by increasing capacity, causing a decline in fares and monumental losses. Hence, to them any suggestion of an increase in capacity, no matter what reason, is almost sacrilegious and produces violent condemnation. My view is that when oil prices went permanently down, it was a rational development for airlines to increase capacity and lower fares. Yes, it brings back memories of past airline industry mistakes.

Many analysts pine for "capacity discipline" and take suggestions that airlines behave rationally in light of oil price declines as an invitation for disaster. The future, though, can be much brighter. Lower oil prices must lead to higher worldwide traffic benefiting manufacturers and airlines, assuming they do not repeat past mistakes. Terrorism and other external events notwithstanding, lower oil prices can be a boon for aviation.

So, what will happen? Must lower ticket prices and higher capacity necessarily lead to airline losses? Does increasing capacity equal abandoning discipline, leading us towards the abyss? Not inevitably in my view. Previous capacity increases led to price wars and disaster. This does not need to happen. True, airlines behave very differently in good versus bad times. When times were tough – such as when oil prices were sky high – airlines behaved more rationally. When things were good, they often engaged in destructive and unwise behaviour.

It does not need to happen now when capacity increases are not an irrational prelude to price wars but a rational response to a changing demand-and-supply relationship. Economic principles are not the enemy – bad airline practices are. Increasing capacity may lead to very good times if airlines follow economics.

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