



# Airfinance JOURNAL

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Financial intelligence for commercial aviation



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## EDITOR'S LETTER

# A widebody bubble

Widebody aircraft values are under threat, but perhaps not to the extent some airlines would have us believe.

Delta Air Lines' chief executive officer Richard Anderson has stirred up controversy with remarks he made about widebody aircraft availability, during a briefing on the carrier's third-quarter results. Anderson suggested that a huge bubble in excess widebodies will provide opportunities for his airline.

In particular, he said there will be "huge buying opportunities" to purchase used 777-200s and A330-200s as they come off lease.

Delta has apparently already been approached by more than one seller of such aircraft.

Anderson noted: "It's a relatively small market [and] there are not many people in the world that can take a dozen 777s; there's a handful of customers. It's a very small market, it's a very transparent market and we get calls all the time."

According to Anderson, buyers can already find nine- or 10-year-old 777-200s for about \$10 million, while leases of used A330-200s are "about a fifth" of what they would be new.

Anderson summed up Delta's view by saying: "We think that the weakness in that aircraft bubble in widebodies is going to spread to narrowbodies, and that there will be some huge buying opportunities because low interest rates really have created a huge bubble in the world."

Anderson expanded on his position by pointing out that used widebodies, from carriers such as Singapore Airlines, will flood the market over the next few years. Asked whether there is already a deal with Singapore Airlines in the works, Anderson responded: "There is no deal. Prices are going to get lower; you wouldn't strike a deal now."

Some analysts have suggested to *Airfinance Journal* that there is an element of self-interest in Anderson's comments. In particular, his figure of \$10 million for a 777-200 looks more like a negotiating ploy than a realistic valuation of the type. A number of appraisers have confirmed that even the scrap value of the aircraft with mid-life engines would be closer to \$30 million than \$10 million. Most appraisers value newer models much higher than that.

*Airfinance Journal* canvassed the views of a number of Istat appraisers. The typical valuation for a generic configuration 777-200ER with half-life maintenance is \$40.5 million for a 2005 model and \$58 million for a 2010 aircraft.

So Anderson's \$10 million looks far-fetched but, although not many industry insiders would agree with his pricing estimates, many of them share his views about a potential oversupply of capacity for both widebody and narrowbody aircraft.

Most delegates at the 2015 Istat Europe conference said they anticipated a capacity glut, and the question was when rather than if it would occur. Although the order boom of recent years has been concentrated largely on the single-aisle market and the problem of overcapacity is across the board, the intrinsic difficulties in remarketing widebody aircraft mean that owners may face greater problems than those primarily involved in the single-aisle market.

As *Airfinance Journal* has reported, even the 777-300ER, widely regarded as the definitive widebody of its era, is facing difficulties (*see 777-300ER – a remarketing challenge*, *Airfinance Journal*, July/August 2015, page 27).

How the problems at Transaero (*see Transaero bankruptcy looms*, page 23) are resolved will provide an insight into the difficulties of the widebody secondary market, not to mention its impact on new Boeing 747-8 sales.

The problem for current widebodies is not helped by the prospect of several new types, which offer significant cost efficiencies, entering the market in the coming years. In addition to the A350-900, which has already entered service, the A330-900 is due in 2017 and the first 777Xs are scheduled to follow in 2020. The manufacturers would suggest that most of these aircraft are destined to meet growth in passenger markets, but there is increasing concern in the industry that the surge of new models is bound to undermine the market for current aircraft as they come off lease. The problem is starting to become a pressing one because, as Anderson alludes to, there are significant numbers of widebody aircraft that could become available from Asian and Middle Eastern carriers in the next few years.

Where all this leaves the prospects of a new or stretched A380 is another question.

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## NEWS

## People



**Kavanagh is CCO at Macquarie AirFinance**

Macquarie AirFinance has appointed Liam Kavanagh as its new executive vice-president and chief

commercial officer. He joined the company in September 2011 as senior vice-president trading.

Kavanagh spent 10 years in corporate and investment banking with National Westminster Bank. He then joined Halifax in 1999, where he led deal origination and airline relationship management, before he was appointed managing director and head of aircraft finance in 2008.


**Transportation Partners hires financial controller**

Transportation Partners, the Singapore-based lessor linked to Indonesian company Lion Group, has appointed

Ho Bee Leng as financial controller. She will oversee the group's accounting functions.

Ho is a chartered accountant and previously worked as a director for KPMG, where she was also responsible for the initial public offering department for the Asia Listings Group.

**Chorus appoints Ridolfi for investments and M&A**

Chorus Aviation, the holding company of Canadian regional airline Jazz Aviation, has appointed Steven Ridolfi as senior vice-president (SVP) of strategic invest-

ments, mergers and acquisitions (M&A).

Ridolfi previously worked as SVP of strategy, mergers and acquisitions at Bombardier.

"Steve's worldwide relationships and extensive experience in the regional airline sector are attributes that we will leverage to achieve future success," says Rick Flynn, executive vice-president and chief corporate development officer at Chorus.

In August, Joe Randell, Chorus Aviation's chief executive officer, told *Airfinance Journal* that the company planned to expand by leasing to new airline customers.

**Mizuho Securities snaps up BNP director**

Mizuho Securities USA has hired former BNP Paribas director Vinodh Srinivasan as a managing director, *Airfinance Journal* understands. He was previously director of corporate solutions at BNP Paribas.

His new role at Mizuho Securities is managing director and co-head of the strategic credit group.

**Clifford Chance gets senior associate in London**

Clifford Chance has hired a senior associate to work in its London asset finance practice. Richard Sharman joins the firm from Clyde & Co, where he was a senior associate in the transportation finance group in the London office.

Sharman has experience in structured aircraft finance acting for lenders, lessors and airlines, and advises the Aviation Working Group on insurance matters. Sharman qualified in 2008, and spent two years at Stephenson Harwood as a trainee solicitor.

**New CEO for SriLankan Airlines**

Suren Ratwatte has been appointed as chief executive officer of SriLankan Airlines. The former Emirates captain, who has more than 18,000 flight hours on Boeing 777s and Airbus A380s, will take over from Rakitha Jayawardena.

Ratwatte is the brother of Charitha Ratwatte, the adviser of Sri Lankan prime minister Ranil Wickremesinghe, according to the Colombo Telegraph.


**Taylor is made for WestJet**

Canadian airline WestJet has named Harry Taylor as its new chief financial officer (CFO) and executive vice-president of finance.

Taylor joins WestJet from Canadian Tire Corporation (CTC), where he has worked since 2010, most recently as senior vice-president finance. CTC is a large Canadian retailer that sells automotive services and sports and leisure products.

**MacGregor joins LCI's Americas sales team**

Leasing company LCI has hired Malcolm MacGregor as its new vice-president of sales and marketing for the Americas.

MacGregor joins the company from Milestone Aviation Group, where he was VP of sales for Europe, Middle East, India and Africa.

LCI's fleet mostly consists of helicopters, but the lessor also has four A330-300s and one 747-400. In 2009, the company placed an order with Bombardier for 17 CS300s and three CS100 jets.



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## NEWS

## People


**Samson is Air Namibia's new MD**

Air Namibia has appointed a new acting managing director. Mandi Samson previously worked at the Namibia Airports Company as the general manager of corporate and legal services.

She also served as the chairperson of the board of trustees of the Namibian Government Institution Pension Fund, as well as a commissioner of the Law Reform and Development Commission.

Samson is a master of business administration and is completing a doctorate in philosophy in air transport at Leiden University.

*Airfinance Journal* understands the airline has recently gone through a management reshuffle, also appointing a new chief financial officer, chief operating officer and chairman.

**Boeing makes regional appointments**

Aysem Sargin Isil has been named managing director of Boeing Turkey. She will lead the Boeing strategy and coordinate all company work in the country. Isil will be based in the Boeing Turkey headquarters in Ankara.

Omar Arekat, who is Boeing Commercial Airplanes sales director, has taken on the additional role of managing director for Qatar. The company says Arekat will help strengthen customer relationships and advance Boeing's profile in Qatar.

Kuljit Ghata-Aura, regional legal counsel for Boeing operations in India, Middle East and Africa, has taken on the additional role of director, market development, United Arab Emirates. Ghata-Aura will be responsible for planning and implementing key company initiatives.

All three executives will report to Bernie Dunn, president of Boeing Middle East, North Africa and Turkey.

**Gilligan joins Southwest board**

Southwest Airlines has appointed Thomas Gilligan to its board of directors.

Gilligan has been a director at the Hoover Institution on War, Revolution and Peace at Stanford University since September. He was previously dean of the McCombs School of Business at the University of Texas in Austin between 2008 and August 2015.

"Tom brings with him a wealth of knowledge, experience and leadership in finance, economics and business administration that will benefit our board and our company. We're thrilled to welcome him on board," says Gary Kelly, chairman of the board, president and chief executive officer for Southwest Airlines.

Ron Ricks, Southwest's chief legal officer, retired from his position in September and also joined the company's board of directors.

**Alitalia CEO resigns**

Alitalia says its turnaround will continue despite the unexpected resignation of chief executive officer (CEO) Silvano Cassano in September.

Cassano was chosen by Alitalia to be chief executive of the new company, which was formed when Etihad bought a 49% stake in the Italian flag carrier at the end of 2014.

Alitalia says Cassano's departure was because of personal reasons.

Luca Cordero di Montezemolo, chairman of Alitalia's board of directors, is acting CEO until the airline appoints a replacement for Cassano.

"The company will announce a new CEO in due course," says Montezemolo. "In the interim, Mr Cassano's daily responsibilities will be split between Alitalia's chief operations officer Giancarlo Schisano and chief financial officer Duncan Naysmith, with both reporting directly to me until the new CEO is appointed."

**New managing director for Air India**

Air India has appointed a new chairman and managing director. Ashwani Lohani started his new role at the Indian flag carrier in September and will replace Rohit Nandan, according to a source with knowledge of the move.

Lohani was previously the director for railways in India.

**Kaye Scholer appoints London managing partner**

US law firm Kaye Scholer has appointed a new managing partner for its London office.

Philip Perrotta, who is co-chair of the firm's aviation finance and leasing practice, succeeds corporate partner Andrew Harris, who has led the London office since he joined Kaye Scholer in 2010.

Perrotta, who joined the firm in October 2014 from Clyde & Co, will drive the expansion of the London office into the finance and transportation sectors. His primary practice will remain in aviation.

**Air Madagascar appoints new director-general**

Gilles Filiatreault has been appointed as director-general of Air Madagascar. The company says he has the backing of the carrier's personnel, and that his long experience in the aviation industry will help the airline out of a period of turbulence and give it a fresh start. ▲





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## NEWS

## Airlines

## PIA closes \$120m Islamic facility



Pakistan International Airlines (PIA) has closed a \$120 million receivable-backed Islamic facility, *Airfinance Journal* has learnt.

The loan has a tenor of three years and amortizes monthly. The loan was structured using PIA seat revenues as underlying assets and was secured against assignment of International Air Transport Association receivables from the UAE, as well as for the first time PIA's global credit card collections aggregated by WorldPay.

Citi and Mashreq Bank acted as joint coordinators. Citi, Mashreq Bank, National Bank Bahrain, Noor Bank, United Bank Dubai and Warba Bank were the mandated lead arrangers. Citi also acted as account bank for the transaction.

## Fastjet Zimbabwe granted AOC



Fastjet Zimbabwe was granted an air operator certificate (AOC) by the Civil Aviation Authority of Zimbabwe on October 6.

The AOC designates fastjet Zimbabwe Limited as a Zimbabwean airline licensed to operate both domestic and international routes within and from Zimbabwe.

The Zimbabwe subsidiary is the second airline in the fastjet network.



## RIO 2015 BANKER'S PANEL: LATIN AMERICAN CARRIERS CAN ISSUE SUCCESSFUL EETCS



Latin American carriers can issue successful enhanced equipment trust certificates (EETCs) despite jurisdictional risks, according to a panel of financiers that spoke at *Airfinance Journal's* Latin America conference in Rio de Janeiro.

Thomas Hollahan, managing director at Citi, explained that Latam successfully pulled off its inaugural EETC despite the difficulties presented by the two jurisdictions involved: Chile, which has not ratified the Cape Town Convention, and Brazil, where there are macroeconomic risks caused by a decline in gross domestic product, as well as severe currency devaluation.

Talking about the deal, Hollahan added: "If you look at the premium, if any, that Latam paid over a US airline, let's say, that doesn't have any of these risks, it would indicate that it was very efficiently priced."

The panelists agreed that Cape Town ratification makes it easier to issue an EETC, but that it is not a prerequisite to a successful deal.

Meghan Ryan, associate at Goldman Sachs, added that for non-US issuers, investors need to understand the repossession risks of the EETC issuer's jurisdiction, but that Goldman Sachs has had "no trouble with that in prior transactions".

Ryan added: "Having Cape Town checks the box and makes the process of explaining the jurisdiction easier for investors, but that being said, a number of non-Cape Town jurisdictions have more expedited repossession than Cape Town jurisdictions – for instance, in the UK and Australia, where EETCs have been done. So, not having Cape Town doesn't mean you can't do a deal; it just does take more time to explain. But, in some cases, it's better than what Cape Town would afford. So it definitely is on a case-by-case basis."

Olivier Trauchessec, managing director at BNP Paribas, said EETCs make sense for airlines with a large amount of aircraft to finance and that an EETC does not necessarily work for airlines that do not need the same volume of financing. He added that EETCs were difficult to combine with other financial products.

Rafael Kuhn, vice-president, Deutsche Bank, explained that some airlines with large numbers of aircraft arriving in 2017-2018 have begun to look into EETC financing.

He explained: "We are seeing an increase in inquiry from airlines that are trying to understand the market, and figure out if it is something that they want to do now to prepare for the future, when they need to digest more aircraft." ▲

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**Ryanair**

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- How will the slowdown in China and similar large economies impact aircraft trading and financing?

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Philip Greene, Bank of Ireland Corporate Banking

## NEWS

## Airlines

**Aeroflot drops Transaero acquisition plans**

Aeroflot has dropped plans to acquire struggling rival Transaero.

After a government commission in September, Russia's second-largest airline offered to sell 75% of its shares to Aeroflot for a token price of one ruble.

However, Aeroflot says that Transaero's shareholders did not respond with a proposal to a tender offer from Aeroflot by the deadline date. As a result, the Aeroflot board decided not to extend the offer.

Aeroflot chief executive officer Vitaly Saveliev says: "Aeroflot undertakes that all obligations to Transaero's passengers will be fulfilled. Passengers will be guaranteed transportation or a refund in the event that a flight is cancelled."

As of December 2014, debt-laden Transaero had balance sheet debt and outstanding finance leases totalling \$1.8 billion. Transaero's debt would make a substantial impact on Aeroflot's net balance sheet debt and outstanding finance leases, which totals \$1.81 billion, according to figures released in September.

Transaero has a fleet of 99 aircraft with an average age of 16.3 years according to information from AtlasData.

**Malindo Air approved for Australia route**

Malindo Air has won approval from Australian regulators to fly a new route from Kuala Lumpur to Perth, the airline's chief executive officer Chandran Ramamurthy reveals in an exclusive interview with *Airfinance Journal*.

The Malaysian low-cost carrier, which is 49% owned by Indonesian airline company Lion Group, intends flying the Kuala Lumpur-Perth route at least daily and is looking to increase the frequency to as many as 11 flights a week. There are tentative plans for flights on this new route to begin on November

11, according to the carrier.

The airline has a fleet of 11 ATR 72-600s, six 737-900ERs and seven 737-800s. It has taken delivery of five 737-800s this year and will receive three more on lease by the end of 2015. The incoming 737-800s will be used to fly existing routes and some of the 737-900ERs will be deployed on the new Australia route.

Malindo Air operates flights to Bangladesh, Indonesia, India, Nepal, Thailand, Singapore and domestic Malaysian routes.

Ramamurthy adds that Malindo Air is eyeing Sydney and Melbourne as potential destinations "not in the near future but in the long run".

**Jeju Air targets \$128m with IPO**

Jeju Air hopes to raise up to W154 trillion (\$128 million) with its planned initial public offering (IPO) in late October, according to a statement from the South Korean carrier.

The company plans to issue a total of 5.5 million shares to the public. According to the statement, funds from the IPO will be used to "invest in resources to support the carrier's growth plans".

**Ukraine to ban Russian carriers**

Ukrainian authorities will block Russian airlines from operating flights to cities in the country.

The State Aviation Administration of Ukraine announced that Russian carriers would not be issued permits for flights to Ukrainian cities, starting October 25.

Ukraine will ban about 20 of the largest Russian carriers from entering its airspace, including Aeroflot and its subsidiaries, as well as Transaero S7 and Ural Airlines.

A spokesman for the Russian prime minister Dmitry Medvedev said the government was considering "counter measures against Ukrainian airlines".

**US carriers report \$5.5bn profit**

Scheduled passenger airlines in the US reported an after-tax net profit of \$5.5 billion in the second quarter of 2015, up from \$3.6 billion in the same period last year.

According to a report by the US Department of Transportation, the 26 scheduled US passenger carriers have reported nine consecutive quarters of net profit as a group.

Although total operating revenue dropped 1.52% to \$43.9 billion, the 26 airlines' spend on fuel also dropped 27% to \$7.9 billion.

Before the report, Fitch had upgraded the credit ratings of United and Delta, to B+ and BB+ respectively. Explaining its reasons for the upgrades, the ratings agency noted the carriers' improved balance sheets and financial performances.

**Latam's 2016 capital expenditure to hit \$2bn**

Latam plans to take delivery of 25 aircraft next year, including 12 A321s, six A350s, five 787-9s and two A320neos.

From 2015's estimated capital expenditure of almost \$1.7 billion, 49% (\$824 million) is from operating lease and sale/leaseback deals, 48% (\$822 million) from enhanced equipment trust certificates and 3% (\$48 million) is from commercial debt.

For 2016's projected fleet financing, Latam plans to increase the percentage spend on operating lease and sale/leaseback deals. From an estimated capital expenditure of \$2 billion, the airline plans to spend 55% (\$1.1 billion) on leases





## NEWS

## Airlines

**Sky Airline plans aircraft ownership**

Sky Airline, a low-cost carrier based in Chile, intends owning 25% of the aircraft in its fleet by 2020.

Speaking at the Latin America Airfinance Conference in Rio de Janeiro, chief financial officer Nicolás Larrain said the carrier also planned to expand its fleet from 15 to 20 aircraft over the next five years.

At present, the airline leases all of its aircraft. In order to finance the aircraft it planned to own, Sky Airline was considering commercial debt and capital markets products, added Larrain.

Sky Airline's fleet consists of 13 A319s and two A320s. The airline was founded in 2001 and began operations in Cuba.

**Alitalia to buy back leased aircraft**

Italian flag carrier Alitalia is buying back aircraft it is leasing from lessors, according to Nicola Dell'Edera, its vice-president treasury and insurance.

Speaking at the 2015 World Financial Symposium in Barcelona, he said: "The old Alitalia had 80% of its fleet on operating lease and 20% of its fleet owned. We are trying to balance that out now with the new Alitalia. By buying back aircraft from lessors, we are bringing our leased aircraft to between 65%-70% and our owned aircraft to between 30%-35%."

**Air India signs \$300m commercial loan**

Air India has signed a \$300 million (Rs1,900 crore) commercial loan to provide working capital, payment for aircraft spares and to bridge the gap caused by delays in equity infusion from the Indian government.

The loan, which is backed by a sovereign guarantee, has a five-year tenor and the drawdowns are in eight tranches until March 2016, says a source on the deal. The coupon on the loan is believed to be at about 2.5%.

Citibank and State Bank of India are the joint mandated lead arrangers and bookrunners.

*Airfinance Journal* understands that Clifford Chance advised Air India. Hogan Lowells and P&C Legal advised the lenders on the deal. ▲

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## NEWS

# Manufacturers

## Rolls-Royce prices \$1.5bn notes

Rolls-Royce has priced almost \$1.5 billion of notes, according to a company announcement.

It is the engine manufacturer's first issuance of Rule 144A/Regulation S notes. The company stated: "The offering will be used for general corporate purposes and to enhance liquidity."

The offering has two tranches. The first is a \$500 million aggregate principal amount of 2.375% notes due 2020, and the second is a \$1 billion aggregate principal amount of 3.625% notes due 2025.

The issue was scheduled to close on October 14.

## DBJ to invest more than \$831m in MRJ

Development Bank of Japan (DBJ) plans to invest more than ¥100 billion (\$831 million) in the in-development Mitsubishi Regional Jet (MRJ), according to Japanese news service Nikkei.

The money will be used for facilities to build, maintain and repair the MRJ. Some of the funds will also be used for capital investment in parts suppliers.

## Boeing chairman: Ex-Im will be reauthorized

Jim McNerney, chairman of The Boeing Company, said he believes the US Export-Import Bank (Ex-Im) will be reauthorized.

The US export credit agency closed in June for the second time in 12 months, after its temporary nine-month authorization period expired.

McNerney said more Boeing business would move offshore if Ex-Im was not reauthorized. He added that the closure of the export credit agency would put Boeing at a significant disadvantage in about 10% of its sales competitions worldwide because the manufacturer would not be able to respond to request for proposals in the same way that its

competitors could.

Some US airlines, including Delta, believe the bank's loan guarantees for Boeing jets unfairly subsidizes rival international airlines.

Ex-Im says it provided financing support for \$27.5 billion-worth of US exports in the 2014 financial year.

## Airbus opens US facility



Airbus has inaugurated operations at its US manufacturing facility in Mobile, Alabama. The plant will assemble A319s, A320s and A321s.

Airbus announced plans for the \$600 million facility in 2012, and construction began the following year. The first US-built Airbus commercial aircraft, an A321, is scheduled for delivery in spring 2016.

The facility is scheduled to produce between 40 and 50 single-aisle aircraft a year by 2018. Airbus's market forecast indicates a demand over the next 20 years (from all manufacturers) for about 4,700 single-aisle aircraft in North America.

## Easa certifies increased-range A330-200

The European Aviation Safety Agency (Easa) has certified the 242-tonne maximum take-off weight (MTOW) version of Airbus's A330-200.

Airbus said the range of the 242-tonne version increases by 350 nautical miles to 7,250 when compared to the existing 238-tonne version. It added that certification from the US Federal Aviation Administration would follow.

In April, Easa certified the 242-tonne MTOW version of the A330-300.

## Boeing to open Chinese 737 delivery centre

Boeing and Chinese manufacturer Comac plan to open a completion and delivery centre for 737 aircraft in China, the companies have announced.

"Boeing, Comac and Chinese government officials are working toward a final business agreement and will announce the facility's location and timing of first deliveries at a later date," stated Boeing.

The US manufacturer added that it is building a record 42 737s a month, and this figure will increase to 47 aircraft a month in 2017 and 52 a month in 2018.

Wu Guanghui, Comac vice-president, says: "The new collaboration between Boeing and Comac will help advance the Chinese commercial transportation market in a better and faster way, and will benefit the development of supporting Chinese industries related to aircraft completion, as well as the global growth of China's civil aviation business."

The announcement coincided with a visit from Chinese president Xi Jinping to the Boeing Everett Factory, near Seattle, Washington.

Boeing also took the opportunity of the president's visit to announce a 300-aircraft order with China Aviation Supplies Holding Company.

The orders and commitments include 240 aircraft for Chinese airlines and 60 aircraft for Chinese leasing companies ICBC and CDB Leasing.

The aircraft allotted for Chinese airlines include 190 737s, as well as 50 widebodies. ICBC and CDB Leasing will receive 60 737s.

Asked by *Airfinance Journal* for a breakdown of the aircraft types, a Boeing spokesman declined to reveal more details.

## Airbus and Bombardier break off secret talks

A possible tie up between Airbus and Bombardier appears to have been ruled out after secret discussions between the two companies. Both companies acknowledged that talks have taken



## NEWS

## Manufacturers

place, but it is not clear from official statements exactly what was being proposed, with Bombardier referring vaguely in a press release to “certain business opportunities” being discussed.

There has been speculation that the talks centered on bringing the Canadian manufacturer’s CSeries aircraft to market, whereby Airbus would have helped Bombardier complete development of the aircraft in exchange for a controlling stake in the programme.

The all-new CSeries competes with the smaller members of the A320neo and 737 Max families, but its order book is dwarfed by the Airbus and Boeing rivals.

Bombardier has 243 firm orders for the aircraft, which is short of the minimum 300 the company is understood to have been targeting before the aircraft entered service.

Bombardier announced in March that entry into service of the CS100 variant would be further delayed until early 2016 with the larger CS300 model expected to follow in about six months.

The lack of orders and associated deposits has weakened the company’s financial position, and news of the break down of the talks hit the company’s share price.

There have been reports also that Bombardier has approached Chinese buyers about acquiring a stake in the CSeries, but those appear to have been equally unsuccessful.

### SIA launch customer for extended-range A350-900

Singapore Airlines (SIA) has modified its order with Airbus for 63 A350-900s to include seven of the manufacturer’s newly launched ultra-long-range variant of the aircraft. The new aircraft will facilitate the carrier’s plans for non-stop flights to the US.

In addition, the carrier has placed an order for four more A350-900s, taking its total firm orders for the A350 XWB family to 67.

SIA’s first A350-900 is scheduled to enter its fleet in January.

The new variant will include a modified system to increase the fuel carrying capacity, an increase in maximum take-off weight, plus aerodynamic improvements. ▲

## ORDERS IN BRIEF

### Jal Group airline to take Q400s

Japanese domestic airline Ryukyu Air Commuter (RAC), part of the Japan Airlines (Jal) Group, has a firm purchase agreement with Bombardier for the delivery of five Q400 cargo-combi variants.

The deal was announced in July 2014 but the airline was not named. RAC, which operates domestic flights to Japan’s southern islands, is the launch customer of the combi model.

The transaction is valued at about \$168 million at current list prices.

### Rwandair confirms order for two A330s

African carrier Rwandair has firmed up an order for two new A330-200s. The aircraft will begin delivery in the second half of 2016.

They will be powered by Rolls-Royce Trent 700 engines and will be used by Rwandair to expand operations into Europe and Asia.

### Wizz Air firms up 110 A321neo order



Hungarian carrier Wizz Air has firmed up its 2015 Paris Air Show order for 110 A321neos. It is the biggest single order for the A321neo and is worth \$13.7 billion at list prices.

Wizz Air operates 63 A320-family aircraft on more than 380 routes from 22 bases. ▲

## MRO NEWS

### TAESL partnership to end

Rolls-Royce and American Airlines have announced plans to dissolve Texas Aero Engine Services (TAESL), a 50-50 joint venture between the two companies, based in Fort Worth, Texas.

TAESL was originally established in 1998 to work on Rolls-Royce aircraft engines operated by American Airlines. These included the Tay 620/650, RB211 and Trent 800.

Although the facility also carries out third-party work, demand for services on the engine types has fallen significantly.

### Air Partner reports 13% increase in profit

Aviation services company Air Partner has recorded an underlying profit before tax of £2.2 million (\$3.35 million) for the six months ending July 31, a 100% increase from the corresponding six months last year (\$1.67 million).

Air Partner acquired aircraft remarketing broker Cabot Aviation in June in a deal worth up to \$1.8 million. ▲

## NEWS

## Lessors

**Magnetar Capital to buy \$240m Fly portfolio**

Magnetar Capital is set to purchase a 12-aircraft portfolio of older narrowbody aircraft from Fly Leasing, *Airfinance Journal* understands.

The \$240 million deal is expected to produce a \$12 million pre-tax gain for Fly Leasing, according to a statement released by the leasing company.

Fly Leasing announced in September that it would sell the portfolio to a “new owner”, but did not reveal the buyer’s identity. Several market sources have since told *Airfinance Journal* that Magnetar Capital is the buyer.

A Fly Leasing spokesman did not disclose more information about the sale.

Fly Leasing sold a 33-aircraft portfolio for \$985 million in June. The \$425 million of unrestricted cash generated by the deal is being used to purchase aircraft, according to chief executive officer Colm Barrington.

Magnetar Capital is an asset management firm founded in 2005. The company had more than \$12 billion of assets under management in 2014.

**Apollo raises \$833m for aviation fund**

Apollo Aviation Group has raised \$833 million for its third aviation fund, the US asset manager announced in a statement on October 7.

Named SASOF III (Sciens Aviation Special Opportunities Fund), the “institutionally focused private equity fund” is Apollo’s third aviation fund. Its fundraising target was originally \$750 million, the statement added.

The investors in the fund include governmental plans, insurance companies, endowments and others.

SASOF III follows on from two previous funds. Apollo raised \$213 million for SASOF in 2010 and \$593 million for SASOF II in 2013.

SASOF III has already bought 18 aircraft: seven 737-800s, three A319-100s, two A320-200s, three A321-200s, one A330-200 and two A330-300s. Most of the aircraft are on lease and the remainder are planned for sale or disassembly.

William Hoffman, Apollo Aviation’s chairman, says: “As our largest fund yet, it is a testament to the success of our strategy and confidence of our institutional investors. As with SASOF II, SASOF III will seek to acquire mid-life commercial aircraft and engines for lease and/or immediate disassembly and resale of the systems, components and parts.”

Kirkland & Ellis advised Apollo on the formation of the fund.

**Vietjet signs MoU for A321 financing**

Vietjet has signed a memorandum of understanding (MoU) with Mitsubishi UFJ Lease & Finance Company Limited (MUL), a member of Japan’s finance group Mitsubishi UFJ Financial Group.

The memorandum is for MUL to finance Vietjet’s leasing and acquisition of three new A321 aircraft, worth \$347.2 million at list prices.

The three aircraft are part of a contract signed previously between Vietjet and Airbus to purchase and/or lease a total of 107 aircraft.

Vietjet will receive between 10 and 12 new aircraft every year until the above contract with Airbus is complete. The airline has so far taken delivery of eight A321s and A320s.

**Calc subsidiary signs Chexim and BOC agreements**

China Asset Leasing, a subsidiary of China Aircraft Leasing Company (Calc), has signed separate financing agreements with the Export-Import Bank of China (Chexim) and Bank of China (BOC), according to a statement from Calc.

The Chexim agreement will see it provide China Asset Leasing with credit facilities. This comes after a November 2014 framework agreement between the two parties for a credit line of Rmb10 billion (\$1.57 billion). The credit facilities are intended to support the purchase of Chinese-built aircraft.

The BOC agreement will see China Asset Leasing become a strategic partner of BOC (Tianjin branch), which will preferentially provide China Asset Leasing’s parent company with a full range of financing support and banking services.

Calc founded China Asset Leasing Company in the Dongjiang Free Trade Port in December 2010. As of June, the subsidiary had a registered capital of \$300 million and total lease assets of \$12.3 billion. Calc has so far delivered 40 aircraft through this platform.

**NAC increases profits**

Danish lessor Nordic Aviation Capital (NAC) has increased both its net and operating profits.

NAC increased its operating profit by 42% to \$239 million in 2015, up from \$169 million in 2014. The lessor’s net profit after tax rose 37% to \$111 million.

In the fiscal year ending June 30, NAC’s revenue increased from the previous year’s \$311 million to \$392 million, a rise of 26%.

The company attributed the improvements to its “solid market position” and its investment this year in 17 new ATR 72-600s and ATR 42-600s, which are all on lease.

Over the year, NAC completed 74 used aircraft transactions, including a single deal involving 31 Bombardier Q400s – the largest deal recorded in the history of NAC. The company’s total assets increased by 45% to \$3.17 billion.





## NEWS

## Lessors

### Citi executive: capital markets deals to increase

Capital markets transactions are expected to increase over the next few years while export credit agency-backed deals are expected to decrease, according to Munawar Noorani, Citibank's Europe Middle East and Africa (EMEA) regional head.

Speaking at the 2015 World Financial Symposium in Barcelona, Noorani said that between \$500 billion and \$600 billion in funding will be needed in aviation over the next four years.

He noted that \$100 billion had been made available annually to the aviation industry over the past few years because of high US dollar liquidity, low interest rates and other financial institutions looking for higher US dollar yields.

Noorani is now leading Citi's Asian aviation corporate banking after his colleague Anup Mysoor left to take a break from aviation finance.

### ACG closes \$900m unsecured bond

Aviation Capital Group (ACG) has announced the closing of \$900 million of senior unsecured notes.

The notes are split into two tranches. The first tranche has a value of \$600 million and is due September 17 2018. It priced at 99.553% of par and achieved a coupon of 2.875%.

The second \$300 million tranche carries a coupon of 4.875% and is due October 1 2025. It priced at 99.597% of par.

ACG has announced that the proceeds will be used to pay down existing debt as well as funding "strategic opportunities".

A source close to the deal revealed that the active bookrunners for the offering are Crédit Agricole Corporate and Investment Bank, Credit Suisse, Deutsche Bank, JP Morgan and Mizuho. The passive bookrunners are BNP Paribas, Citi, Goldman Sachs, MUFG, RBC Capital Markets and Wells Fargo Securities.

ACG also stated that since 2010 it has raised more than \$8 billion of debt financing. ▲

## LEASES IN BRIEF

### Delta receives 737-900ERs



US carrier Delta Air Lines has received two 737-900ERs on lease from CIT Aerospace, according to the lessor.

The aircraft are from a sale/leaseback deal with CIT for a total of five aircraft.

### Flybe takes second Avation ATR

British regional airline flybe has taken its second ATR 72-600 on lease from Avation. The delivery is part of a five-aircraft deal with the Singapore-based lessor.

The aircraft is in the livery of Scandinavian Airlines (SAS) and will be operated by Flybe for SAS under an operations contract arrangement called the white label project.

The initial duration of all the leases in the deal is six years, and flybe has the option for lease term extensions.

### Air Astana in deal for A320neo family

Air Astana has signed an agreement with lessor AerCap for the lease of four A320neo-family aircraft.

The aircraft include three A321neos and one A320neo. *Airfinance Journal* understands the aircraft are from AerCap's own order book with the manufacturer.

In June, Air Astana also agreed leases for seven A320neo-family aircraft with US lessor Air Lease Corporation.

### Eva Air agrees on A330s



Eva Air has agreed to lease two A330-300s from BOC Aviation. The Taiwanese flag carrier will receive the widebody jets in 2017.

The Singaporean lessor already has six A321s placed with Eva Air, and intends delivering six more, as well as two 777-300ERs, over the next two years.

### Liat opts for new ATR 72-600

Antigua-based airline Leeward Islands Air Transport (Liat) has agreed to lease a new ATR 72-600 from Air Lease Corporation (ALC).

The aircraft is from ALC's order book with ATR and is scheduled to deliver in the third quarter of 2016.

### Siam Air Transport leases 737s

Thai airline Siam Air Transport has agreed to lease two 737-800 aircraft from US lessor Air Lease Corporation.

The aircraft will deliver in the fourth quarter of 2015.

### Wizz Air signs agreement with CDB Leasing

Hungarian low-cost carrier Wizz Air has signed an agreement with CDB leasing for the lease of six A321neos.

Two of the aircraft under the agreement deliver in November and December. They will be Wizz Air's first A321s. ▲

## NEWS

## Deals

**Finnair gets first A350-900 on sale/leaseback**

Finnair has taken delivery of the first of 19 A350-900 XWBs on order from Airbus.

The aircraft is leased for 12 years in a sale/leaseback transaction with US lessor Gecas, according to an airline source.

The source adds that the carrier will do another sale/leaseback with Gecas before the end of the year.

Finnair has an order for 19 A350-900s with Airbus. The first four A350s are arriving in the second half of 2015, seven will arrive between 2016 and 2017 and the last eight will arrive between 2018 and 2023.

The Finnish airline is the first European operator and the third worldwide operator of the new widebody type.

**Cathay Pacific takes delivery of third 777**

Cathay Pacific Airways has taken delivery of its third 777-300ER as part of a three-aircraft deal, according to a source with knowledge of the transaction.

The aircraft arrived on September 25. The second aircraft delivered in the third quarter of this year, while the first aircraft delivered on May 28. ANZ, ING and Natixis are providing a 12-year commercial loan for the jets. All three banks are acting as mandated lead arrangers and lenders, while Natixis is acting as facility agent and security agent. Allen & Overy acted for Cathay Pacific on the deal. Clifford Chance acted for the lenders.

**Japanese banks in talks with Philippine LCC**

Development Bank of Japan and Sumitomo Mitsui Trust Bank are in talks with an undisclosed Philippine low-cost carrier (LCC) to provide commercial debt to support the delivery of an A320 next year, according to a source.

*Airfinance Journal* understands the deal is expected to close by the end of the year and the aircraft should deliver in January.

**Thai Airways taps financiers for A320 delivery**

Thai Airways closed the financing of one A320-200 on October 8.

The aircraft was financed using a commercial loan, with Crédit Agricole Corporate and Investment Bank acting as global coordinator, mandated lead arranger, security trustee and facility agent.

The Korea Development Bank and Kasikornbank acted as joint arrangers. Clifford Chance advised the financing parties and Baker & McKenzie advised the airline.

**Transportation Partners in talks with investors**

Transportation Partners, the Singapore-based lessor linked to Lion Group, is understood to be in talks with investors for the sale/leaseback of up to 10 737-900ER aircraft.

The investors, believed to include leasing companies, US funds and private equity names, will provide financing for the Boeing narrowbodies, which are already in Lion Air's fleet, and are between 2007 and 2011 vintage.

**Nok Air agrees to Q400s**

Thai carrier Nok Air has agreed to take two Bombardier Q400 aircraft from Gecas on sale/leaseback.

Clyde & Co acted for Nok Air on the deal. Gecas used in-house counsel.

Nok Air operates a fleet of more than 20 aircraft and flies to 26 destinations.

**Air China issues 24-aircraft RFP**

Chinese flag carrier Air China has issued a request for proposal (RFP) for the financing of 24 aircraft, according to a source with knowledge of the request.

The RFP, which was issued in September, includes 787s, 737s, A321s and A320s.

**THY closes Ex-Im-backed French tax lease**

Turkish Airlines (THY) has closed a yen-denominated US Ex-Im-backed French tax lease to finance the delivery of a new 777-300ER. The aircraft was delivered to the airline under the 12-year financing.



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## Deals

BNP Paribas is the lead arranger on the deal. BNP Paribas and Development Bank of Japan (DBJ) are the lenders.

Zuckert, Scoutt & Rasenberger advised Ex-Im, Pillsbury advised THY, Norton Rose Paris advised BNP Paribas as lease arranger, Milbank advised BNP Paribas as debt arranger and Norton Rose Tokyo advised DBJ.

### CDB Leasing finances 737-800 for flydubai

Flydubai has taken delivery of a new 737-800, the 50th aircraft in its fleet.

The aircraft is on a long-term sale/leaseback transaction with CDB Leasing, the leasing arm of the China Development Bank.

The delivery of the new 737-800 completes the order the airline made at the 2008 Farnborough Airshow for 50 737-800s.

Baker & McKenzie Hong Kong acted for flydubai, while McCann FitzGerald in Dublin acted for CDB Leasing, according to a source at flydubai.

The Middle Eastern carrier will receive 75 737 Max 8s from the second half of 2017 until 2023. Flydubai will also receive a further 11 737-800s in 2016 and 2017.

### Frontier signs with Gecas

US ultra-low-cost carrier Frontier Airlines has signed a sale/leaseback deal with Gecas for nine A321s, the leasing company announced on September 25.

The aircraft are scheduled for delivery from October and finish delivering in 2016. CFM56-5B3 engines power all nine of the jets.

The aircraft come from Frontier's order book with the manufacturer. The airline will use them to replace A319s in its fleet.

In July, Frontier agreed the long-term lease of two A320-200s with US lessor ALC.

### Ethiopian close to A350 RFP mandates



Ethiopian Airlines is looking to mandate banks for its request for proposals (RFP) for 12 new A350-900s, *Airfinance Journal* learns. The new jets will deliver in 2017.

The RFP was issued on April 7. The original deadline for submissions was May 22. An airline source tells *Airfinance Journal* the RFP was delayed because Ethiopian had to redo some of the predelivery payments.

The source adds that it is likely some of the aircraft will be on sale/leaseback and others will be financed using loans. The airline has received all the offers for the RFP and is at the final stage of announcing the banks.

### Gol woos investors for EETC

Brazilian low-cost carrier Gol is in talks with potential investors for its debut enhanced equipment trust certificate (EETC) and is deciding on the deal's pricing.

The deal will be worth more than \$400 million and will finance 17 737-800s, an airline source tells *Airfinance Journal*. Of the collateral aircraft, 10 have already been delivered to the carrier. The remaining seven are scheduled for delivery. Three of the upcoming aircraft will deliver in 2015.

The deal would be the first EETC issued by a Brazilian carrier, and only the second issued by a Latin American carrier. Latam issued Latin America's first EETC, a \$1.02 billion deal, in May.

### ICBC mandates banks for Xiamen aircraft



ICBC Financial Leasing has mandated at least two banks to provide financing for the purchase of two 737-800s intended for sale/leaseback with Xiamen Airlines, according to a source with knowledge of the deal.

In July, *Airfinance Journal* reported that Xiamen Airlines had mandated ICBC Financial Leasing to provide operating leases for five 737-800s. Xiamen issued a request for proposal for 20 737-800s and two 787-8s in December 2014, and started issuing mandates in April.

*Airfinance Journal* understands that ICBC Financial Leasing has selected Natixis, as well as at least one other undisclosed bank, to provide financing for the delivery of two of the 737 aircraft.

ICBC Financial Leasing will purchase these aircraft directly from the manufacturer with bank financing, and then lease them to Xiamen Airlines.

The first aircraft is scheduled to deliver on November 26.

### Latam receives request offers

Latam is receiving offers for its request for proposal (RFP) for a sale/leaseback deal for eight A321s, *Airfinance Journal* understands.

The RFP covers new aircraft that are delivering to the airline in 2016.

The request for proposal has progressed to the second round after receiving 25 offers, according to a source with inside knowledge.

Latam recently closed a \$250 million



## NEWS

## Deals News

## SECONDARY MARKET NEWS

**Falko remarkets six ATR 72-500s**

UK-based lessor Falko has been mandated to remarket six ATR 72-500s. The turboprops are owned by Air Tahiti and are available for sale immediately. Air Tahiti has already taken delivery of two ATR 42-600s and one ATR 72-600 as part of its fleet-renewal strategy.

A Falko source confirms the aircraft are between 2005 and 2009 vintage and suggests the type tends to be popular in the Asia-Pacific region.

**Flybe takes fourth Q400**

UK regional carrier flybe has taken delivery of its fourth Q400 in a leasing deal for 24 of the turboprops, *Airfinance Journal* learns.

The aircraft are subleased from US-based Republic Airlines and financed by Export Development Canada.

Vedder Price represented flybe and EDC on the deal. Norton Rose Fulbright represented Republic Airlines.

**Fastjet pays cash for A319**

Pan-African low-cost carrier fastjet has paid cash to buy an A319. The narrow-body jet was purchased from a company managed by US lessor BBAM.

SkyWorks Leasing advised fastjet

on the purchase of the aircraft, which, according to the airline, is worth \$15.5 million. Fastjet added that it obtained the aircraft at a discount to the market value.

The aircraft is 2006 vintage, according to AeroTransport Data Bank.

The delivery marks the carrier's first owned aircraft and the sixth in its fleet.

**Kalitta Air receives 747 freighter**

US cargo operator Kalitta Air has taken delivery of a 747-400 Freighter on lease from Awacs.

The agreement is the first deal between Kalitta Air and the aircraft lessor. An Awacs spokesman confirms that the aircraft is from its existing fleet.

**Hawaiian buys ATR 72-200F**

Hawaiian Holdings has purchased a converted ATR 72-201 Freighter from South African company Solenta Group.

Hawaiian Airlines, a subsidiary of Hawaiian Holdings, will operate the aircraft. Solenta Group is the parent company of South African airline Solenta Aviation.

The aircraft, a 1991 vintage, according to a source on the deal, is one of 12 ATR 72s featuring a large cargo door conversion.

Slovakian-based Aelis Group arranged the sale of the aircraft. ▲

engine portfolio financing. *Airfinance Journal* understands that the three-year loan is secured against 33 engines, some of which are already delivered and some of which are scheduled for delivery.

Crédit Agricole Corporate and Investment Bank (CA-CIB) is the sole arranger and administrative agent on the deal.

The lenders are CA-CIB, Crédit Industriel et Commercial and Sumitomo Mitsui Banking Corporation.

**ABC signs commercial loan for A320-200**

ABC Financial Leasing, a subsidiary of the Agricultural Bank of China, has signed a 10-year commercial loan for one A320-200. The Airbus jet was financed using a commercial loan facility advanced to a special purpose company established by ABC Financial Leasing in the Tianjin Free Trade Zone.

The aircraft has been on lease to Sichuan Airlines since December. The jet is 2014 vintage, according to AeroTransport Data Bank.

Crédit Agricole Corporate and Investment Bank (CA-CIB) acted as mandated lead arranger, security trustee, facility agent and lender.

The deal marks the first collaboration between CA-CIB and the leasing subsidiary. Norton Rose Fulbright advised CA-CIB and Clifford Chance advised ABC Financial Leasing.

**China Southern agrees 777 French tax lease**

China Southern Airlines has agreed a French tax lease deal to fund the delivery of two 777-300ERs, according to sources close to the deal.

National Bank of Abu Dhabi and Société Générale acted as joint lenders.

The first aircraft arrived on August 26 and the second aircraft is expected to deliver in December.





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Baker & McKenzie partner Allen Ng acted for China Southern. Norton Rose Paris acted for the lenders.

**ICBC refinances three jets**

ICBC Financial Leasing has announced the refinancing of three aircraft with DVB Bank. The aircraft portfolio, which consists of one A330-200, one 737-700 and one A319-100, are on long-term finance leases with China Eastern Airlines.

DVB is the sole arranger, sole underwriter and lender for the senior loan facility. Berwin Leighton Paisner represented ICBC and Clifford Chance represented DVB.

ICBC is one of the largest leasing companies in China, with more than 200 aircraft in its portfolio.

**Thai reissues cancelled A330 sale RFP**

Thai Airways has reissued a request for proposal (RFP) for the sale of five used A330-300 aircraft, according to documents seen by *Airfinance Journal*.

The Thai flag carrier issued an RFP for the sale of the aircraft in July, but the following month sent out a notice asking potential bidders to disregard the request. Two of the aircraft are 1994 vintage, two are 1995 and one is 1998.

Thai Airways states it prefers to sell all the aircraft in one package, but will also consider selling them individually. The carrier has been disposing of a number of used aircraft in recent months.

**Emirates takes 777 Freighter on sale/leaseback**

UAE carrier Emirates has taken delivery of one 777 Freighter in a sale/leaseback transaction with Dubai Aerospace Enterprise.

A source familiar with the deal tells *Airfinance Journal* the aircraft is on lease for “over 10 years”.

**Air India takes fourth ECA-backed Calc A320**

Air India took delivery of an A320-200 from China Aircraft Leasing Company (Calc) on September 15.

The jet is the third aircraft to be delivered under a five-aircraft deal with the Hong Kong-based lessor. All of the aircraft are on 12-year operating leases. The final A320 will be delivered by the end of the year.

The delivery is export credit agency (ECA) supported, with UK Export Finance acting as fronting ECA.

Crédit Agricole Corporate and Investment Bank is acting as ECA financing adviser to Calc. TD Bank is acting as lender and TD Securities as co-arranger. ING Capital is the co-arranger and facility agent. Wilmington Trust SP Services (Dublin) is the security trustee.

Vedder Price is advising Calc. Watson, Farley & Williams is advising the ECAs, the lender and the facility agent. ▲

## DELIVERIES IN BRIEF

**Xiamen Airlines takes sixth Dreamliner**

Xiamen Airlines took delivery of its sixth 787-8 Dreamliner at the end of September.

The delivery was the Chinese carrier's 16th aircraft delivery this year. Xiamen Airlines took delivery of its first Dreamliner on August 31 2014.

China Southern Airlines purchase an additional 4% equity stake in Xiamen Airlines in August.

**Volaris takes second A320-200 on sale/leaseback**

Mexican low-cost carrier Volaris has taken delivery of its second new A320-200 on lease from Hong Kong Aviation Capital.

The new delivery is the second of seven A320-200s the airline is taking from the lessor.

**Air China gets 50th A330**

Air China has taken delivery of its 50th A330. The aircraft, an A330-300, is the first 242-tonne maximum take-off-weight version to be operated by a Chinese airline. ▲



## DEAL ANALYSIS

# Etihad closes \$700 million bond

The Etihad Alliance Partners' bond was arranged on an unsecured basis despite the fact that several of the obligors are weak credits. Jack Dutton and Mike Duff investigate.

Etihad closed a novel \$700 million platform financing to raise five-year unsecured debt for members of its equity alliance in September. The financing was arranged on an unsecured basis, despite the fact that some of the obligors are weak credits.

The structure involves the issue of fixed-rate notes by an orphan special purpose vehicle, EA Partners IBV (EAP), the proceeds of which have been on-lent to the six airline partners – Etihad, Alitalia-CAI, airberlin, Jet Airways, Air Serbia and Air Seychelles – and Etihad subsidiary Etihad Aviation Services (EAS). The allocation of the proceeds is shown in Figure 1.

The deal was structured as a collateralized loan obligation (CLO). Some would call it a blended credit, where the better rated sweet tranches come with the requirement also to assume some of the sour tranches, all blended in a single interest rate. Each of the obligors' material obligations is on a several basis, though default by one may lead to an event of default on the notes.

The notes carry a coupon of 6.875%, payable quarterly for a period of five

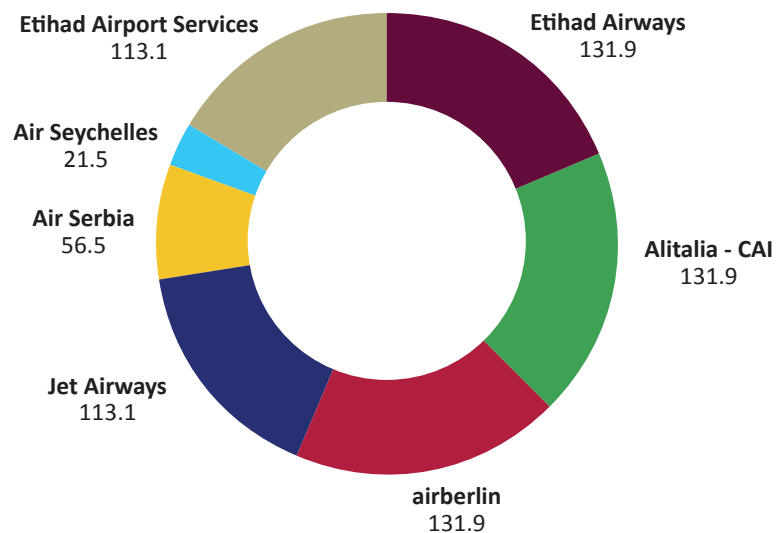
years and are listed on the Global Exchange Market, which is regulated by the Irish Stock Exchange. They mature on September 28 2020. The notes priced at par.

The mandate for the deal was given a year ago and was initially set at a \$1.3 billion programme. The proceeds from the bond will be used for a mixture of capital expenditure and investment in fleet, as well as for refinancing, depending on each airline's individual needs, according to a statement released by Etihad. Etihad declined to comment on the transaction.

Goldman Sachs International, ADS Securities and boutique merchant bank Anoa Capital acted as joint lead book-running managers for the offering. Ashurst represented the managers on the deal, while Paul Hastings Europe and Loyans & Loeff represented the issuer (EAP) and Freshfields Bruckhaus Deringer represented the obligors (the airlines and EAS).

Each obligor pays a different coupon, reflective of their individual credit risk, as shown in Figure 2. Etihad has paid a high price for its share of the financing

FIGURE 1 - ALLOCATION OF PROCEEDS (\$M)





“Etihad has paid a high price for its share of the financing when compared with straight unsecured bond issues by its highly rated peers.”

when compared with straight unsecured bond issues by its highly rated peers. It is paying a coupon of 4.16% for its portion, compared to Ryanair’s (BBB+) 1.125% for eight years and WestJet’s (BBB-) 3.287% for five years unsecured financing.

The facility adds more debt to already stretched balance sheets. Which might be better bolstered by equity financing. However, the deal rates highly innovative and raised unsecured funding for the equity partners without recourse to Etihad, so it presumably achieved the airline’s objectives.

**Deal structure**

The structure of the transaction originally confused investors, partly because the deal had certain credit enhancement elements to it.

The deal was marketed as a bespoke CLO, involving the special purpose vehicle, EAP, providing individual unsecured loans to each of the obligors. The security of the transaction is the loans provided by EAP. By definition, the investors are structurally subordinated to the senior secured debt of each obligor and the unsecured debt of the obligors’ subsidiaries.

The primary credit protection for investors comes in the form of change of control language for each individual obligor, limited negative pledge conditions and limitations on distributions by any

of the obligors in the event that certain conditions are not met. These include a 2:1 coverage ratio measured as earnings before interest, tax, depreciation and amortization (Ebitda) divided by fixed charges (debt interest and interest component of finance lease rentals).

There are also further enhancements. The first is a liquidity pool comprising an initial deposit of 4.75% of the notional loan amounts and additional deposits of 10% of each obligor’s coupon payments, which are placed into a cash reserve account and can be applied to an overdue coupon payment. This is the only cross-collateralized feature of the transaction.

Another enhancement is a ratchet mechanism, which protects the investors in the bond if one of the obligors borrows at a higher rate later on. For example, if Alitalia under the structure pays 6.31% and, one year later, it borrows money at 9%, the investor captures some of the additional spread Alitalia is paying on the other loan.

“The deal has a cash reserve that is composed of three components: one, 4.75% of initial deposit; two, 10% of coupons; and three, a ratchet mechanism. They are all available to investors in case of a default,” says Nader Al Salim, executive director, investment banking division, Goldman Sachs, who led the transaction.

**Determining the rating**

Etihad obtained an unsecured rating of A- from Fitch earlier this year, making it the highest-rated airline in the world. Notably, however, this rating was based on the sovereign ratings criteria and not the airline ratings criteria. According to Fitch, the rating “incorporates strategic, operational and, to a lesser extent, legal ties with its sole shareholder Abu Dhabi (AA/Stable)”.

The transaction is not cross-guaranteed, meaning each airline is standing on its own feet from a risk perspective. Each airline obtained its own individual rating. The overall rating for the transaction of B- was not determined by averaging the ratings of all the obligors involved, but instead was taken from the lowest-rated obligor, according to two sources that worked on the deal. They added that the lowest-rated airline was airberlin, at B-, and, not unexpectedly, has the highest coupon at 10.56%.

Fitch in its rating of the transaction stated: “While the obligors with the weakest profiles also benefit from the shareholder support of their minority parent, Etihad Airways, their standalone profiles remain weak largely due to weak credit metrics.”

The summary financial and operational data about each of the obligors provided in the offering memorandum is shown in Figures 3 and 4.



**FIGURE 2 - INTEREST RATES PAYABLE BY BORROWERS**



\* in Rupees



“The transaction is not cross-guaranteed, meaning that each airline is standing on its own two feet from a risk perspective.”

FIGURE 3 - ETIHAD EQUITY ALLIANCE AIRLINES

|   | Etihad       | Alitalia - CAI | airberlin    | Jet Airways  | Air Serbia   | Air Seychelles |
|---|--------------|----------------|--------------|--------------|--------------|----------------|
| <b>Financial data (\$ millions):</b>            | 31-Dec-14    | 31-Dec-14      | 31-Dec-14    | 31-Mar-15    | 31-Dec-14    | 31-Dec-14      |
| Revenue   | 7,500        | 3,862          | 5,051        | 3,466        | 215          | 107            |
| EBITDAR (1)                                     | 1,119        | 151            | 426          | 282          | 37           | 34             |
| <i>EBITDAR margin (2)</i>                       | <i>14.9%</i> | <i>3.9%</i>    | <i>8.4%</i>  | <i>8.1%</i>  | <i>17.2%</i> | <i>31.8%</i>   |
| Long-term debt                                  | 6,631        | 483            | 886          | 1,321        | -            | 16             |
| Total Assets                                    | 19,379       | 3,151          | 2,263        | 2,736        | 132          | 86             |
| Net Debt  | 5,913        | 327            | 976          | 1,748        | (20)         | 2              |
| <i>"Capitalization" of operating leases (3)</i> | <i>2,968</i> | <i>3,306</i>   | <i>5,817</i> | <i>3,862</i> | <i>184</i>   | <i>102</i>     |
| <i>Adjusted Net Debt (4)</i>                    | <i>8,881</i> | <i>3,633</i>   | <i>6,793</i> | <i>5,610</i> | <i>164</i>   | <i>104</i>     |
| <i>Adjusted Net Debt / EBITDAR (5)</i>          | <i>7.9</i>   | <i>24.1</i>    | <i>15.9</i>  | <i>19.9</i>  | <i>4.4</i>   | <i>3.0</i>     |
| <b>Operating data:</b>                          |              |                |              |              |              |                |
| Operating fleet (aircraft)                      | 110          | 125            | 149          | 106          | 19           | 10             |
| Destinations                                    | 111          | 104            | 147          | 72           | 40           | 9              |
| Available seat departures (thousands)           | 18,800       | 31,021         | 39,850       | 29,565       | 3,419        | 660            |
| Passengers (thousands)                          | 14,800       | 22,445         | 31,716       | 22,507       | 2,296        | 413            |
| RPKs (billions) (6)                             | 68.6         | 34.0           | 49.3         | 36.8         | 2.4          | 1.0            |
| ASKs (billions) (7)                             | 86.6         | 44.8           | 59.0         | 44.8         | 3.5          | 1.6            |
| Seat load factor (8)                            | 79.0%        | 75.9%          | 83.5%        | 82.3%        | 67.3%        | 60.0%          |
| Passenger block hours (9)                       | 471,882      | 420,818        | 494,587      | 440,777      | 54,241       | 14,457         |

All figures in italics are provided by or calculated by The Airline Analyst

(1) Earnings before interest, tax, depreciation, amortization and rents

(2) EBITDAR/Revenue

(3) The estimated "capitalized" value of aircraft rentals, calculated as 8 x rents based on company reports and The Airline Analyst estimates

(4) Net Debt plus capitalized value of operating leases

(5) Leverage measured by dividing adjusted net debt by EBITDAR

(6) Revenue passenger kilometres

(7) Available seat kilometres

(8) RPKs divided by ASKs

(9) Flight time plus taxi time

Source: offering memorandum

We have calculated some ratios based on the offering memorandum and estimates from *The Airline Analyst* to provide a better insight to the credits, starting with the earnings before interest, tax, depreciation and amortization (Ebitdar) margin. While these calculations show Etihad having a mid-teen Ebitdar margin, the Ebitdar margins for Alitalia, airberlin and Jet Airways are weak, in the 4% to 8% range. The two smallest carriers, by contrast, have high Ebitdar margins.

“It is a high-yield CLO focusing on corporate loans, with seven borrowers, each of whom have been individually rated.”

Leverage is calculated by incorporating the capitalized value of operating leases based on the companies' reports or estimates from *The Airline Analyst*. The leverage calculations show the challenge that lies ahead for Etihad in turning the individual obligors' performance around so that the companies can support their high levels of adjusted debt. In fact, even Etihad has high leverage by this measure.





**“It’s a structure that allows investors to capture multiple airline risk while buying into something large, liquid and a proxy to a group performance as opposed to a single entity exposure.”**

– **Nader Al Salim, executive director, investment banking division, Goldman Sachs**

### A difficult deal

According to Dirk van Daele, chief executive officer of Anoa Capital, an undiversified CLO at \$700 million is big in its own right in the CLO market. Daele adds that producing a CLO against mainly an emerging market portfolio has not been done before. “The structure of this offering is unique in both size and nature. It is a large, high-yield CLO focusing on corporate loans, with seven borrowers, each of whom have been individually rated,” van Daele tells *Airfinance Journal*.

A source on the deal, who did not want to be named, told *Airfinance Journal*: “When the deal hit the market, nobody wanted to touch it. For example, anybody you would approach with this deal would say, ‘Oh, so Etihad’s going to guarantee the whole thing?’ No. Or ‘You are going to provide collateral?’ No.”

A year ago, none of the airlines involved had a credit rating. The bookrunners convinced Etihad that it needed to get a public rating and take all the other airlines involved to the ratings agency to get individual ratings.

Etihad had the choice of either leaving its equity partners to fend for themselves and source its own funding or trying to pull the capital together. Why did it choose to pull the capital together in one bond? Although the deal was creative and innovative, it was highly expensive for Etihad.

“It’s a valid point, but say you were going to do it all separately, like going to do an airberlin bond: investors don’t want a \$200 million bond because they don’t view it as a liquid enough,” says Al Salim. “If you need \$150 million of senior unsecured funding, you’re not going to do a bond for \$150 million funding. When you do something for the group, it becomes of a certain scale and it enhances liquidity.”

Another source on the deal adds: “Then what we had was called a non-diversified CLO. If you are going to take such a structure, and then put it in an environment of emerging markets, yes,

initially, a lot of people run away. We took this project on. We worked on it with all the airlines, with the rating agency. Then, in about June, we got one of our partners involved, which was ADS Securities. We are doing other deals to do with the Middle East region with them, and then Goldman came on board.”

Van Daele tells *Airfinance Journal* that Anoa Capital wanted to enter the marketplace being a price setter, not a price taker. Initially, it closed the deal at \$500 million. On the night the company closed the deal, investors said to Anoa that they were interested in coming in if Anoa was to price the bond at a higher level. It reopened the bond the next day and accommodated another large institutional investor, raising another \$200 million to make \$700 million overall.

### Road show

The bond was taken on road shows by the airline and the bookrunners in Abu Dhabi, Dubai and London. A statement released by Abu Dhabi Financial Group said it had placed and syndicated 20.3% of the note.

The airline and the bookrunners went to Dubai on Thursday for day one of the road show. On Friday they went to London, and then they went to Abu Dhabi on Sunday. On Monday, they were back in London and, on Tuesday, they closed the deal. With Eid being celebrated on September 24, the day after the road show, Etihad and the bookrunners were pressed for time.

“For this transaction to work, it needed to have two pillars. If you turn up in London and you don’t have regional demand, why would they have a go if the region doesn’t buy? So the investor base is sitting on both established institutional investors out of the London market and the regional demand from UAE,” a source on the deal tells *Airfinance Journal*.

It was a diversified book across regions all the way from the Middle East to Europe. As well as the UK, there was participation from Italy, Germany and Switzerland.

“We wanted to be in and out of the market as quickly as possible given the volatility but we had a well-diversified participation from investors, including European participation,” says Al Salim.

The bond has performed well in the secondary market and was trading at 104 on October 15. The bond was scalable, big enough for investors to care about and has proved to be liquid.

“It’s a unique structure that acts as a centralized funding vehicle, and the next natural step in the strategic tie out within the equity alliance partners,” says Al Salim. “It enables all airlines to access the capital markets in a transparent and efficient way. It allows investors to capture multiple airline risk in one structure buying into something large, liquid and a proxy to a group performance as opposed to a single entity exposure.” ▲

**FIGURE 4 - ETIHAD AIRPORT SERVICES**

|                              | EAS Catering | EAS Ground | EAS Cargo |
|------------------------------|--------------|------------|-----------|
| <b>Financial data (\$m):</b> | 31-Dec-14    | 31-Dec-14  | 31-Dec-14 |
| Revenue                      | 106.5        | 88.2       | 35.3      |
| EBITDAR(1)                   | 15.3         | 3.9        | 5.0       |
| Long-term debt               | -            | -          | -         |
| Net Debt                     | (3.5)        | (10.1)     | (1.7)     |
| Total Assets                 | 56.2         | 78.3       | 15.3      |
| Net Cash                     | 3.5          | 10.1       | 1.7       |

(1) Earnings before interest, tax, depreciation, amortization and rents

Source: offering memorandum





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## NEWS ANALYSIS

# Indian carriers seek 5/20 rule change

Jack Dutton investigates the legislation that many industry players believe is preventing Indian aviation from reaching its full potential.

Aviation is one of the fastest-growing sectors in India. The country has the highest aviation growth in the world, surpassing other major markets in the US, China and Russia. Boeing's 2015-2034 market outlook says that India's GDP is forecast to grow by 6.6 annually over the next 20 years. The new government's easing of the market regulations has changed foreign investment rules to allow foreign airlines to acquire up to a 49% stake in an Indian airline. Despite all these promising statistics, the industry in India is still running under huge losses.

Many involved in the industry would argue that one of the main impediments of growth in the Indian aviation sector is the 5/20 rule.

In the early 1990s, India privatized some of its industries, including aviation, and with that came several new entrants. After these new entrants, a new regulation was brought in – the 5/20 rule – which states that to be able to fly internationally as an Indian carrier, the airline must be five years old and have at least 20 aircraft in its fleet. Some industry heads say that it acts as a protectionist rule for the government-owned flag carrier Air India.

Newer Indian carriers such as Vistara and AirAsia India are affected by the rule and therefore are restricted to flying only domestic routes. Several carriers have spoken out against the rule this year and want the government either to change it or abolish it completely.

"The 5/20 rule is a bit irrelevant now, because you have so many airlines that can fly internationally," says Sidanth Rajagopal, an aviation finance partner at Kaye Scholer, who has acted for Indian airline SpiceJet.

"You have the low-cost carriers doing the most lucrative routes. Vistara and

AirAsia are the ones that can't do it. Air Costa can't do it, but all of these guys would love to do it because of where they are."

Airlines including IndiGo, SpiceJet, Jet Airways and Air India are exempt from the rule, and are able to fly internationally. Foreign carriers such as Singapore Airlines and Emirates are able to fly routes such as Singapore to Delhi in much larger aircraft than the Indian carriers. Because some Indian airlines are impeded by the rule, foreign carriers reap the benefits. Emirates flies three A380s a day to Delhi, with most flights being full, carrying about 500 passengers each.

"You're not using the aircraft for the distance it's made for. If you opened it up, those slots would get used by the Indian carriers. The market would open up, and everybody can try and have a go. There is no rationale behind the 5/20," says Rajagopal.

If the rule does get revoked, airlines with adequate business plans and capital but which are too new or too small to fly internationally would benefit, as would India's aviation sector as a whole.

Vistara, which is affected by the 5/20 rule, began operations in January and has a fleet of eight A320neos, according to AeroTransport Data Bank (ATDB).

Phee Teik Yeoh, chief executive officer of Vistara, tells Airfinance Journal: "5/20 is not an issue that impacts only Vistara, but it is one that holds back unleashing the true potential of the Indian aviation sector. The 5/20 rule has outlived its time and has become an obstacle in the path of Indian aviation's transformation and the country's economic growth. Removal of the 5/20 rule will bring huge economic benefits to all – central and state governments, individual travellers and businesses.



Its abolition will provide enhanced and seamless connectivity to business and leisure passengers travelling in and out of India, thus boosting both trade and tourism."

He adds: "Currently around 70% of passengers flying internationally to and from India are Indians. But only 30% of them travel on Indian carriers. Imagine the amount of loss to the Indian economy because of this ongoing trend," he adds.

AirAsia India, the Indian subsidiary airline of AirAsia, also has been affected by this rule. The carrier was established in 2013 and has a fleet of five A320neos, according to ATDB. Tony Fernandes, chief executive officer of AirAsia, has spoken out against the rule, saying that Indian aviation needs much more investment and new entrants.

Scrapping the rule could benefit passengers too, offering them a greater choice of different airlines as well as routes and destinations. The abolition of the rule would likely make international flying more affordable for Indians because of more new entrants and competitive low pricing.

There has been talk for several years about scrapping the rule, and the Indian government is now reviewing it. Instead of asking whether to keep the rule or abolish it, the question seems to be whether to abolish the rule or replace it.

Rajagopal says: "I hope the rule is abolished, but right now you can't say. With India, it's the good thing and the bad thing – they are consistently inconsistent on decisions in aviation. There's so many things that can be fixed in the industry today if the government had the will to do it." ▲





## NEWS ANALYSIS

# Transaero bankruptcy fear for creditors

As the bankruptcy of Russia's second-largest carrier becomes increasingly likely, Joe Kavanagh examines which companies have the most exposure to the airline.

Alongside other airlines, Transaero had to lobby the Russian government for state aid last year when its revenues dropped because of a weak ruble and low passenger demand. And like many Russian carriers, Transaero has continued to struggle this year.

The future of Russia's second-largest carrier seemed a little brighter in September, when flag carrier Aeroflot announced it had offered to buy 75% of the airline's shares, in return for a token price of one ruble. However, in October, Aeroflot stated that Transaero shareholders had not responded to its offer within the time limit, and that it had decided not to extend the purchase offer.

As creditors threaten to file bankruptcy petitions, the carrier's debts continue to grow. As of December 2014, the debt-laden airline had balance sheet debt and outstanding finance leases totalling almost \$1.8 billion. However, the carrier has struggled to make lease payments throughout the year, and that figure is now substantially higher.

Leasing sources have confirmed that Transaero is up to 12 months behind on some lease payments.

## How are lessors affected?

*Airfinance Journal* understands that some of Transaero's lessors are considering bankruptcy claims, as well as the repossession of aircraft in response to non-payment by the airline.

Transaero creditors include VTB Leasing, Sberbank, VEB Leasing, Ilyushin Finance Company, AerCap, ICBC Leasing, Gecas, GA Telesis, Amentum and BBAM, according to information from AeroTransport Data Bank (ATDB).

The worst affected lessors by number of aircraft are Russian lenders VEB Leasing and VTB Leasing. VTB's press office said that Transaero's debts to the bank total Rb40

billion (\$641 million) in lease payments and Rb12 billion in loans.

VTB is the lessor with the largest exposure by number of aircraft, according to data from ATDB, with 21 aircraft on lease to the carrier. The company told *Airfinance Journal*: "We are currently carrying out pre-sale preparations for 21 aircraft and are interested in selling them either to Aeroflot or to other aviation market participants."

To make matters worse, much of VTB's Transaero exposure consists of large, ageing widebodies, which are costly and difficult to remarket. VTB leases eight mid-life 747s to Transaero, as well as six 777-200ERs and four 767-300ERs.

However, industry sources have indicated that lessors with widebody exposure to the carrier will be hard-pressed to remarket their aircraft in the case of insolvency, and will be unlikely to realize prices in line with their book values.

Market reports suggest that a decade-old 777-200 has sunk in value to about \$10 million. In contrast, appraisers tell *Airfinance Journal* that the current market value for a new 777-200LR is about \$147 million.

The worst-case scenario for a creditor is repossession, because of the extensive costs involved. Lenders will often choose to take late or diminished payments to help the operator stay afloat, in the hope of receiving a greater amount of the debt. However, even if reduced payments are unlikely, a creditor will sometimes have no other option than to repossess and then remarket its aircraft.

As always, the most highly liquid assets are young, in-production narrowbodies, because of high demand for the aircraft and lower remarketing costs in comparison to their twin-aisle counterparts. So the lessors of Transaero's 737 NGs and A320-family aircraft are in the best position, but the airline has relatively



few of these types in service.

AerCap, for example, has taken five narrowbodies out of Russia in the past couple of months. In September, the lessor relocated five 737-700s from Transaero to US low-cost carrier Southwest, which operates more than 450 of the Boeing narrowbodies.

When asked whether the relocation was related to non-payment from the Russian airline, a spokesman declined to comment, but noted that AerCap has been reducing its exposure in Russia since the second quarter of 2014, and clarified that "[its] remaining exposure, if any, is immaterial".

## Manufacturer orders

A question mark also hangs over Transaero's direct orders with manufacturers.

The airline has placed direct orders with Airbus – for eight A320neos and four A380s. The combined value of these aircraft, at list prices, is \$2.6 billion. An Airbus spokesman told *Airfinance Journal* the company was "monitoring the situation", but declined to comment further.

Transaero also ordered four 747-8s from Boeing in December 2013, which *Airfinance Journal* estimates to be worth about \$670 million at current market prices.

Asked about the status of this order, a Boeing spokesman replied: "We are aware of the government decision to begin bankruptcy proceedings for Transaero Airlines. Transaero's 747-8 Intercontinental order is on our books. We are working closely together with them to best support their business needs."

Although most creditors are putting a brave face on their exposure to the Transaero situation, the withdrawal of Aeroflot's offer will have come as a major disappointment. ▲



## MEXICO

# Mexican carriers need funding

With almost 200 new-engine aircraft on order and deliveries beginning next year, Mexico's largest carriers need to diversify their sources of financing. But Mexico's unique implementation of the Cape Town Treaty will make that difficult, writes Joe Kavanagh.



Operating leases are a crucial part of most airlines' fleet plans. By allowing flexibility and reduced risk, they are a lifeline to start-up carriers and established airlines.

As airlines grow, though, most begin to blend these leases with forms of aircraft ownership, such as commercial loans, export credit deals and capital markets financing. The process of diversification allows more efficient sources of debt to be brought into the mix.

In Mexico, the country's large airlines are still reliant on operating lessors for the bulk of their financing. While this has not held them back, the airlines do have large order books delivering in the next few years. Several analysts and financiers have suggested to *Airfinance Journal* that the numbers of aircraft involved are likely to lead companies to chase new sources of debt.

### Capital markets increasingly attractive

Financiers are keeping a close eye on whether these large order books of Mexico's main carriers will lead airlines to seek out capital markets deals.

Large debt issuances have been rare from Mexican carriers, not least because of the heavy reliance on operating lessors to finance the bulk of their fleets. Flag carrier Aeromexico, for example, leases three-quarters of its aircraft, which is high compared to a global average of 48%.

Low-cost carrier Volaris, whose fleet consists of more than 50 A320-family aircraft, has leased all of the aircraft. The airline plans to expand its fleet to 65 aircraft by the

end of 2016, and has already arranged sale/leaseback deals for all of the aircraft delivering this and next year.

Volaris' chief financial officer Fernando Suarez says the airline has chosen sale/leaseback deals with major lessors because of the "favourable lease terms" it gets on these deals. However, he adds that Volaris may begin to own a portion of its fleet in the future.

Suarez says: "In the future... and depending on residual values and interest rate terms, Volaris may elect to own a portion of its fleet, and will explore the different financing terms available by then, or it may continue with sale/leasebacks. In the interim, the Volaris credit metrics have continued to improve, as the company continues with its growth plan."

There are important considerations related to owning rather than leasing. Carriers which own aircraft have to shoulder the residual value risk of their aircraft. They also sacrifice some flexibility in their fleet plans if they choose not to lease. However, it is more cost-effective to own aircraft than to lease them, providing that an operator can get its hands on attractively priced debt.

Aeromexico has revealed how much cash it saves by owning 25% of its aircraft, rather than leasing.

The carrier states that the annual cost of leasing an aircraft ranges from 10% to 12%, while the cost of ownership ranges from just 4% to 6%. As a result, Aeromexico reveals that by owning a quarter of its fleet it makes annual savings of between \$108 million and \$162 million.

The carrier is capable of issuing debt at



# “[We are] moving towards a more balanced split of owned vs leased aircraft through our long-term fleet plan.”

- Aeromexico statement

attractive rates. In February, Aeromexico refinanced two new 787-8s with an Ex-Im-backed loan for \$196 million. The 12-year loan had a margin over an applicable mid-swap rate of 55 basis points, with a coupon of 2.329%.

But could the airline reduce the percentage of its aircraft on lease? In a presentation to investors made in September, Aeromexico wrote: “[We are] moving towards a more balanced split of owned vs leased aircraft through our long-term fleet plan.”

When contacted by *Airfinance Journal*, a spokesman confirmed that Aeromexico plans to increase the percentage of its fleet that is financed and not leased, but that the carrier is not yet making the details of its plans public. The spokesman added that its debt would ideally consist of a mix of different structures.

Over the next few years, the need for more diverse financing may become more pressing. As the table of aircraft orders shows, the four largest Mexican carriers have to source financing for almost 200 new-engine narrowbodies from 2016 onwards.

Chris Hansen, a partner in the Miami office of White & Case, is among those who expect Mexican carriers to diversify their financing methods in the next few years.

He says: “Mexico’s major carriers have all recently announced significant new aircraft orders for the fuel-efficient [Airbus and Boeing] Neo and Max products as well as, in the case of Aeromexico, Boeing 787s.

“While Mexico poses certain jurisdictional challenges for particular classes of financiers, and therefore the diversity of financing products available may be more limited than it is for US carriers, we expect to see significant aircraft finance activity in

## REPOSSESSION THE MEXICAN WAY

IBA’s Owen Geach provides an insight into the realities of taking aircraft out of Mexico.

Repossessing aircraft from Mexico was “horrible”, recalls Owen Geach, chief commercial officer of IBA, which was involved in the repossession of three narrowbodies from Mexican airline Aviacsa in 2010.

Geach explains there was a grey area over ease and rights of recovery, even though the Cape Town Convention was in force at the time, which made the process time-consuming and difficult. The repossession took more than a year to complete.

The problems were compounded by aggressive union action, he adds. “Unions didn’t want to see their staff losing their jobs, and therefore held on to the aircraft by any means, which was a tactic to obstruct the lenders’ rights to recover their assets,” he says.



To make things worse, Geach says there were extra difficulties, such as aircraft being hidden or relocated at the last minute, and even robberies of avionics equipment.

The problems that lenders faced in 2010 still colour lender and investor understanding of the jurisdictional risk.

Geach adds: “Since the time of Mexican bankruptcies, there hasn’t been a similar event on a major scale. Repossession rights haven’t been properly tested since the collapse of those various airlines. Traditional lenders and lessors are still wary about Mexican exposure.” ▲

this market over the next few years, including traditional sale/leasebacks, but also the introduction of new products for this market that will provide a more diverse and stable funding base.”

He adds: “The question of US Ex-Im [Export-Import Bank] reauthorization is especially acute in this market (particularly for Aeromexico, the main Boeing opera-

tor in the market), and resolution of the reauthorization question will of course bear upon the manner in which funding trends will develop.”

As *Airfinance Journal* went to press, the US Congress had still not decided whether to reauthorize the bank, meaning that no new export credit-backed deals could be approved.



### NEXT-GENERATION ORDER BOOKS FOR MEXICO’S LARGEST AIRLINES

| Carrier                  | Aeromexico                        | Volaris      | Interjet    | VivaAerobus |
|--------------------------|-----------------------------------|--------------|-------------|-------------|
| Aircraft type and number | 60 Boeing 737 Max plus 30 options | 30 A320neos* | 40 A320neos | 40 A320neos |

\* Has also signed lease agreements for a further 16 A320neos



## “The form [of Cape Town] that Mexico ratified is not compliant with what is expected by the financial community.”

**Carlos Sierra, partner, Abogados Sierra y Vazquez**

Other potential new sources of funding include commercial bank loans and capital markets structures. In addition to these conventional sources, carriers might choose to tap the private placement market, as Columbian Avianca, for example, has done successfully in recent years.

### Repossession risk and investor appeal

When asked how likely a large Mexican capital markets deal is in the near future, most financiers bring up the issue of jurisdictional risk.

While Mexico is host to strong airlines with solid opportunities for growth, investors remain cautious about how easy it would be to repossess aircraft from Mexico. As recent airline bankruptcies have demonstrated (see *Repossession the Mexican way*), the country's ratification of the Cape Town Treaty is inadequate for the needs of some investors, causing them to hold back from Mexican exposure.

The problem stems from the fact that Mexico ratified Alternative B of Cape Town when it signed up in July 2007. It is the only signatory to have done so.

The differences between Alternative A and Alternative B relate to the issue of insolvency. Alternative A is modelled on Section 11 of the US bankruptcy code, which reassures investors they can reclaim assets with relative ease. Alternative B, however, makes reclaiming assets more difficult for lenders.

According to Carlos Sierra, partner at law firm Abogados Sierra y Vazquez, Mexico's ratification of Alternative B fails to make the insolvency process “less cumbersome than it already is under local law”.

Sierra adds that under Mexico's interpretation of Cape Town, insolvency remains a complex process for creditors, needing court intervention before leases can be terminated and assets can be reclaimed by lessors.

The big question is whether Mexican airlines have been limited by these jurisdictional problems. Are capital markets deals being held back due to the form in which the country has ratified the treaty?

“Yes,” states Sierra, “The form that Mexico ratified is not compliant with what is expected by the financial community. Mexico needs to adopt the Qualifying Declarations of the ASU [Aircraft Sector Understanding] in order for airlines to benefit from the discounts and an

overall lower perception of risk that would result in the availability of more sophisticated financing deals”

Capital markets deals are possible for unrated airlines in countries such as Mexico. However, for the time being, they would potentially attract such high yields that they would be inefficient for the airlines to use for financing.

That said, there are ways to mitigate the jurisdictional risk. With enhanced equipment trust certificate (EETC) deals issued by airlines based in countries which have not ratified Cape Town, for example, banks can “work through” the jurisdictional risk to achieve tighter pricing.

For Latam's EETC issuance in May, the liquidity facility was set at 21 months, rather

than the typical 18 months, to mitigate the perceived risk. Similar tweaks to capital markets deals could potentially be made for Mexican issuers.

However, even if deal arrangers pull off such an issuance for a Mexican airline, a deal would only be worthwhile if it prices competitively. There is little point in breaking away from operating lessors to tap the capital markets at the wrong price.

For the time being, Mexican carriers are victims of their country's jurisdiction. To remain competitive in the future, they will need to end their reliance on operating lessors and find access to new sources of debt – before billions of dollars of new equipment lands on the tarmac. ▲

## MEXICAN CARRIERS STRUGGLE FOR PROFITABILITY

Aeromexico, Volaris and Interjet have reported declining net income for the past few years, as a result of flat revenues and earnings before interest, taxes, depreciation, amortization and restructuring or rent cost (Ebitdar) margins, as well as significant increases in aircraft rents and depreciation.

In 2010, the three carriers' net income totalled \$340 million. That has declined each year, leading to aggregate 2014 annual net income for these three airlines of \$96 million.

At the operating level, the airlines have struggled to increase revenue and Ebitdar in dollar terms as a result of competition and the depreciating peso. The aggregate industry leverage (adjusted net debt/Ebitdar) has increased from 4.4 times to 6.5 times over the past four years, reflecting the capital expenditure and new operating leases.

That Mexico has been a challenging operating environment in recent years explains much of the decline in net income. During the second quarter of this year, for example, the Mexican peso depreciated 17.7% year-on-year against the dollar. As carriers in Russia and Brazil can testify, declining currency values leads to a spike in variable costs that are denominated in US dollars.

However, low fuel costs have led to a



turnaround this year. While the three airlines made a combined loss of \$52 million in the first half of 2014, a 30% drop in fuel costs led to a net income of \$72 million in the same period this year.

One of the largest votes of confidence in the region's future was cast by Delta in 2012, when it took a 4.2% stake in Aeromexico for \$65 million. The carriers have also filed for antitrust immunity for a new joint venture on flights between the US and Mexico as they build on their relationship.

Some analysts have questioned whether the Mexican market is large enough to support the growth of four sizeable carriers.

Christian Wolff, director of transport finance at Helaba, says: “If all three [of the largest airlines in Mexico] are on a growth strategy, they will have to eat into each other's business.” ▲





## REGIONAL ANALYSIS

# Hong Kong's aviation future

The 16th Annual Asia-Pacific Airfinance Conference in Hong Kong provides a focus for the ambitions of the Chinese administrative region to become an aircraft-financing hub. Michael Allen reviews its progress.



As hundreds of delegates descend on the 16th Annual Asia-Pacific Airfinance Conference in Hong Kong, behind the scenes dedicated Hong Kong aviation professionals are working towards developing their city as an aircraft finance and leasing hub to rival those of Ireland and Singapore.

*Airfinance Journal* reported in July that the Hong Kong government was in the final stage of its talks on modifying corporation tax to encourage aircraft finance and leasing in the Special Administrative Region (SAR). This is one of the most important developments affecting the Chinese aviation finance and leasing market and, accordingly, the topic will be discussed at the conference during a special afternoon session on November 3 called "Aviation Tax Treaties and Aviation Tax Reforms – Hong Kong".

#### Tax is the key

One of the policy measures set out in Circular No 108 (Opinions on accelerating the development of the aircraft leasing industry, issued by the State Council of the People's Republic of China in 2013) is to use Hong Kong's position as an international transportation and financial trading centre to encourage aircraft leasing companies in establishing operations in Hong Kong, explains Pieter Burger, partner, financial

services, tax, at consultancy firm Deloitte in an article for *Airfinance Annual*.

As a result of Circular No 108, on April 1 Hong Kong signed a fourth protocol with mainland China with respect to the China/Hong Kong agreement. Under the protocol, the rate of withholding tax on lease payments is reduced from 7% to a maximum of 5%. Industry players generally view withholding tax as burdensome.

Because of the reduction, adds Burger, Hong Kong is now the jurisdiction with the lowest rate of withholding tax applied by Chinese tax authorities on rentals paid by People's Republic of China (PRC) lessees on cross-border leasing. Singapore and Ireland had, up to the signing of the fourth protocol, the lowest rate of withholding tax applying on rentals paid by PRC lessees on cross-border leasing at a rate of 6% under their respective double tax agreements (DTAs) with the PRC.

The force behind the withholding tax reform was the Hong Kong Economic Development Commission, set up by the city's chief executive CY Leung when he was appointed in 2012. The commission is composed of four working groups, one of these being the Working Group on Transportation (including maritime and air transport).

Dewey Yee, head, aerospace finance/leasing advisory, at Hong Kong-based



## “It is paramount that the Hong Kong administration revisits the existing tax rules to improve the overall business environment for aircraft lessors in Hong Kong”

Pieter Burger, Deloitte

Bridge Capital Partners, has been a member of this working group since 2013 and oversaw the implementation of the withholding tax reduction.

“It required a whole lot of lobbying at various government departments and a lot of educating,” he told *Airfinance Journal* in June.

### Hong Kong versus Singapore

The change to withholding tax and proposed reforms in Hong Kong poses a challenge to the established leasing hubs of Ireland and Singapore. Multiple sources say that Singapore is more threatened by Hong Kong’s aviation ambitions than Ireland because of a number of soft factors.

These include Hong Kong’s proximity to the PRC market, Hong Kong’s use of the Chinese language, Hong Kong’s sharing the same time zone as the PRC and the similarity of the city’s business culture to the mainland.

The Singapore government is said to be closely watching the developments in Hong Kong because it views these as a threat to its aviation finance supremacy in the region.

### A need for more reforms

A Hong Kong-based aircraft lessor is in general subject to tax on any lease rentals derived from the lease of aircraft entered into by the lessor, according to Burger. In addition, a Hong Kong-based lessor is not entitled to claim tax depreciation on the cost of the aircraft in instances where the aircraft is leased to a non-Hong Kong-based airline. Therefore, the Hong Kong lessor is taxed on its gross rentals (as opposed to profits arising as is the case in Ireland and Singapore) from the leasing transaction at a rate of 16.5%.

However, there are three key advantages from a tax perspective available to aircraft lessors based in Hong Kong.

First, Hong Kong has agreements with 54 jurisdictions covering income from air services, out of which 32 are comprehensive DTAs.

Second, Hong Kong is in the process of negotiating DTAs with 14 countries. It is likely that any new agreements will cover

lease payments, which will provide greater tax certainty to Hong Kong-based lessors when entering into leasing transactions with lessees in those countries.

Third, there are no indirect taxes such as sales tax, VAT, or goods and services tax.

“It is paramount that the Hong Kong administration revisits the existing tax rules to improve the overall business environment for aircraft lessors in Hong Kong,” says Burger.

“This will not only help Hong Kong to maintain its competitiveness as Asia’s key transportation and business hub, but would also strengthen its position as a major international financial centre.”

Despite the positive developments that have been made so far and enthusiasm shown by those involved in the reforms, the reforms will take time.

“People are actively looking into Hong Kong, but not much development activity has happened since June,” says David Yu, adjunct professor of finance at New York University Shanghai.

Yu adds that Hong Kong faces competition from places like the Qianhai special economic zone, which is now looking to compete in the aircraft market.

Whether future reforms will lure more market players to Hong Kong remains to be seen, but they are certainly being watched carefully by market players looking to tap into the flourishing Asia-Pacific aircraft finance and leasing market.

“Government has its own pace of doing things,” Yee said in June. “All we can do is be there and provide the best material and the best assistance we can.” ▲

## CHOW TAI FOOK EXPANDS AIRCRAFT AMBITIONS

For a company that splashed out \$35.3 million for a single record-breaking 507-carat diamond in 2010, spending about \$1.26 billion (CNY 8 billion) on aircraft might not seem such a surprising financial gesture. But last month’s declaration by Stanley Hui, the new deputy chief executive officer of Chow Tai Fook’s leasing business, that his company would purchase 20 new Airbus and Boeing aircraft was greeted by significant interest from market players in Asia and further afield.

Hui also said his company is considering setting up a leasing platform in Tianjin or Shanghai, something which most large Chinese airlines want their leasing partners to do.

Chow Tai Fook is owned by Cheng Yutung, Hong Kong’s fourth-richest person with a net worth of \$11.5 billion, according to *Forbes*. It has previously invested in aviation with Dublin-based Goshawk Aviation, a joint venture between NWS Holdings (owned by Chow Tai Fook) and UK-based Investec Bank. In July, Goshawk closed a \$605 million non-recourse



secured term loan facility for a portfolio of 23 aircraft with Citigroup, Bank of America and Helaba.

Further acquisitions by Goshawk, as promised by Hui, will ensure the new lessor is seen as a serious player in Hong Kong’s aviation finance markets. ▲



## REGIONAL AND SMALL AIRCRAFT

# Small aircraft, big rewards

**Mike Duff,** managing director, *The Airline Analyst*, looks at the performance of lessors specializing in regional and smaller single-aisle aircraft.

Small commercial aircraft have generated attractive returns to lessors in recent years. There is no better example than Nordic Aviation Capital (NAC), whose net profit has doubled since 2011/12 and which has been valued at \$3.3 billion.

In recent years a number of new companies have entered the market, in some cases by buying existing portfolios. Fortress Investment Group's 2011 acquisition of BAE Systems' asset management operation and its associated aircraft portfolio is such a case. The new organization now trades under the Falko name. The sector continues to attract high-profile new entrants, such as Oaktree Capital, which has moved into the market through its Elix Aviation Capital group. The publicly traded Avation has also been growing profitably.

All four of the companies mentioned above were represented in *The Leasing Top 50* published by *Airfinance Journal* in September, but all have subsequently issued new financial data, making a review of this specialist segment of the market timely.

### The lessors

NAC estimates that it has a 30% share of the global leasing market for turboprop aircraft with more than 40 seats, making it the largest independent lessor of turboprops in the world. The average life of the fleet is young at nine years. The average has been driven down by recent acquisitions of CRJ 1000 aircraft. The small number of A320 and 737 aircraft in the NAC fleet, by contrast, are much older. The lessor is expanding its turboprop fleet further and had 24 ATR 42/72 aircraft on firm order as of August.

Elix Aviation Capital is the fastest growing of the lessors in this review, with its fleet size up from 11 aircraft a year ago to 39. Owned by private equity fund Oaktree Capital, it has its principal operations in Ireland. Irish subsidiary Elix Assets 1 owned the majority of the fleet with 38 aircraft as of December 31 2014 and it is this entity's consolidated financials that we examine here.

With fixed assets of \$251 million, the implied average purchase price of aircraft

acquired was \$6.6 million. As the accounting period covers the start-up phase of its activities, is for 14 months and is not a consolidated financial view of the group, some of the ratios should be interpreted with caution.

The third of our small aircraft lessors is commonly called Falko, but operates through the Triangle Aviation group of companies.

FIGURE 1 - FLEET SUMMARY

| Lessor/Aircraft Type           | No. of Aircraft | Average Age (yrs) |
|--------------------------------|-----------------|-------------------|
| <b>Nordic Aviation Capital</b> | <b>225</b>      | <b>9.0</b>        |
| Airbus A320                    | 3               | 22.7              |
| ATR 42                         | 30              | 15.3              |
| ATR 72                         | 79              | 7.4               |
| Boeing 737                     | 8               | 27.0              |
| Bombardier CRJ1000             | 12              | 2.2               |
| Bombardier CRJ900              | 7               | 7.2               |
| DHC-8                          | 85              | 7.1               |
| Saab 2000                      | 1               | 18.9              |
| <b>Falko</b>                   | <b>51</b>       | <b>14.6</b>       |
| ATR 72                         | 1               | 6.6               |
| BAe B146                       | 33              | 17.0              |
| Boeing 717                     | 9               | 14.5              |
| Bombardier CRJ900              | 3               | 4.1               |
| DHC-8                          | 3               | 8.7               |
| Embraer E190                   | 2               | 5.4               |
| <b>Elix Aviation Capital</b>   | <b>39</b>       | <b>16.4</b>       |
| ATR 42                         | 11              | 16.5              |
| ATR 72                         | 13              | 8.1               |
| DHC-8                          | 15              | 23.5              |
| <b>Avation</b>                 | <b>31</b>       | <b>8.4</b>        |
| Airbus A320                    | 2               | 17.6              |
| Airbus A321                    | 3               | 13.1              |
| ATR 72                         | 20              | 2.5               |
| Fokker 100                     | 6               | 22.5              |
| <b>Grand Total</b>             | <b>346</b>      | <b>10.6</b>       |

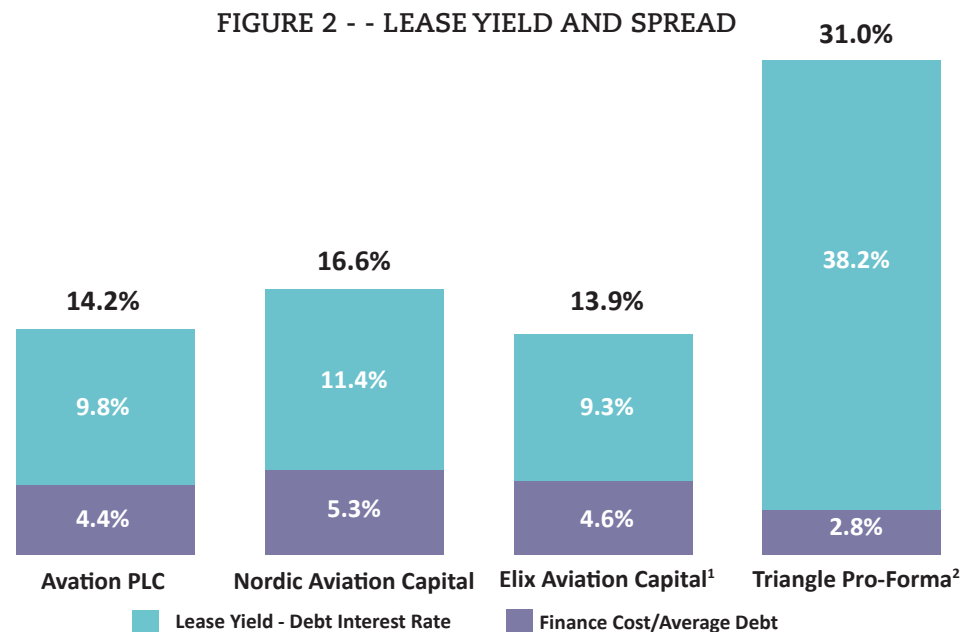
Source - AtlasData, August 2015

## All four lessors generated a lease yield in the mid-teens or better

Falko was established in 2011 to acquire the Trident group of companies from BAE Systems, which owned the residual RJ85 and RJ100 portfolio of aircraft. Since the acquisition, Triangle has parted out a number of aircraft but has also made some new investments, most notably a fleet of Boeing 717s with leases attached. At the time of purchase, the Boeing aircraft were on lease to scheduled and charter carrier Cobham of Australia and to Spain's Volotea. The lessor also has two E190s, which are on lease to Cobham and Bora Jet. Its fleet of BAE aircraft is now reduced to just 33 of the 51 originally acquired. In mid-2014, Falko signed two letters of intent for the purchase of up to 24 Bombardier CS100 jets.

The Triangle group consists of Triangle Aviation (UK) Holdings and Triangle Aviation Ireland. *Airfinance Journal* has made a simplifying pro-forma addition of the two entities for the financial analysis in this feature.

The fourth turboprop lessor whose financials were recently released is Avation, which is listed on the London Stock Exchange but run out of Singapore. It is primarily focused on an ATR turboprop



fleet but also owns some mid-life and older A320-family aircraft and Fokker 100s. Avation had nine ATR 72s, two A320s and one A321 on order as of June.

### Profitability

All four lessors generated a healthy lease yield in the mid-teens in their most recent financial years (see Figure 2), which, combined with relatively low average debt costs, generated attractive spreads.

Cost of debt was strikingly low. Falko was lowest at 2.8%, followed by Avation at 4.4%, Elix at 4.6% and NAC surprisingly bringing up the rear at 5.3%. Perhaps this is the penalty they are prepared to pay to have the flexibility of unsecured borrowing (see below).

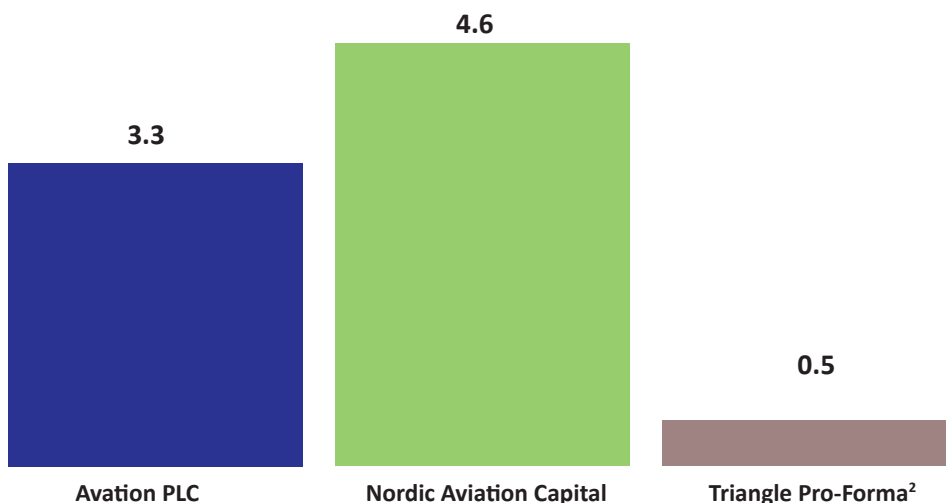
Ebitda (earnings before interest, taxes, depreciation and amortization) interest coverage was comfortable for the three established companies. As noted earlier, the period analyzed incorporates the start-up phase for Elix, and its interest coverage was only 0.6 times.

Excluding the loss of \$21.4 million made by Elix in its start-up year, net profitability ranged from \$13.3 million for Avation to \$110.7 million for NAC. In this zero Libor environment, the high returns on equity in the range of 10%

<sup>1</sup> Elix Assets 1 Limited

<sup>2</sup> Pro-forma summation of Triangle Aviation (UK) Holdings Limited and Triangle Aviation Ireland Limited

**FIGURE 3 - DEBT/EQUITY (SHAREHOLDER LOANS AS EQUITY) (X)**







## the high returns on equity in the range of 10% to 35% provide further attraction to new entrants

to 35% provide further attraction to new entrants.

### Capital structure

Elix and Falko are funded principally by related company borrowings, equity and external borrowing. Excluding Elix, which is in its start-up year, the lessors' leverage is shown in Figure 3.

Martin Møller, sole owner of NAC, has agreed a partnership with private equity investor EQT valuing the company on an unlevered basis at \$3.3 billion. On closing, EQT will become NAC's majority share-

holder and NAC will receive \$100 million of additional equity, which may help moderate its leverage of 4.6 times. Avation and Triangle have quite modest amounts of leverage.

Both Avation and NAC have tapped the debt capital markets on an unsecured basis – Avation with a \$500 million global medium-term note programme of which \$100 million was issued in 2014/15 and NAC through an unsecured term loan of \$345 million. It was reported in 2013/14 that \$230 million had been provided by US institutional investors led by High-

bridge but the source of the additional \$115 million in 2014/15 was not disclosed.

Avation obtained a B+ rating from Fitch in support of its debt capital markets programme. The two lessors had secured debt/tangible assets ratios in the 56% to 57% range, offering reasonable protection to unsecured creditors.

These two lessors, in particular, have their funding plans in place and appear well prepared for further growth. Given the returns on offer, it seems likely that more investors will be attracted to the small aircraft leasing market.

FIGURE 4 - KEY FINANCIALS AND RATIOS

| \$ million  | Lessor      |                         |                                    |                                 |
|---|-------------|-------------------------|------------------------------------|---------------------------------|
|   | Avation PLC | Nordic Aviation Capital | Elix Aviation Capital <sup>1</sup> | Triangle Pro-Forma <sup>2</sup> |
| Country of incorporation                              | UK          | Denmark                 | Ireland                            | Ireland/UK                      |
| Financial Year Ending                                 | 30-Jun-15   | 30-Jun-15               | 31-Dec-14                          | 31-Dec-14                       |
| Equity market capitalization (if any)                 | 120         | N/A                     | N/A                                | N/A                             |
| Unsecured credit rating (if any)                      | B+ (Fitch)  | N/A                     | N/A                                | N/A                             |
| Size of fleet   | 31          | 225                     | 39                                 | 31                              |
| Average age of fleet                                  | 8.4 years   | 9 years                 | 16.4 years                         | 14.6 years                      |
| <b>Total Revenue</b>                                  | <b>60.2</b> | <b>398.2</b>            | <b>18.0</b>                        | <b>80.2</b>                     |
| <b>EBITDA</b>   | <b>52.2</b> | <b>245.9</b>            | <b>(6.6)</b>                       | <b>54.5</b>                     |
| Depreciation & amortisation                           | (17.8)      | (0.8)                   | (7.6)                              | (26.0)                          |
| EBIT  | 34.4        | 245.2                   | (14.2)                             | 28.5                            |
| Non-recurring gains and losses                        |             |                         |                                    | 24.7                            |
| Finance costs   | (18.9)      | (126.8)                 | (10.3)                             | (3.7)                           |
| <b>Profit Before Tax</b>                              | <b>15.5</b> | <b>118.4</b>            | <b>(24.5)</b>                      | <b>(3.7)</b>                    |
| Income tax expense                                    | (1.0)       | (7.7)                   | 3.1                                | (3.5)                           |
| <b>Profit for the year from continuing operations</b> | <b>14.5</b> | <b>110.7</b>            | <b>(21.4)</b>                      | <b>46.1</b>                     |
| Gain (Loss) from discontinued operations, net of tax  | (1.2)       |                         |                                    | -                               |
| <b>Net income</b>                                     | <b>13.3</b> | <b>110.7</b>            | <b>(21.4)</b>                      | <b>46.1</b>                     |
| Lease yield (Lease revenue/Average PP&E)              | 14.2%       | 16.6%                   | 13.9%                              | 31.0%                           |
| Finance Cost/Average Debt                             | 4.4%        | 5.3%                    | 4.6%                               | 2.8%                            |
| Lease Yield - Debt Interest Rate                      | 9.8%        | 11.4%                   | 9.3%                               | 28.3%                           |
| EBITDA/Total Finance Costs (x)                        | 2.8         | 1.9                     | (0.6)                              | 14.8                            |
| Return on Average Equity                              | 10.4%       | 21.0%                   | 1808.4%                            | 35.3%                           |
| Debt/Equity (Shareholder Loans as Equity)             | 3.3         | 4.6                     | -188.0                             | 0.5                             |
| Debt/Total Capital                                    | 77.0%       | 82.1%                   | 100.5%                             | 50.3%                           |
| Debt/EBITDA   | 8.2         | 9.8                     | -33.7                              | 2.4                             |
| Secured Debt/Gross Tangible Assets                    | 56.2%       | 57.7%                   | 80.8%                              | 26.0%                           |
| Cash/Total Debt                                       | 25.4%       | 5.6%                    | 3.4%                               | 24.7%                           |
| Property, Plant and Equipment                         | 434         | 2,816                   | 251                                | 183                             |

<sup>1</sup> Elix Assets 1 Limited

<sup>2</sup> Pro-forma summation of Triangle Aviation (UK) Holdings Limited and Triangle Aviation Ireland Limited

## EXECUTIVE INTERVIEW

## Meet DVB Bank's new Tokyo head

Michael Allen speaks to Yoichi Hirotsu, who took over from Masa Kubo as the new head of DVB's Tokyo office in October, about his plans for the bank's Japanese operations and his views on the country's aviation market.

Before the interview with *Airfinance Journal*, Yoichi Hirotsu had just arrived back in Tokyo after attending a company meeting in Prague coinciding with October's Istat Europe 2015 conference. Eleven days into his new job, the new head of DVB Bank's Tokyo office had only spent two-and-a-half days in the Tokyo office. Hirotsu says this is only to be expected because, he explains, the aviation market is "universal and global".

"I'm an expert in the Japanese aviation market, but I have to understand what is going on elsewhere, such as the joint venture between Lufthansa, United and British Airways," he says.

"Without understanding the rest of the world, it's very difficult to understand my own market."

The 39-year-old has taken over the top position at DVB Japan after Masahide (Masa) Kubo, who held the role for about two-and-a-half years, stepped down for health reasons. Kubo will stay on as an adviser to DVB.

DVB's Tokyo office consists of four people, the other three being senior vice-presidents Takasuke Usuyama and Masahiro Mita, and secretary Miki Wakao.

Hirotsu says he is happy with the size of the team, but sees room for expansion as and when it is needed.

He joins DVB with more than 17 years' experience at state-owned Development Bank of Japan (DBJ), including seven years directly engaged in aircraft finance. His proudest accomplishments include working on the rescue project for Japan Airlines (JAL) between 2009 and 2011, and helping set up DBJ's global aviation team headed by Masao Masuda.

He believes that one of DVB's strengths lies in asset-related transactions, and that while Japanese lenders and leasing companies have focused primarily on high credit transac-

tions, asset-related transactions are likely to become more popular.

However, taking asset risk is not always something with which Japanese lenders tend to be comfortable.

"Understanding how you ski – by the book – is quite easy, but it's quite difficult for you to go skiing on the mountain," explains Hirotsu.

"In the same way, understanding asset risk on the paper is quite easy, right? In 12 years, the 737-800 will probably go down \$15 million, but how much can you take a risk on 15 million? Can you take 12 million? 10 million? Five million? Nobody knows what's going to happen in 12 years. There's no crystal ball."

One key market trend that Hirotsu has observed and is keen to tap into is that more Japanese institutional investors are likely to become interested in aircraft investment.

"The Japanese Government Pension Investment Fund is the largest pension fund globally and, along with other institutions, is considering diversifying its investment," he says.

"Their portfolio is skewed to only Japanese bonds and Japanese stocks, so they are looking for good alternative investments. Aircraft can probably be their target in the long run. Probably it will take five to 10 years, but it's a good time to start considering that opportunity."

Supply in the Japanese operating lease (Jol) and Japanese operating lease with call option (Jolco) markets, which are cornerstones of Japan's aviation finance industry, is struggling to keep up with demand as investors hope to get the most out of structures with uncertain futures. The Japanese government is considering changes to the accelerated depreciation method, although any potential changes have been postponed until 2017.

"If you look at the demand balance



between Jol and Jolco, obviously demand is much more than supply, so that's the reason why the tax investors' returns keep going down and down," says Hirotsu.

"The real investors are long-term investors in the institutional investor market like pension funds and insurance companies."

One problem these investors could face when venturing into aircraft risk assets involves currency.

"If you look at their assets on their balance sheets it's primarily denominated in Japanese yen on the debt side, but the aircraft market is denominated primarily in US dollars, so they need to consider the FX risk. The diversification is the most important thing for long-term investors, and I strongly believe they can overcome that shortfall." ▲

## MADE IN JAPAN

Yoichi Hirotsu, whose last name, he tells *Airfinance Journal*, translates to "wide valley", was born and grew up in Hiroshima, before moving to Tokyo when he was 18 years old. He studied at the University of Tokyo, and, with the exception of a stint at graduate school in Austin, Texas, has lived and worked in the Japanese capital ever since. He lives in Tokyo with his wife and two children, a boy aged 12 and a girl aged nine. ▲



## CEO INTERVIEW

# Novus eyes the twin-aisle market

Jack Dutton speaks to Safwan Kuzbari, the Middle Eastern lessor's president and chief executive officer, about lead times, moving widebodies and the company's leasing strategy.

"In today's market, we believe it's the opportune time to sell because of the abundance of market liquidity coupled with low interest rates and positive outlook for airlines enjoying sustained low fuel prices," says Safwan Kuzbari.

Kuzbari is president and chief executive officer of Novus, a Middle Eastern lessor he founded in 1994 with Chafic Kuzbari, its chief financial officer and general manager. The lessor is based in Dubai and is one of the largest in the Middle East. It has 30 employees in four offices: Dubai, UAE; Dublin, Ireland; Hong Kong; and Beirut, Lebanon.

Novus has 25 aircraft in its fleet, consisting mainly of widebody aircraft, some narrowbodies and two Embraer E-Jets. Its fleet has an average age of six years and is valued at about \$2.5 billion, according to Kuzbari. The aircraft are on lease to six different lessees in Europe and Asia, including British Airways, Cathay Pacific and Emirates.

Novus' intention is to acquire and dispose of aircraft in a way that maximizes the return for its shareholders and investors. It keeps its portfolio size at between 25 and 35, mainly made up of twin-aisle aircraft. Kuzbari anticipates further aircraft trades during the final quarter of this year, and will be announcing some additional sale/leaseback transactions in the coming weeks.

Novus prefers to buy aircraft not older than five years and to move them on with lease attached within the first five to eight years for narrowbodies and eight to 10 years for widebodies.

### Direct from manufacturers

Despite being an active player in the used market, Novus has not placed any direct orders from manufacturers. Kuzbari does not see a huge amount of scope for new aircraft orders in the single-aisle segment. Many of the new programmes, especially in the narrowbody segment, have sold out for a few years, so the lessor is looking more to the secondary market.

"Nevertheless, we do keep in contact with the manufacturers regarding their programmes, mainly in the twin-aisle segment," says Kuzbari. "While no decision has yet been taken, we will consider the matter at the next board of directors meeting, taking into consideration the potential opportunities connected with the maturity of some of the aircraft programmes."

Shorter lead times make a direct order for twin-aisle aircraft more attractive to the lessor. It has not ruled out ordering single-aisle aircraft, but it would be likely to order aircraft that are last off the line.

### Recent closings

The lessor has spent \$500 million in delivery commitments. Middle Eastern banks finance about 45% of Novus' fleet, while European banks finance 41% and Asian banks about 14%. One of its bigger recent deals was a sale/leaseback transaction for five 777-300ERs with UAE carrier Emirates.

More recently, Novus signed an operating lease agreement for two A340-300s with Spanish start-up Plus Ultra. The two A340-300s were previously on lease from Gulf Air before the lessor reconfigured the cabins for its new lessee. Novus used in-house counsel to advise on the Plus Ultra deal. The jets are now on lease with the Spanish carrier for five years.

For its operating lease and sale/leaseback transactions, the company uses the Novus Aviation Capital platform. For finance leases for airlines, it uses Tamweel Finance Leasing, a product in partnership with Airbus, Development Bank of Japan and NordLB. Novus says it offers "attractive, high LTV [loan-to-value] funding to airlines" and has passed the billion-dollar mark in aircraft assets financed.

After its inception, the first six months were taken up establishing the company, before it completed its first transaction in 2014.



### Moving widebodies in secondary market

The lessor's fleet includes 767s, 777s, A330s, A340s and A380s. With Novus being predominantly a mid-life, widebody lessor, Kuzbari spends a lot of time considering how to move aircraft when they come off lease. He is in the process of remarketing some 777s, the leases of which expire in the next one or two years.

"We have a number of 777-300ERs and 777-200ERs in our portfolio under long-term operating leases, save for one 777-200ER ex-MAS," he says. "We believe strongly in the future of the -300ER type, as the replacement 777X will not be delivered before 2020 at the earliest and will take some time to achieve critical mass in the market. The 777-300ER will, therefore, remain in demand for many years to come."

He adds: "I think several of the existing leases approaching maturity will be extended but, naturally, we'll have to transition some aircraft to new operators. There are many airlines that have not placed orders for new or additional twin-aisle aircraft and these airlines will be seeking a cost-competitive leasing option, which the 777-300ER provides.

Novus is remarketing a 777-200ER, which is not as attractive as the larger variant but we are confident in our ability to place this aircraft."

Novus is always in the market looking at new transactions but is not driven by fleet volume and looks only at deals that meet its investment criteria.





“We are very selective in terms of deals and pricing and we have some concerns going forward about the rate of production, mostly in the single-aisle category.”

“Novus prefers the twin-aisle segment since these aircraft tend to generate better yields than single-aisles. We believe the single-aisle market is highly competitive, which generates aggressive pricing behaviour from participants and lowers yields. Many of the lessors opt for the single-aisle market because these aircraft are generally easier to remarket in having a much wider operator base. In contrast, Novus has the necessary expertise and experience to remarket twin-aisle aircraft.”

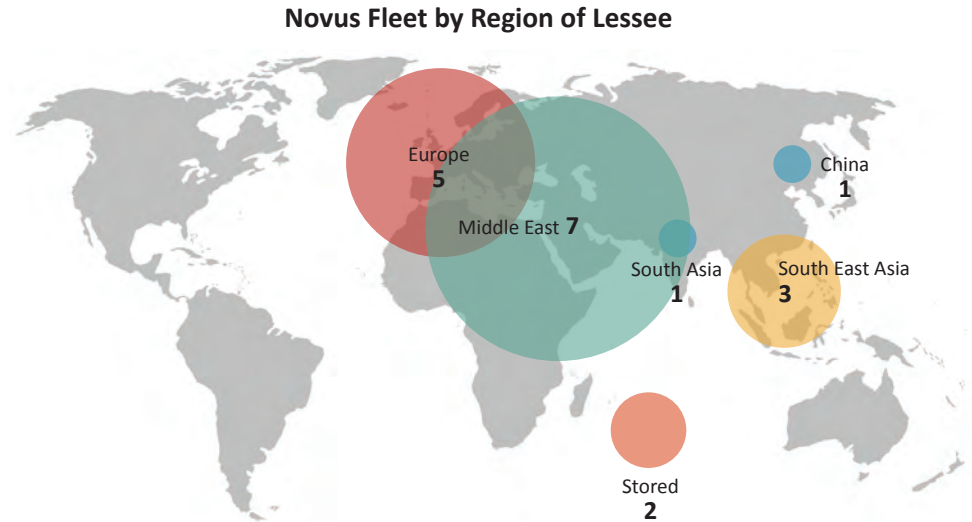
**Challenges to come**

Kuzbari acknowledges the main challenges the lessor faces: the intensity of the competition and the downward pressure on yields. He pays a great deal of attention to future values because wrong value assumptions at the outset could lead to potential investment losses further down the line.

“We are very selective in terms of deals and pricing and we have some concerns going forward about the rate of production, mostly in the single-aisle category,” he says. “This could impact the future values of these aircraft and increase the pressure on the lease rent factors. We also take into consideration the shortened economic life of an aircraft from a marketing perspective.”

Asked about the general trends in the Middle East, Kuzbari appears optimistic.

He says: “The leasing market in the Middle East is growing because of the rapid expansion of several airlines in the region to meet growing demand. In-



Source: AtlasData

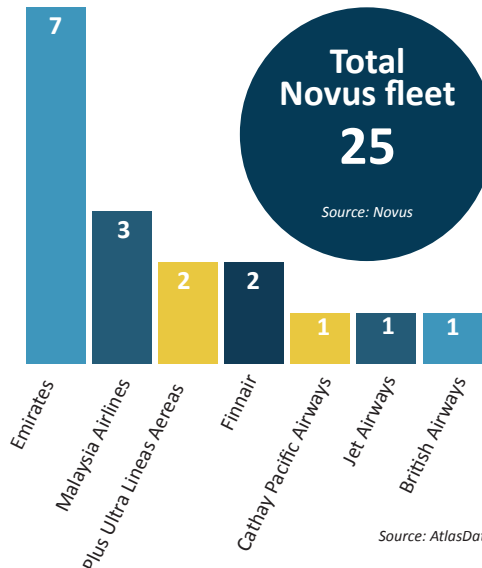
vestors are also showing more interest in entering the space. Local investors have a higher cost of equity than some other markets and particularly in relation to Asian investors.

“The big concern is with the softening of the fuel price, which will impact on the financial liquidity in this region forcing the cost of equity to rise. The same is also true of the debt market as governments are likely, in the near future, to be borrowing more from the financial markets.”

**Novus Key Facts**

|   |                                 |
|---|---------------------------------|
| <b>Name:</b>                                      | Novus Aviation Capital          |
| <b>Country:</b>                                   | Dubai, UAE                      |
| <b>Founded:</b>                                   | 1994                            |
| <b>Ownership:</b>                                 | Private                         |
| <b>Head office:</b>                               | Dubai, UAE                      |
| <b>Number of employees:</b>                       | 30                              |
| <b>Size of fleet:</b>                             | 25 (including under management) |
| <b>Average age of fleet:</b>                      | 6 years                         |
| <b>Number of lessees:</b>                         | 6                               |
| <b>Order book:</b>                                | None                            |
| <b>Delivery commitments (as of June 30 2015):</b> | \$500 million                   |
| <b>Unsecured Credit Ratings:</b>                  |                                 |
| <b>Fitch:</b>                                     | n/a                             |
| <b>Moody's:</b>                                   | n/a                             |
| <b>S&amp;P:</b>                                   | n/a                             |
| <b>Total assets (as of June 30 2015):</b>         | \$2.5 billion                   |
| <b>Net income (as of June 30 2015):</b>           | n/a                             |

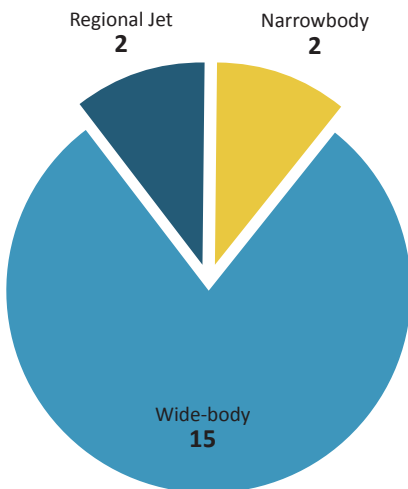
**Novus Top 10 Lessees by number of aircraft**



Source: AtlasData

Source: Novus/Ratings Agencies

**Novus Aircraft Categories**



Source: AtlasData



## AIRCRAFT PROFILE

# E175 – scope for improvement

Values of Embraer's E175 are holding up well and there is as yet little impact from the prospect of replacement models entering service.



The Embraer E175 is part of the Brazilian E-Jet family, which straddles the regional and single-aisle markets. The other members of the family are the similarly sized E170, as well as the larger E190 and E195 models. Close to 1,200 models from the family have been built and more than 1,150 aircraft remain in service.

All current models are powered by General Electric engines, and have significant commonality in aircraft systems and avionics. The fuselage cross-section is identical for all members of the family and accommodates four-abreast seating.

The E170 was the first version to be built and entered service in 2004. In response to market feedback, Embraer launched the E175, which has typically eight more seats. The first E175 was delivered in 2005 and has outsold its smaller stablemate, accounting for virtually the entire current order backlog.

The E175 is available in three major versions differentiated primarily by their maximum take-off weights and associated ranges. The models are designated as standard (STD), long-range (LR) and augmented range (AR) versions. The E170 and E175 compete with Bombardier's CRJ700 and CRJ900 models.

### Future developments

Embraer has announced the launch of the second generation of the E-Jet family, which it identifies by the designation

E2. The family comprises three models: E175-E2, E190-E2 and E195-E2. The E175 has been stretched by a single seat row and is the smallest aircraft in the second-generation family.

Embraer is targeting 2018 for entry into service of the E190-E2, but the E175-E2 is not scheduled to follow until 2020. The company has introduced a number of modifications and enhancements to improve the fuel efficiency on the current-generation E-Jet that will narrow the gap to the E2, with particular focus on the E175.

## ISTAT APPRAISERS VIEWS



**Avitas**

**Martin O'Hanrahan,**  
director,  
asset valuation

Avitas is of the opinion that the market for the Embraer 175LR is balanced and will remain so with the potential to strengthen in line with airline industry fundamentals. Since 2012, the expansion of pilot scope clauses allowing for aircraft up to 76 seats at major US airlines has resulted in increased orders and options for this size aircraft.





“Although the re-engined E2 will be replacing the current generation in 2020, the last-off-the-line aircraft are the only ones that might be impacted by shorter economic lives.”

**Lindsey Mohr, manager valuations, MBA**

| AIRCRAFT CHARACTERISTICS  |                              |
|---|------------------------------|
| <b>Seating/range</b>  |                              |
| Max seating   | 88 at 30-inch pitch          |
| Typical seating   | 78 at 32-inch pitch          |
| Max range (LR version)  | 1,900nm (3,520km)            |
| <b>Technical characteristics</b>                                  |                              |
| MTOW (LR version)   | 38.95 tonnes (85,870lb)      |
| OEW   | 21.67 tonnes (47,770lb)      |
| MZFW  | 31.70 tonnes (69,880lb)      |
| Fuel capacity   | 11,625 litres                |
| Engines   | CF34-8E                      |
| Thrust  | 14,200 lbf (63kN)            |
| <b>Fuels and times</b>  |                              |
| Block fuel 200 nautical miles                                     | 1,180kg                      |
| Block fuel 500 nautical miles                                     | 2,390kg                      |
| Block time 200 nautical miles                                     | 45 minutes                   |
| Block time 500 nautical miles                                     | 81 minutes                   |
| <b>Fleet data</b>   |                              |
| Entry into service  | 2005                         |
| In service  | 309                          |
| Operators (current and planned)                                   | 10                           |
| In storage  | 6                            |
| On order  | 162 (excluding E2 versions)  |
| Built peak year (2014)  | 62                           |
| Built 2014  | 62                           |
| Average age   | 4.6 years                    |
| <i>Source: AeroTransport database/Airfinance Journal research</i> |                              |
| <b>Indicative maintenance reserves</b>                            |                              |
| C-check reserve   | \$45-\$50 per flight hour    |
| Higher checks reserve   | \$35-\$40/flight hour        |
| Engine overhaul   | \$70-\$75/engine flight hour |
| Engine LLP  | \$100-\$105/engine cycle     |
| Landing gear refurbishment  | \$30-\$35/cycle              |
| Wheels, brakes and tyres  | \$50-\$55/cycle              |
| APU   | \$55-\$60/APU hour           |
| Component overhaul  | \$150-\$160/flight hour      |

Positioned at a size that meets the threshold for scope clauses makes this an attractive regional jet for US carriers. The average age of the in-service fleet is only four years, so the secondary market has yet to be tested.

The pilot scope clause dynamic is an evolving contractual issue. The seat limit, now set at 76 seats, has been slowly increasing over time. As a result, this size advantage is likely to erode, pushing the demand to larger aircraft. However, these changes are taking place slowly so this advantage could remain for some time to come.

The second-generation Embraer E2 types were launched in 2013 but are not scheduled to enter service until later in the decade. These models will feature improved avionics, seating configurations and better unit costs. The E175-E2 will be slightly larger than its predecessor and will be powered by new more fuel-efficient Pratt & Whitney geared turbofan engines.



#### Collateral Verifications (CV)

**Gueric Dechavanne,**  
vice-president,  
commercial aviation  
services

Market values have remained stable for new and used aircraft in line with the current economic environment. In the past six months, values of used aircraft have increased by 5% to 10% depending on the aircraft vintage. This trend, which is continuing to strengthen, should remain stable over the next 12 months.

With the latest signs indicating that the US economy will continue improving, we see further potential for the values and lease rates of this aircraft to increase. The big unknown for this type remains how the secondary market will develop. CV believes it will expand over the next few years, which will offer additional outlets should any of the US fleet become available in larger numbers. However, CV does not see this occurring in the short term.

Monthly lease rates have remained fairly stable over the past 12 months as the availability of aircraft has remained low. CV sees this trend continuing because of the appetite for the type from the existing operator base.

The introduction of newer, more efficient aircraft, such as the Mitsubishi MRJ and Comac ARJ21, as well as Embraer's own E2 models, will affect the current E175's values in the future, should the new entrants prove successful. We may also see an impact to residual values as the E2 family starts to deliver in the later part of this decade. The next few years should determine what the 70-seat market requires, and the E175 risks becoming outdated with the introduction of some of its new competitors.

With its future secured in the medium term, the values and lease rates will remain stable and benefit from the overall market recovery. We see the introduction of the enhanced E175 and further progression to the E2 generation as positives for the type overall. Increasing concentration in the US could be a concern if the type does not receive wider acceptance, especially in the Asia-Pacific markets.



#### MBA

**Lindsey Mohr,**  
manager  
valuations

The Embraer E175LR has seen recent success, most notably in North America, as regional carriers replace ageing fleets with more fuel-efficient and larger aircraft. While the E175 consists of four main variants differing mainly in maximum takeoff weight (MTOW), the most popular is the long-range or LR, which can fly 1,900 nautical miles with 88 passengers on board.

While many carriers continue to up-gauge aircraft, the E175 remains in a niche position because of scope clause agreements limiting seating capacity and range





“With its future secured in the medium term, the values and lease rates will remain stable and benefit from the overall market recovery”

Gueric Dechavanne, vice-president, commercial aviation services, Collateral Verifications

on regional airlines. As a result, values and lease rates for the type have remained stable, and the outlook is positive.

In June 2012, Embraer announced plans to enhance the current-generation E175’s aerodynamics by making small improvements in the design, as well as adding winglets. Increasing the fuel burn efficiency by 5% over the earlier vintages and offering a 4% fuel burn advantage over its competitor the Bombardier CRJ900, the E175 became a prime candidate for regional carriers looking to replace fleets during a time of high oil prices.

Before 2013, the E175LR variant had 76 net orders, a very low number compared to the near 300 orders for the CRJ900. However, from 2013 to date, the E175LR variant brought in an additional 274 orders, taking the majority of the market share from its competitor. With a growing backlog, new values for the type have slightly increased and market values have aligned with base values. Although the re-engined E2 will be replacing the current generation in 2020, the last-off-the-line aircraft are the only ones that might be impacted by shorter economic lives. ▲

### US PILOT SCOPE CLAUSES IMPACT ON REGIONAL AIRCRAFT MARKET

Restrictions on the size and number of aircraft that US regional airlines can operate pose artificial restraints on markets and make life difficult for the manufacturers.



Pilot scope clauses have been in force since the 1980s, when the pilots of the major legacy carriers negotiated them in an effort to stop their jobs being transferred to smaller regional airlines that paid well below the rates of the big carriers. The clauses effectively restrict the size and number of aircraft that can be operated by regional airlines affiliated to the major carriers.

The impact of scope clauses on aircraft is manifested in the number of aircraft designs that are optimized around the seating limits set by the clauses. Initially, 50 seats was a cut-off point, which dictated the size of the early regional jets such as the Bombardier CRJ and Embraer 145 – aircraft that are now too small to be economical in many markets.

In the past decade, the US majors

have negotiated concessions, sometimes taking advantage of Chapter 11 bankruptcy protection, allowing them to operate limited numbers of larger regional jets. This trend has benefited Embraer and Bombardier by allowing them to place aircraft such as the E170/175 and the CRJ 700 respectively.

The regional jet manufacturers appear to be banking on further relaxation in time for the entries into service of their new models. For example, the current designs of the Mitsubishi MRJ90 and the Embraer E175-E2 exceed the maximum take-off weight limit of existing agreements. ▲

| VALUES E175LR                            |         |         |         |         |         |         |
|--|---------|---------|---------|---------|---------|---------|
| Current market value (\$m)               |         |         |         |         |         |         |
| Build year                               | 2005    | 2007    | 2009    | 2011    | 2013    | 2015    |
| Avitas view                              | 13.1    | 15.6    | 18.5    | 21.6    | 25.1    | 29.5    |
| CV view                                  | 14.2    | 15.5    | 16.7    | 18.8    | 22.3    | 29.1    |
| MBA view                                 | 14.5    | 16.6    | 19.0    | 21.8    | 25.1    | 28.8    |
| <i>Assuming standard Istat criteria.</i> |         |         |         |         |         |         |
| Indicative lease rates (\$'000s/month)   |         |         |         |         |         |         |
| Build year                               | 2005    | 2007    | 2009    | 2011    | 2013    | 2015    |
| Avitas view                              | 130-150 | 140-170 | 170-190 | 180-210 | 200-230 | 230-270 |
| CV view                                  | 140     | 160     | 180     | 200     | 220     | 240     |
| MBA view                                 | 149-161 | 162-175 | 176-190 | 191-207 | 209-226 | 228-246 |



# DEAL WATCH

## LOANS/FINANCE LEASES

| Borrower                         | Country   | Asset                        | Amount                      | Structure               | Arranger                            | Debt |
|----------------------------------|-----------|------------------------------|-----------------------------|-------------------------|-------------------------------------|------|
| <b>October 2015</b>              |           |                              |                             |                         |                                     |      |
| Cathay Pacific                   | Hong Kong | 1x777-300ER (third of three) | \$340m/\$168m (List/CMV*)   | Commercial loan         | ANZ, ING, Natixis                   |      |
| Thai Airways                     | Thailand  | 1xA320-200                   | \$97m/\$44m (List/CMV*)     | Commercial loan         | CA-CIB, Korea Development Bank      |      |
| Jetscape                         | US        | 5xE190                       | Undisclosed                 | Commercial loan         | DVB                                 |      |
| <b>September 2015</b>            |           |                              |                             |                         |                                     |      |
| ICBC Leasing                     | China     | 1xA330-200,1x737-700,1xA319  | \$250m                      | Refinancing             | DVB                                 |      |
| Latam                            | Chile     | Engine portfolio             | Undisclosed                 | Loan                    | CA-CIB                              | SMBC |
| ABC Leasing                      | China     | 1xA320-200                   | \$97m/\$44m (List/CMV*)     | Commercial loan         | CA-CIB                              |      |
| China Southern                   | China     | 2x777-300ER                  | \$660m/\$335m (List/CMV*)   | French tax lease        | NBAD/SocGen                         |      |
| <b>August 2015</b>               |           |                              |                             |                         |                                     |      |
| HKAC                             | Hong Kong | Various aircraft             | \$725m                      | Warehouse facility      | Credit Suisse, Credit Agricole, RBC |      |
| Lion Group                       | Indonesia | 1xATR72-600                  | \$25.9m/\$20.2m (List/CMV*) | 12-year finance lease   | PK AirFinance                       |      |
| Dubai Aerospace Enterprise (DAE) | Dubai     | 6xATR72-600                  | \$155m/\$121m (List/CMV*)   | Commercial loan         | DekaBank                            |      |
| Awac                             | Ireland   | 8 aircraft                   | Undisclosed                 | Refinancing/(3-4 years) | DVB                                 |      |

## EXPORT CREDIT DEALS

| Borrower              | Country | Asset                             | Amount                       | Structure/ECA                    | Arranger            | Debt  |
|-----------------------|---------|-----------------------------------|------------------------------|----------------------------------|---------------------|---|
| <b>August 2015</b>    |         |                                   |                              |                                  |                     |   |
| CMB Financial Leasing | China   | 1xA330-300, 1x737-800, 1xA320-200 | \$136m                       | Senior loan facility             | DVB, Morgan Stanley | Bank of Tokyo-Mitsubishi UFJ, Sumitomo Mitsui Trust |
| Vietnam Airlines      | Vietnam | 4x787-9                           | \$589m                       | Guaranteed loan loan/Ex-Im       | ING, THD Securities |   |
| <b>July 2015</b>      |         |                                   |                              |                                  |                     |   |
| THY                   | Turkey  | 3x737-900ER plus engines          | Undisclosed                  | Yen-denominated loan/Ex-Im       | Mizuho              |   |
| Korean Airlines       | US      | 1xA330-300                        | \$113m                       | Export credit/Coface             | ING                 |   |
| <b>June 2015</b>      |         |                                   |                              |                                  |                     |   |
| China Eastern         | China   | 1x777-300ER                       | \$330m at list (CMV* \$168m) | ECA-backed commercial loan/Ex-Im | HSBC                |   |

## CAPITAL MARKETS

| Borrower              | Country   | Asset/Security | Amount                                     | Structure/Term                            | Arranger  | Coupon/Rating                  |
|-----------------------|-----------|----------------|--|---|---|--------------------------------|
| <b>September 2015</b> |           |                |  |   |   |                                |
| Etihad                | Abu Dhabi |                | \$700m                                     | collateral loan obligation/September 2020 | Goldman Sachs, ADS Securities, Anoa                                   | B- (Fitch)                     |
| <b>August 2015</b>    |           |                |  |   |   |                                |
| THY                   | Turkey    | Part of 3xA321 | \$86.4m (A:\$70.36m/B:\$16.1m)             | Yen denominated EETC/ March 2024          | Mizuho Securities, Shinsei Trust & Banking, Development Bank of Japan | A:A2, B:baa2 (Moody's)         |
| ALC                   | US        | Unsecured      | \$500m                                     | Bond/3 years                              | Syndicate of banks  | 2.63%                          |
| Delta Airlines        | US        | 15x737-900ER   | \$500m (AA:\$312.5m/A:\$69.4m/B:\$118.02m) | EETC/(A:AA:11.9 years, B:7.9)             | Morgan Stanley  | AA:Aa3, A:A1, B:Baa2 (Moody's) |
| <b>July 2015</b>      |           |                |  |   |   |                                |
| Spirit Airlines       | US        | 15 aircraft    | \$577m (A:\$456m/B:\$121m)                 | EETC/(A:12.6 years, B:8.6)                | Citi, Morgan Stanley  | A:4.1%, B:4.45%                |
| Apollo Aviation       | US        | 40 aircraft    | \$71m (C tranche of November 2014 ABS)     | ABS/2029                                  | Goldman Sachs, DVB, CA-CIB  | B+                             |

\* Current market value - see page 46



## DEAL WATCH

## SALE/LEASEBACKS

| Borrower              | Country  | Asset      | Lessor/Arranger     | Amount                       |
|-----------------------|----------|------------|---------------------|------------------------------|
| <b>October 2015</b>   |          |            |                     |                              |
| Finnair               | Finland  | 1xA350-900 | Gecas               | \$305m (list)                |
| Nok Air               | Taiwan   | 2xQ400     | Gecas               | \$60m/42m (at list/CMV*)     |
| EVA Air               | Taiwan   | 2xA330-300 | Standard Chartered  | \$507m/211m (at list/CMV*)   |
| <b>September 2015</b> |          |            |                     |                              |
| Frontier Airlines     | US       | 9xA321     | Gecas               | \$1.02bn/468m (at list/CMV*) |
| Ethiopian Airlines    | Ethiopia | 6x787-8    | Unannounced         | \$1.34bn/707m (at list/CMV*) |
| Emirates              | Dubai    | 1x777F     | DAE                 | \$318.7m (list)              |
| <b>August 2015</b>    |          |            |                     |                              |
| Indigo                | India    | 5xA320neo  | Goshawk             | \$531m (list)                |
| Avianca               | Brazil   | 6xA320     | Vermillion Aviation | \$782m/\$262m (at list/CMV*) |



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## DEAL PIPELINE (MANDATES)

| Borrower                      | Country  | Asset                                | Structure            | Amount                     | Arranger/Advisor | Status     |
|-------------------------------|----------|--------------------------------------|----------------------|----------------------------|------------------|------------|
| <b>August to October 2015</b> |          |                                      |                      |                            |                  |            |
| Air China                     | China    | 24 aircraft                          | To be decided        | Undisclosed                |                  | RFP issued |
| ICBC                          | China    | 2x737-800                            | Commercial financing | \$192m/958m (at list/CMV*) | Natixis          | Mandated   |
| Thai Airways                  | Thailand | 5x737-800                            | Ex-Im backed         | \$467m/238m (at list/CMV*) | BNP Paribas      | Mandated   |
| SunExpress                    | Turkey   | 5x737-800                            | Ex-Im backed         | \$467m/238m (at list/CMV*) | BNP Paribas      | Mandated   |
| Xiamen Airlines               | China    | 5x737-800                            | Operating leases     | \$467m/238m (at list/CMV*) | ICBC             | Mandated   |
| Turkish Airlines (THY)        | Turkey   | 20x737-800, 6x777-300ER              | To be decided        | Undisclosed                |                  |            |
| Turkish Airlines (THY)        | Turkey   | 10xA321-200, 5xA330-300, 2xA330-200F | To be decided        | Undisclosed                |                  |            |

\* Current market value - see page 46

## 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) |
| Alliant Travel Company      | -             | Ba3 (stable)  | BB (stable)   |
| American Airlines Group     | B+ (stable)   | Ba3 (stable)  | BB- (stable)  |
| Avianca Holdings - IFRS     | BB- (neg)     | -             | B+ (stable)   |
| British Airways             | -             | Ba2 (stable)  | 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)  | B+ (stable)   |
| LATAM Airlines Group        | BB- (stable)  | Ba2 (stable)  | BB (stable)   |
| Lufthansa Group             | -             | Ba1 (pos)     | BBB- (stable) |
| Qantas Airways              | -             | Ba1 (pos)     | BB+ (stable)  |
| Ryanair                     | BBB+ (stable) | -             | BBB+ (stable) |
| SAS                         | -             | B3 (stable)   | B- (stable)   |
| Southwest Airlines          | BBB (pos)     | 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            | B+ (stable)   | B1 (stable)   | -             |
| Virgin Australia            | -             | B2 (Stable)   | B+ (stable)   |
| WestJet                     | -             | -             | BBB- (stable) |

Source: Ratings Agencies - 12th October 2015

### 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 October 2015

### LESSOR CREDIT RATINGS

| Lessor                        | Fitch       | Moody's     | S&P          |
|-------------------------------|-------------|-------------|--------------|
| AerCap                        | BB+(pos)    | Ba2(pos)    | BB+(pos)     |
| Air Lease Corp                | -           | -           | BBB-(stable) |
| Aircastle                     | -           | Ba2(pos)    | BB+(stable)  |
| Avation PLC                   | B+(stable)  | -           | B(stable)    |
| Aviation Capital Group        | BBB-(pos)   | -           | BBB-(stable) |
| AWAS Aviation Capital Limited | -           | Ba3(stable) | BB-(neg)     |
| BOC Aviation                  | A-(stable)  | -           | A-(stable)   |
| CIT Group Inc                 | BB+(stable) | B1(stable)  | BB-(pos)     |
| 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 October 2015



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# AIRCRAFT ORDERS

## COMMERCIAL AIRCRAFT ORDERS BY MANUFACTURER

|            | Gross orders 2015* | Cancellations 2015* | Net orders 2015* | Net orders 2014 |
|------------|--------------------|---------------------|------------------|-----------------|
| Airbus     | 987                | 60                  | 927              | 1,456           |
| Boeing     | 516                | 69                  | 447              | 1,432           |
| Bombardier | 23                 | 0                   | 23               | 93              |
| Embraer    | 124                | 0                   | 124              | 122             |
| ATR        | 49                 | 0                   | 49               | 160             |

\*Based on manufacturer announcements of firm orders as of mid October

## COMMERCIAL AIRCRAFT ORDERS BY CUSTOMER

| Customer                    | Country   | Quantity/Type                         |
|-----------------------------|-----------|---------------------------------------|
| <b>July to October 2015</b> |           |                                       |
| Wizz Air                    | Hungary   | 110x A321neo                          |
| Rwanda Air                  | Rwanda    | 2x A330-200                           |
| Jet2.com                    | UK        | 27x 737-800                           |
| Qantas                      | Australia | 8x 787-9                              |
| Indigo                      | India     | 250x A320neo                          |
| IAG                         | UK/Spain  | 8x A350-900, 3x A330-200, 20x A320neo |
| FedEx                       | US        | 50x 767-300F                          |
| China Eastern Airlines      | China     | 50x 737-800                           |
| China Aviation Supplies     | China     | 45x A330                              |

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## CURRENT PRODUCTION AIRCRAFT PRICES AND VALUES (\$ MILLIONS)

| Model                      | List price | Current market value* |
|----------------------------|------------|-----------------------|
| <b>Airbus (2015 price)</b> |            |                       |
| A319                       | 88.6       | 37.6                  |
| A320                       | 97.0       | 43.8                  |
| A321                       | 113.7      | 52.1                  |
| A330-200                   | 229.0      | 93.9                  |
| A330-300                   | 253.7      | 105.6                 |
| A350-900                   | 304.8      | TBD                   |
| A380                       | 428.0      | 222.2                 |
| <b>ATR (2015)</b>          |            |                       |
| ATR42-600                  | 20.1       | 15.5                  |
| ATR72-600                  | 24.7       | 20.2                  |
| <b>Boeing (2015)</b>       |            |                       |
| 737-700                    | 80.6       | 38.0                  |
| 737-800                    | 96.0       | 47.6                  |
| 737-900ER                  | 101.9      | 50.6                  |
| 747-8 (passenger)          | 378.5      | 167.2                 |
| 777-200LR                  | 313.8      | 147.0                 |
| 777-300ER                  | 339.6      | 167.7                 |
| 787-8                      | 224.6      | 117.8                 |
| 787-9                      | 264.6      | 136.1                 |
| <b>Bombardier (2014)</b>   |            |                       |
| CRJ700                     | 39.9       | 23.9                  |
| CRJ900                     | 45.8       | 26.0                  |
| CRJ1000                    | 48.9       | 27.7                  |
| Q400                       | 30.0       | 21.2                  |
| <b>Embraer (2014)</b>      |            |                       |
| E170                       | 40.0       | 27.0                  |
| E175                       | 43.1       | 29.2                  |
| E190                       | 47.7       | 33.0                  |
| E195                       | 50.5       | 34.9                  |

\*Based on Istat appraiser inputs for Air Investor 2015

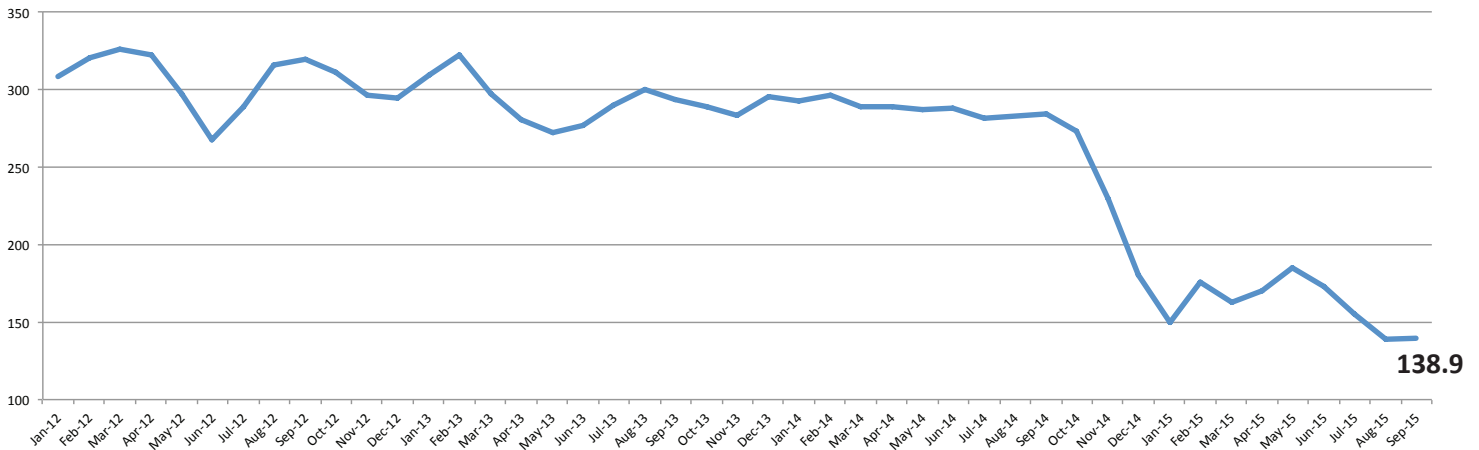
## AIRCRAFT LIST PRICES - NEW MODELS

| Model                       | \$ millions |
|-----------------------------|-------------|
| <b>Airbus (2015 prices)</b> |             |
| A319neo                     | 97.5        |
| A320neo                     | 106.2       |
| A321neo                     | 124.4       |
| A330-800neo                 | 249.6       |
| A330-900neo                 | 284.6       |
| A350-800                    | 269.5       |
| A350-1000                   | 351.9       |
| <b>Boeing (2015)</b>        |             |
| 737 Max7                    | 90.2        |
| 737 Max8                    | 110         |
| 737 Max9                    | 116.6       |
| 777-8X                      | 371.0       |
| 777-9X                      | 400.0       |
| 787-10                      | 306.1       |
| <b>Bombardier (2014)</b>    |             |
| CS100                       | 67.1        |
| CS300                       | 75.3        |
| <b>Embraer (2014)</b>       |             |
| E175-E2                     | 48.3        |
| E190-E2                     | 55.3        |
| E195-E2                     | 62.4        |





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



Source: US Energy Information Administration

## LEASE RATES (\$000S)

| Model             | Low   | High  | Average |
|-------------------|-------|-------|---------|
| <b>Airbus</b>     |       |       |         |
| A319              | 230   | 370   | 300     |
| A320              | 280   | 410   | 345     |
| A321              | 360   | 490   | 425     |
| A330-200          | 690   | 950   | 820     |
| A330-300          | 730   | 1,100 | 915     |
| A380              | 1,650 | 2,110 | 1,880   |
| <b>ATR</b>        |       |       |         |
| ATR42-600         | 120   | 180   | 150     |
| ATR72-600         | 160   | 210   | 185     |
| <b>Boeing</b>     |       |       |         |
| 737-700           | 230   | 380   | 305     |
| 737-800           | 330   | 450   | 390     |
| 737-900ER         | 370   | 470   | 420     |
| 747-8 (passenger) | 1,200 | 1,770 | 1,485   |
| 767-300ER         | 400   | 590   | 495     |
| 777-200ER         | 800   | 1,250 | 1,025   |
| 777-200LR         | 950   | 1,420 | 1,185   |
| 777-300ER         | 1,050 | 1,550 | 1,300   |
| 787-8             | 850   | 1,110 | 980     |
| 787-9             | 1,190 | 1,340 | 1,265   |
| <b>Bombardier</b> |       |       |         |
| CRJ700            | 160   | 210   | 185     |
| CRJ900            | 190   | 225   | 208     |
| CRJ1000           | 210   | 280   | 245     |
| Q400              | 150   | 225   | 188     |
| <b>Embraer</b>    |       |       |         |
| E170(AR)          | 180   | 230   | 205     |
| E175(AR)          | 200   | 250   | 225     |
| E190 (AR)         | 260   | 300   | 280     |
| E195 (AR)         | 230   | 320   | 275     |

Based on Istat appraiser inputs for Air Investor 2015



## PILARSKI SAYS...

# China – from saviour to bogeyman

The country's slowdown, like its growth, should not have come as a surprise, writes Adam Pilarski, senior vice-president at Avitas.

China's economic growth over the past almost four decades has been quite exceptional. From a very underdeveloped country, it has evolved into a major producer and consumer worldwide. Because of its population size and high growth rates, China has become a major player in the world, including in aviation.

Three decades ago China had only seven million passengers versus 51 million in Japan and 372 million in the US. In 2013, the same numbers were 353 million for China, 106 million for Japan and 743 million for the US.

China is the second-largest air traffic market in the world, and every businessperson involved in aviation sees the country as a critically important market. One-fifth of all Airbus and Boeing aircraft delivered last year went to China. Hence, the country became the perceived saviour of many businesses which were enamoured with the huge potential it offers.

Recently, China has been in the news in a much less positive manner. The slowdown of economic activity and a major stock value price bubble burst caused ripple effects on many stock markets worldwide. The adage of "when the US economy sneezes the world catches a cold" can now be applied to China, with a slowdown there negatively affecting exports in many countries. Declines in raw material prices and bankruptcies of companies selling investment goods worldwide are tied to the slowdown in the Chinese economy.

What is interesting is that many people were caught by surprise both with the tremendous growth that China experienced over the many decades and by the slowdown it faces now. Both of these developments were perfectly predictable and could be quantified.

Let us start with history. Thirty years ago I was predicting the tremendous future growth in Chinese aviation, and my forecasts were met with almost universal scorn. My rationale was quite simple. The Chinese economy was expected to grow at very high rates and its traffic was way below the level that could have been expected based on population, country size and future economy. The fact that Chinese traffic grew from 1985 until today by an average of 12.4% annually should not have come as a surprise.

Similarly, the slowdown in the Chinese economy should not catch anybody by surprise because the signs have been around for a long time. First is the population structure. The policy of restricting families to one child caused tremendous distortions in China. The proportion of working to retired people

has been inevitably shrinking. Older people work less and save less, affecting the economy significantly.

Two, the structure of the Chinese economy has been out of kilter with world averages in regard to savings, investment, consumption and exports. The phenomenal growth of the Chinese economy was accomplished via high production and exports. Abnormally high savings rates in part because of the lack of a social safety net led to equally abnormally high (40%) rates of investment. As a consequence, consumption is at ridiculously low levels of below 40% against about 70% in the US. This model could work with excess farm labour from inside China moving to the rapidly growing coastal areas where exports are produced. As the stream of excess labour is getting weaker, wages go up and China is losing its competitive advantage.

The obvious way forward, pushed by virtually all inside and outside experts, is to change the composition of Chinese GDP from export to consumption based. As these developments occur, China's trade will stop growing at breakneck speed. Exports relied on imports of raw materials, while consumption has many elements that have no foreign component. An increasing part of consumption (haircuts, entertainment, psychologist's visit, etc) is purely domestic in nature compared with buying raw materials from abroad for production purposes. This is the reason why Chinese developments are having a negative impact on the world economy.

Finally, high growth rates cannot continue forever. China experienced average annual growth of 9.8% for 37 years from 1978 until today. Singapore had an average growth rate of 9.3% for 28 years from 1966-94; South Korea grew for 29 years by 9.5% annually (1966-95); and Taiwan grew for 30 years by 9.7% from 1962-92. Japan grew in the 1960s by an average rate of more than 10.4%. And what happened to all those countries in the long run? None of them have experienced anything close to the numbers of previous decades. From 2000 until 2014, Japan, South Korea, Singapore and Taiwan experienced average annual growth rates of 0.7%, 4%, 5.4% and 3.7% respectively.

Chinese aircraft manufacturer Comac's latest forecast calls for a long-term traffic growth in China of 6.8% annually based on a 5.8% economic growth rate, a far cry from the recent heydays of double-digit growth. This is a multiple of less than 1.2 versus a multiple of over two, used when I started to do such analysis more than three decades ago. Not bad, but not the salvation of manufacturers in the future – and a totally expected and rational development. ▲



| TAA Financial Rating Scores - LTM            |                |     |           |          | Overall Rating Scores |       |     |
|--|----------------|-----|-----------|----------|-----------------------|-------|-----|
| Avg. Fleet Age                               | EBITDAR Margin | FCC | Liquidity | Leverage | LTM-2                 | LTM-1 | LTM |
| 5  | 2              | 2   | 1         | 3        | 1.4                   |       | 2.2 |
| <b>THE AIRLINE ANALYST FINANCIAL RATINGS</b> |                |     |           |          | 6                     | 2.4   | 5.6 |
|  |                |     |           |          |                       |       | 6.2 |
|  |                |     |           |          |                       |       | 3.5 |
|  |                |     |           |          |                       |       | 2.9 |
|  |                |     |           |          |                       |       | 6.6 |
|  |                |     |           |          |                       |       | 3.9 |
| 7  | 2              | 1   | 1         | 1        | 1.9                   | 1.9   | 1.7 |
| 4  | 2              | 4   | 4         | 5        | 3.6                   | 3.8   | 3.8 |
| 6  | 3              | 5   | 4         | 3        | 5.1                   | 4.6   | 3.9 |
| 5  | 1              | 4   | 2         | 4        | 2.5                   | 2.5   | 2.9 |
| 5  | 2              | 4   | 3         | 4        | 2.7                   | 2.9   | 3.4 |



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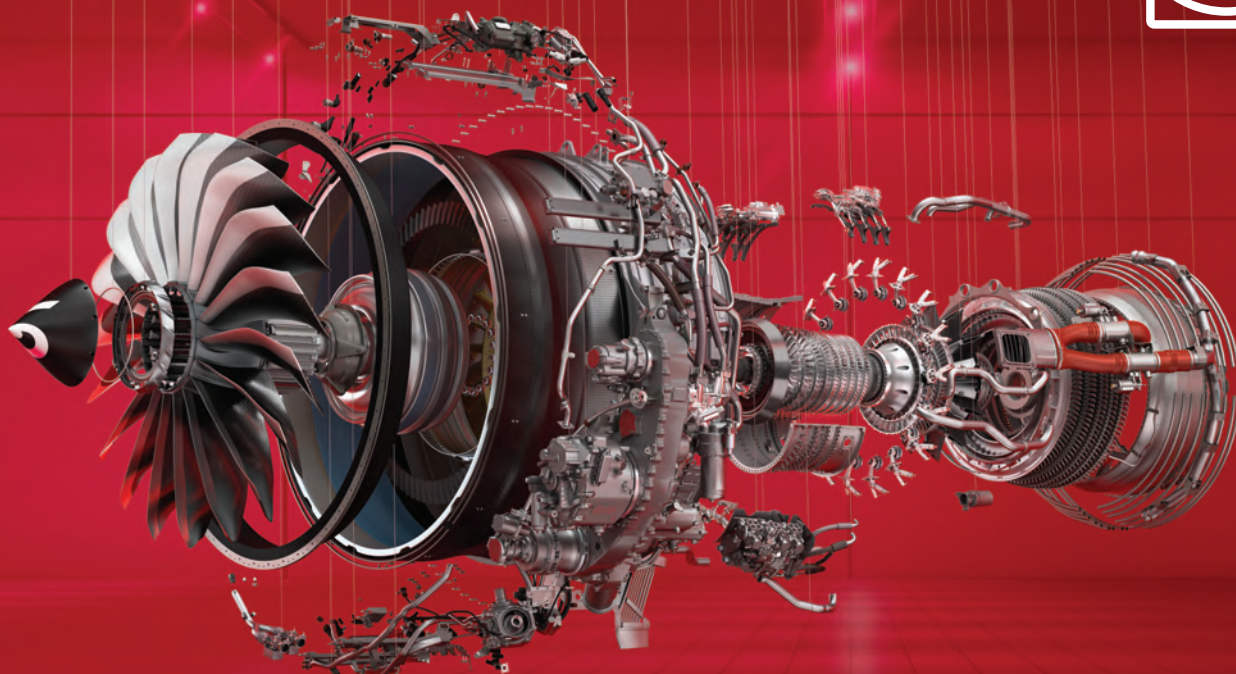
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