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Financial intelligence for commercial aviation

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EDITOR'S LETTER

Middle East's future widebody and whether to float or sell

Future widebody deliveries to Latin America and the Middle East could not be more contrasting, writes Jack Dutton.

As holidays end and autumn begins, the aviation markets are starting to warm up again and conference season approaches. In the run up to 12th Annual Latin America Airfinance conference and the 14th Middle East Airfinance conference, it is worth comparing the two very different markets.

Although global travel demand is skyrocketing in Latin America, air travel demand has fallen to its lowest levels since 2012, according to the Brazilian Airline Association trade group. The gross domestic product (GDP) in Latin America is forecasted to be 2.9% from 2015 to 2035, according to Boeing's 2016 Current Market Outlook. The region has witnessed turmoil in the commodity market and a decline in investment, which has put it into recession. Its largest economy, Brazil, is predicted to have negative growth over the next two years, according to a report from the Organisation for Economic Co-operation and Development (OECD).

Consequently, aircraft deliveries in the region have dropped 20% over the past two years. However, Boeing forecasts that the region will take 2,960 new aircraft by the end of 2035, with the majority – 85% – being single-aisle aircraft. Only 1% of these deliveries are predicted to be widebodies.

Boeing's GDP growth projections are higher for the Middle East, which is expected to grow at 3.8% between 2015 and 2035. Although some Middle Eastern economies that make most of their revenues from oil have seen less foreign investment and liquidity available as a result of low oil prices, Boeing says the region is still due to take some 3,310 new aircraft by 2035. Of those, 36% will be widebodies, a higher percentage than any other region.

But which widebodies will make up the lion's share of these orders?

Tim Clarke, chief executive officer of Emirates and the main champion of the A380neo, seems to have given up on the upgraded version of the aircraft. At a briefing in Dublin in June, he told reporters "can't force Toulouse to do anything", but his main concern is that Airbus does not stop producing the current-generation A380. But the lack of orders for A380s suggest that A350s and 777Xs will make up the bulk of the Middle Eastern widebody orders in the next 20 years.

Elsewhere in this issue, Aircastle chief executive officer Ron Wainshal talks about the idea of leasing companies going public. Although Aircastle has been a public company for the past 10 years, Wainshal says lessor initial public offerings (IPOs) are not always a good idea. He notes that, although the recent BOC Aviation IPO had a strong valuation when it came to market, it is now trading down, with shares in the lessor decreasing from $42 to $37.65 a share at the time of writing.

Shenzhen-based CDB Leasing, which listed in July, has also lost some value since it listed. The deal, which was dominated by Chinese cornerstone investors, fell 7% on its trading debut, making it the worst debut on the Hong Kong Stock Exchange in three years for a major first-time share sale, according to Bloomberg data.

Other lessors are also planning to shed their aircraft portfolios or launch an IPO – some are even considering both. In November 2015, CIT Group said it planned to separate its commercial aerospace platform CIT Aerospace.

Ellen Alemany, chief executive officer of CIT Group, said in an earnings call in August that she looks to close the transaction to sell its aerospace division by the end of this year.

The US lessor is using a dual-track process to do this, which means it is conducting an auction for sale at the same time as filing for an IPO. CIT can decide late in the process whether it wants to sell or to float, depending on how much value it derives from its offers. The group is due to announce the winning bidder this month.

On the earnings call, Alemany said: "We will take a variety of factors into making a decision on this transaction including valuation, timing, certainty of execution, funding and tax implications".

Several companies have made bids to acquire CIT's portfolio of about 350 aircraft. These include Century Tokyo Leasing, HNA Group, Ping An and Aircastle. The key takeaway from the lessor's latest round of bids is the domination of Asian buyers.

Now that the airfinance community is back in full swing, expect to see more Asian investment coming into the market later this year.

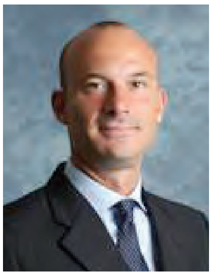
JACK DUTTON
Editor
Airfinance Journal

PEOPLE NEWS

Levy becomes CFO at United

United Continental Holdings has appointed Andrew Levy as its chief financial officer (CFO). Since January 2015, Levy was chief executive officer and managing partner of AML Ventures, an investment and advisory firm specialising in the airline industry. Before that, he worked at Allegiant between 2001 and 2014, as managing director of planning and treasury, chief financial officer, president and chief operating officer.

The appointment is effective from 22 August, when Gerry Laderman, the acting CFO, returned to his previous position as senior vice-president of finance, procurement and treasurer.



CALC appoints SVP aircraft recycling

China Aircraft Leasing Group (CALC) has appointed Alistair Dibisceglia as senior vice-president of technical at its aircraft recycling facility.

Dibisceglia will be based in Dublin, while spending half of his time in Asia, says CALC.

He previously served as a vice-president with Castlelake. He also held vice-president roles at AerCap and International Lease Finance.

Goshawk opts for Obrycki in marketing

Goshawk has hired CIT Aerospace's assistant vice-president of marketing, Christine Obrycki. She will be responsible for marketing in the USA, *Airfinance Journal* understands.

Obrycki has worked in marketing at CIT since September 2007. Previously, she was a marketing executive at US Airways.

Hubbard joins CALC

China Aircraft Leasing Group (CALC) has appointed Russell Hubbard as its senior vice-president of sales and marketing.

Hubbard joins the Hong Kong-based lessor from Singapore-based lessor Avation, where he was the global head of aircraft trading.

Previously, he headed the global trading team of Hong Kong Aviation Capital and was head of operations and chief commercial officer of Global Aviation Asset Management.

Hubbard will be based in CALC's Dublin office. His role is effective from 5 September.

THY ex-CFO sues airline over dismissal

Coskun Kilic, the former chief financial officer at Turkish Airlines (THY), has begun legal proceedings against the airline, according to a source familiar with the action.

Kilic wants the airline either to reinstate him or to pay compensation and acknowledge that his dismissal was not related to July's attempted coup against President Erdogan, says the source.

He has filed his complaint with an administrative court in Istanbul.

Kilic was dismissed along with other senior members of THY's management and finance team in July. THY did not reveal a reason for Kilic's dismissal, or the dismissals of the other members of the finance team, but it was announced at the same time as the mass firing of employees who were allegedly linked to the planners of the coup.

The airline announced in July that it had fired more than 200 employees over suspected links to US-based preacher Fethullah Gulen, who was accused by Turkish authorities of orchestrating the coup.

"Turkish Airlines' decision to fire us without showing a real reason is damaging people's reputation, because we were portrayed as if we are linked with that terror organisation," Kilic is reported telling news agency Bloomberg.

Turkish Airlines and Kilic could not immediately be reached for comment.

Magnusson gets top role at AeroCentury

AeroCentury has appointed Michael Magnusson as chief executive officer (CEO), effective 6 September.

Magnusson was previously president and CEO of Saab Aircraft Leasing. He joined the company in 1982.

After leaving Saab, Magnusson was a founding partner of an independent consulting company, which he will leave when he joins AeroCentury.

Klein enters into Spirit as CCO

Spirit Airlines has appointed Matt Klein as senior vice-president and chief commercial officer (CCO). He will lead the airline's revenue and marketing strategy.

Klein has worked most recently in a variety of consulting roles in the travel industry. He was previously CCO at Lastminute.com and vice-president of global airline relations at Travelocity. He was also leader of pricing, revenue, forecasting and distribution planning at AirTran Airways.

The airline has appointed Rocky Wiggins as senior vice-president and chief information officer.

Goring-Thomas to succeed Grabowski at DVB

Bertrand Grabowski, a member of the board at DVB Bank, is stepping down from his position at the German financier on 30 November.

David Goring-Thomas, the head of aviation finance, will succeed Grabowski on the board of the bank and take responsibility for the bank's aviation finance and land transport finance businesses.

Ralf Bedranowsky, chairman and chief executive officer of DVB's board of managing directors, says in a statement that Grabowski is leaving to pursue personal projects.

Grabowski will be 60 years old when he leaves his post.

Frank Westhoff, chairman of the supervisory board of DVB, says: "I want to thank Mr Grabowski for his very valuable contribution to the development of DVB in the past decade... the sustainable and stable profit contribution delivered."

He adds: "I am pleased to welcome Mr Goring-Thomas as a new board member. He has worked for DVB for over 15 years and is internally, and in the market, one of the best professionals recognised. We are looking forward to benefit from his contributions."

Pillsbury hires Evans in Los Angeles

Pillsbury has announced the appointment of Richard Evans as counsel in its Los Angeles office. He joins from the Los Angeles office of White & Case, where he was an attorney. While at the law firm, he worked on secondment as the interim general counsel at Jackson Square Aviation.

Evans was also seconded to Airbus for one year in 2002, according to his LinkedIn profile.

He works primarily with major aircraft leasing companies. His clients have included AerCap, Air Lease, BBAM, Jackson Square Aviation, Sky Holding and Wings Capital Partners.

At Pillsbury, Evans will partner with special counsel Jason Greenberg.

Gol reshuffles management

Brazilian airline Gol has appointed a new chief financial officer and has reshuffled its board of directors.

Richard Lark has been named executive vice-

PEOPLE NEWS

president, chief financial officer and investor relations officer. He previously held these roles between 2003 and 2008, and has been on the airline's board of directors since then. He previoulsy founded Endurance Capital Partners, a private equity firm, and has acted on the boards of various companies. He has held executive roles at Morgan Stanley, Citi and First Boston.

Edmar Prado Lopes Neto, who has held these roles since 2012, will move internally when the transition is completed.

Lark will step down from the board in accordance with Gol's governance practices. André Jánszky, the managing partner of the São Paulo office of law firm Milbank, will replace him.

Henrique Constantino will also leave the board of directors. Anna Luiza Constantino has been nominated to replace him. She works in analysis and research at Bloomberg Intelligence.

The airline has been grappling with the effects of the Brazilian economic slowdown since 2015. In November last year, it announced a capacity-reduction plan that included the deferral of 737-800 deliveries from Boeing. In March this year, Gol hired SkyWorks Capital to help it renegotiate lease agreements, and it also announced the appointment of PJT Partners to advise it on capital structure and liquidity. PJT Partners has advised Gol on the private exchange offer.

Goshawk names CFO

Goshawk has named Anand Ramachandran as its new chief financial officer.

Ramachandran has acted as head of corporate finance, treasury and tax at the aircraft lessor since June last year. He was previously a consultant at Investec.

He told *Airfinance Journal* he was "delighted" with the new role but declined to comment further.

Goshawk recently announced the closing of a $345 million revolving credit facility with a syndicate of banks. The four-year facility can be increased to $750 million through an accordion feature and will be used for general corporate purposes and aircraft acquisitions.

Vietnam Airlines appoints new CEO

Vietnam Airlines has appointed Duong Tri Thanh as its new president and chief executive officer. He replaces Pham Ngoc Minh, who will take up the role of chairman of the Vietnamese flag carrier.

Hanoi-born Tranh has been a member of the board of management at Vietnam Airlines and chairman of the board of Jetstar Pacific Airlines since 2012.

He began his career in 1983 at Vietnam Air Traffic Management Corporation, part of the Civil Aviation Administration of Vietnam. After joining Vietnam Airlines in 1990, he was appointed general manager south branch in 2004 and executive vice-president in 2008.

Trauchessec leaves BNP Paribas

Olivier Trauchessec, head of aviation finance for the Americas at BNP Paribas, has left the bank, *Airfinance Journal* can reveal.

Trauchessec has led the aviation desk for the Americas since 2000. From 1996 to 2000, he served as vice-president of aircraft finance in the bank's Paris office.

Airfinance Journal understands that he plans to take a new role at another financial institution. He is on gardening leave.

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CALC returns to the bond market

China Aircraft Leasing Group (CALC) returned to the bond market on 15 August with a $300 million five-year deal, off the back of a $1.2 billion orderbook.

The unrated bonds, CALC Bond 2, have a maturity date of 22 August 2021.

China Everbright Bank's Hong Kong branch and DBS Bank are acting as the joint global coordinators, joint bookrunners and joint lead managers. China Everbright Group has a 34.6% shareholding in CALC.

The bonds bear interest at the rate of 4.9% a year, payable semi-annually, commencing on 22 February 2017.

The lead managers launched the offering with an initial guidance in the 5.25% area, which was slashed to guidance of 4.95% plus/minus five basis points, before the offering was priced at the tight end, according to *GlobalCapital*, a sister publication of *Airfinance Journal*.

This was possible as the five-year deal received a warm welcome from the market, with books quickly building to $500 million within hours of opening, and ending in excess of $1.2 billion. In comparison, CALC's April debt bond deal attracted bids worth just $550 million.

The issuer decided to cap the size of the new transaction at $300 million, and the 4.9% deal was sold at par. The Reg S deal was strongly backed by Chinese investors, with those in Hong Kong and China taking 82% of the notes. Singapore took 10% and the remaining 8% was sold to other countries.

Given April's trade was CALC's debut in the market, the lead managers – also China Everbright Bank and DBS – struggled to find a direct comparable at the time, adds *GlobalCapital*.

But things were easier this time around, as the existing April offering was the main reference. The bonds were trading at a yield of 4.42% before the new deal went live.

Those close to the transaction tell *GlobalCapital* that the reoffer yield was slightly inside fair value, which was seen at about 5% by investors. This was reflected in the bond's trading level in the aftermarket, with the new senior unsecured notes spotted at a cash price of 100.35-100.45 about lunchtime on 16 August.

CALC's debut offering, on the other hand, had experienced a substantial price swing in the aftermarket immediately after the trade. Also sold at par, the three-year bonds traded to 5.262% the following day – a hefty 63.8 basis points tighter than the reoffer price of 5.9%, *GlobalCapital* reported at the time.

The Hong Kong-based leasing company says the estimated net proceeds of the bonds issue, after deducting underwriting commission and other expenses, will be about $297.4 million.

CALC will pay China Everbright Bank an underwriting commission that is not expected to exceed $1.95 million in aggregate.

The lessor says it is issuing the bonds because they "will allow the company to obtain longer-term financing from international investors and to improve its capital structure so that the company is able to develop its business in aircraft leasing and related businesses in the PRC [People's Republic of China] and globally."

Pegasus negotiates A320neo financing

Pegasus Airlines is negotiating the financing of three Airbus A320neos delivering in 2016, the airline has revealed in an investor update.

The carrier will have received nine A320neos by the end of 2016. It has closed the financing of the first three aircraft.

The airline received its first A320neo in July despite indications that the delivery might be delayed because of the attempted coup against Turkey's President Erdogan in the same month.

The airline is scheduled to receive five Boeing 737-800s and three A320neos in 2017.

KDB and NordLB fund Alafco aircraft

Korea Development Bank (KDB) and NordLB are funding Alafco's nine-aircraft portfolio purchase from Gecas, according to documents seen by *Airfinance Journal*.

The portfolio comprises: two 2012-vintage Boeing 737-800s, two 2014-built Airbus A321s, three 2013-vintage A320s and two 2014-built 737-800s. Three of the four lessees are new customers for Alafco.

As part of the deal, Alafco added three A320 aircraft to its portfolio in August under lease agreements with Indonesia's Citilink.

The aircraft, MSNs 5571, 5574 and 5597, were delivered new to Citilink in April and May 2013. KDB is the lender on the three A320s, as well as two 2012-vintage Lion Air 737-800s that were acquired in June, the document reveals. The bank acted as arranger in the transaction.

In June, Alafco purchased a pair of A321s on lease to Juneyao Airlines as part of the portfolio purchase. The aircraft, MSNs 6172 and 6221, were delivered new to the Chinese carrier in June and August 2014, respectively. The document shows another two 737-800s, MSNs 43421 and 43420, have leases attached to Nok Air. Both were delivered in October and December 2014.

German financier NordLB acted as the lender on the two A321s and the two 737-800s with Nok Air. The bank also acted as the security trustee in the transactions.

Separately, in April, Alafco acquired two 737-800s with leases attached to Jet Airways from BOC Aviation.

As of August the Middle Eastern lessor had 53 aircraft in its portfolio, of which 30 A320s are leased to Aegean Airlines,


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FINANCIERS NEWS

Beijing Capital Airlines, Go Air, IndiGo, Royal Jordanian, Saudi Airlines and VietJet Air.

A total of 18 737-800s are on lease to Caribbean Airlines, Ethiopian Airlines, Jet Airways, Malaysia Airlines, Nok Air, Okay Airways, Transaero and Turkish Airlines.

Its portfolio also includes a pair of 737-900ERs leased to Ukriane International Airlines, a single 777-200ER placed with Transaero and two 777-300ERs with Garuda Indonesia.

Southwest signs $1bn revolving credit facility

Southwest Airlines has entered a new $1 billion revolving credit facility, the airline has announced in a filing with the Securities and Exchange Commission (SEC).

The five-year facility includes an accordion feature that allows the airline to increase the deal to $1.5 billion. It may also increase the term of the facility by one year on two separate occasions, with permission from the banks.

The airline has terminated its previous revolving credit facility, which was due to expire in April 2018.

JP Morgan and Citibank are joint lead arrangers, bookrunners and co-administrative agents. Barclays is acting as syndication agent.

BNP Paribas, Goldman Sachs, Morgan Stanley, US Bank National, Bank of America and Wells Fargo are acting as documentation agents. JP Morgan is acting as paying agent.

Simpson Thacher & Bartlett represented the lenders, while Vedder Price represented Southwest, an airline spokesman confirmed.

The agreement requires Southwest to maintain a certain ratio of adjusted net income to interest and aircraft rental expense, as well as an unencumbered pool of aircraft consisting of 107 of the airline's Boeing 737-700 aircraft. The vintages of the aircraft range between 1997 and 2005. The spokesman confirmed that the lenders do not have recourse to the aircraft in the pool.

Goshawk issues first unsecured notes deal

Goshawk Aviation has closed its debut $231 million issuance of unsecured notes.

The deal is split between five-year and seven-year tranches, which *Airfinance Journal* understands are about even in size.

A source on the deal says the final coupon was "around the four mark" and that the deal priced at the end of June.

Goshawk will use the proceeds from the notes for aircraft acquisitions and general corporate purposes.

Airfinance Journal understands that there are 10 investors on the deal. The deal was launched as a $200 million issuance but market demand was closer to $300 million.

The joint lead agents are Citibank, Natixis and HSBC. Crédit Agricole Corporate and Investment Bank was a co-lead agent.

O'Melveny & Myers acted for Goshawk, while Greenberg Traurig Maher acted for the investors.

KfW Ipex-Bank finances ATRs

Nordic Aviation Capital (NAC) has closed a commercial loan facility for seven ATR72-600s with KfW Ipex-Bank.

KfW Ipex-Bank is the agent and sole lender on the transaction, states the bank.

The first two aircraft to be financed under the facility will be leased from NAC by Asian carriers.

ALC closes $750m unsecured notes offering

Air Lease (ALC) has closed its public offering of $750 million of seven-year senior unsecured notes, according to a filing with the Securities and Exchange Commission (SEC).

The notes, which carry a coupon of 3%, priced at a discount of 98.658% of the face amount.

The spread is 180 basis points above the 1.25% seven-year benchmark treasury. The yield to maturity is 3.21%.

ALC will use the proceeds of the notes, which are about $735 million after underwriters' fees and offering expenses, for general corporate purposes.

The joint bookrunning managers are Bank of America Merrill Lynch, Citigroup Global Markets, JP Morgan, Mizuho, BMO Capital Markets, BNP Paribas, Fifth Third, Goldman Sachs, ICBC Standard Bank, Lloyds, Morgan Stanley, MUFG Americas, RBC Capital Markets, Santander Investment, SunTrust Robinson Humphrey and Wells Fargo.

Atlas Air closes $70m engine-backed deal

US air cargo operator Atlas Air has closed a $70 million debt facility secured by spare engines.

The facility was structured and underwritten by Crédit Agricole Corporate and Investment Bank, which also acted as an agent.

Separately, Atlas Air has agreed with Amazon a deal to lease and operate 20 Boeing 767-300s.

It expects to place the first aircraft into service for Amazon in the third quarter of this year.

The airline stated: "We have secured all of the conversion slots and the vast majority of the feedstock aircraft required to support the 20 767-300s for Amazon by the end of 2018."

American finances A321s and 787 with banks

American Airlines has closed the financing of three Airbus A321s and one Boeing 787-8, a source on the deal tells *Airfinance Journal*.

BNP Paribas, KFW Ipex-Bank and Sumitomo Mitsui Trust Bank are the lenders on the deal. The aircraft were funded simultaneously and the debt was allocated pro-rata among the lenders, adds the source.

All the aircraft delivered earlier this year.

The MSNs of the Airbus aircraft are 6998, 7009 and 7034, while the MSN of the Boeing aircraft is 40632.

Debevoise & Plimpton advised American Airlines and Pillsbury advised the lenders.

DEALS NEWS

SunExpress receives 737-800s

Turkish carrier SunExpress has taken delivery of five Boeing 737-800s financed with US Ex-Im-backed French tax leases in the second quarter of 2016.

ING and BNP Paribas acted as debt arrangers for the 12-year loans, according to a joint announcement. The banks state that Ex-Im Bank approved the transaction before its authorisation lapsed on 30 June 2015.

BNP Paribas acted as lease investor and arranger.

The five loans totalled €151 million ($171 million).

A source with knowledge of the process say the MSNs of the aircraft are 61181, 61182, 61183, 61175 and 61184.

Pillsbury advised SunExpress, Robert Wray advised Ex-Im Bank, Dentons represented ING and BNP Paribas as lenders and agents, and Norton Rose advised BNP Paribas as lessor.

Vietjet takes delivery of A321

Vietjet has taken delivery of one new A321-200 (MSN 7278) from Avation.

The aircraft is the third of its type that the Vietnamese low-cost carrier has leased from Avation.

The aircraft, which is on long-term operating lease, is equipped with CFM56-5B3/3 engines.

Hebei Airlines gets 737

Hebei Airlines has taken delivery of a Boeing 737-800 (MSN 42970), the carrier indicates.

This acquisition brings Hebei's fleet to 17 aircraft: nine 737-800s, two 737-700s and six Embraer E190s.

The airline plans to have a fleet of 50 aircraft by the end of 2020.

According to *Airfinance Journal*'s Fleets that Hebei Airlines leases two 737-800s and one 737-700 from Bocomm Leasing and two 737-800s from BBAM.

The airline could not be reached for comment on how MSN 42970 is being financed, but the AeroTransport Data Bank indicates that the aircraft is owned by Hebei Airlines.

Shandong Airlines leases 737-800

Shandong Airlines has taken delivery of a Boeing 737-800 (MSN 61430) on lease from ICBC Financial Leasing, sources indicate.

The narrowbody unit is on a 12-year operating lease.

The aircraft is the 99th of its type to be delivered to Shandong Airlines. It expects its 100th 737-800 delivery this month.

Iberia leases A330s

Spanish carrier Iberia has agreed to take four Airbus A330-200s as part of a sale and leaseback agreement with CIT Aerospace, *Airfinance Journal* understands.

The widebody aircraft will be on 10-year leases, market sources indicate.

The airline has 43 aircraft on order – 17 A320neos, 16 A350-900s, seven A330-200s and three A321neos – according to *Airfinance Journal*'s Fleets.

Iberia used in-house counsel, while Watson Farley & Williams acted for CIT Aerospace.

CIT is in the market seeking bids for its aircraft portfolio, which it hopes to offload by the end of the year. Avolon, HNA Group and ICBC Leasing are among the companies that have submitted bids for the lessor's fleet.

Saudia leases first A330-300 regional

Saudi Arabian Airlines (Saudia) has taken delivery of its first A330-300 regional from International Air Finance. The carrier is the launch customer for the new member of the A330 family.

The aircraft is the first of 20 of its type ordered at the 2015 Paris Air Show, and joins the airline's existing Airbus fleet of 12 A330-300s.

The A330-300 regional is optimised for missions up to 2,700 nautical miles, or five-hour flights, covering short- to medium-haul routes and offers "significant cost savings" through a reduced operational weight of about 200 tonnes, according to Airbus.

The manufacturer adds that the reduction in fuel burn per seat and maintenance costs will result in an overall cost reduction of about 20% compared with today's long-range A330-300.

Nok Air gets second Avolon 737-800

Nok Air has taken delivery of a second Boeing 737-800 (MSN 61296) on lease from Avolon, according to a statement from the Dublin-based lessor.

The airline holds orders for five 737-800s, according to *Airfinance Journal*'s Fleets.

In July, Nok Air took delivery of a Bombardier Q400 aircraft as part of a sale and leaseback agreement with Gecas. Nok Air has six Q400s in its fleet, according to *Airfinance Journal*'s Fleets. Four of them (MSNs 4455, 4458, 4504 and 4506) are on lease from Gecas, while the remaining two (MSNs 4479 and 4480) are owned.

DEALS NEWS

Lucky Air leases 737-800

Lucky Air has taken delivery of one new Boeing 737-800 from BOC Aviation.

The remaining six aircraft will be delivered by the first half of 2017. All seven are from BOC Aviation's existing orderbook.

Airfinance Journal's Fleets indicates that Lucky Air has a fleet of 19 aircraft. The airline's leased aircraft include three 737-700s and one 737-800 on lease from CIT Aerospace, four 737-700s and two 737-800s on lease from AerCap, three 737-800s on lease from BBAM, two 737-800s on lease from Gecas, one 737-800 on lease from ICBC Financial Leasing and one Airbus A320 from Awas.

Lucky Air officially transformed into a low-cost carrier (LCC) in March, becoming the first Yunnan-based LCC. The carrier is part of the HNA Aviation group.

Aircastle accelerates sale of 747 freighters

US lessor Aircastle has sold two Boeing 747 freighters to Martinair.

The aircraft were previously on long-term lease to Martinair from Aircastle.

The lessor announced the accelerated sale of the widebody units on a second-quarter earnings call, but only revealed the quantity and type of aircraft being sold. The sales will conclude in the third quarter of this year.

Aircastle says it moved the sales ahead to reduce the lessor's risk in this section of the market.

Airfinance Journal's Fleets indicates that the MSNs of the aircraft are 24066 and 24975.

The two aircraft were each out of service for nearly three years, *Airfinance Journal* understands.

In the second quarter, Aircastle also wrote down one 16-year-old A330-200, which is due to come off lease.

The company recorded $16.8 million in impairment charges associated with all three aircraft.

White Airways receives ATR72-600s

Nordic Aviation Capital has delivered two ATR72-600s on lease to Portuguese carrier White Airways.

The aircraft MSNs are 1316 and 1323. They were both manufactured in 2016, according to *Airfinance Journal*'s Fleets.

White Airways is a passenger and cargo airline that operates a fleet of seven ATR aircraft, one Airbus A320, two executive Airbus A319CJs, one Boeing 737 and one 777-200LR.

Qatar Airways agrees deal for A350s

Qatar Airways has agreed to lease five Airbus A350-900s from Gecas, according to a statement from the Irish lessor.

Airfinance Journal's Fleets shows that Qatar Airways operates nine aircraft of the type.

In August, the Doha-based airline increased its stake in International Airlines Group to 20% from 15.7%.

Ethiopian welcomes second A350

Ethiopian Airlines has taken delivery of its second Airbus A350-900 on lease from AerCap.

The aircraft (believed to be MSN 043) is the second from an operating lease agreement for two of the aircraft from the lessor. The airline took delivery of its first A350-900 in June.

The lessor has an A350-900 portfolio of six-owned aircraft and another 23 on order delivering through 2019.

AerCap has also leased two A350-900s to Vietnam Airlines and two to Cathay Pacific Airways.

BOC Aviation places two new aircraft with Wizz Air

Hungarian carrier Wizz Air has agreed to lease two Airbus A320-family aircraft from BOC Aviation.

The aircraft, an A321 and an A320 from the Singapore-based lessor's orderbook, will deliver in January and June 2017, respectively.

Wizz Air has a fleet of eight A321-200s and 62 A320s, according to *Airfinance Journal*'s Fleets. The carrier will take delivery of four A321s on lease from CDB Leasing by the end of this year.

China Airlines leases 737-800s

China Airlines has agreed to lease six Boeing 737-800s from BOC Aviation.

The Taiwanese flag carrier is a new customer for the lessor.

The airline was founded in 1959 and operates a fleet of 107 aircraft, making it the largest airline by size and frequency of service in Taiwan.

In July, *Airfinance Journal* reported that China Airlines had agreed financing with local banks for two A350-900s delivering later this year.

HK Express awaits arrival of A320neos

HK Express will take delivery in November of its first two Airbus A320neo aircraft from Arctic Aviation Assets.

The airline tells *Airfinance Journal* that the aircraft are the first two of 12 Neos it will take from Norwegian's captive leasing arm.

In December 2015, HK Express finalised a 12-year leasing deal with the Dublin-based lessor.

In an interview with *Airfinance Journal* in June, Andrew Cowen, HK Express' chief executive officer, said that aircraft availability was the determining factor behind his airline's decision to lease 12 Neos from Arctic.

Cowen said at the time that although a number of firms were "interested to lease, they tended to talk in terms of one to three aircraft. The big attraction of the Arctic offer was that it was a package of aircraft".

HK Express will also lease two A321s from CIT Aerospace this year, delivering in October and November.

THE VIEW FROM NEW YORK

Lessors move fast to head off regulation

The capital markets are about to get busy after the quiet summer months, writes New York City-based Joe Kavanagh.

Airfinance Journal hears that most major lessors are in conversations with financiers about tapping the asset-backed securities (ABS) market in the short term. One financier suggested that the attendee list of an ABS-themed conference in Miami this month is going to be a "who's who" of debut and repeat issuers that are hoping to tap this market.

Increased activity in the ABS market could be because of the incoming Dodd-Frank regulations (see page 25), which might be encouraging lessors to issue securities before they potentially become subject to a fresh wave of regulation.

It could also be to do with increased investor appetite for lessor-issued debt, as shown by the recent lessor issuances that have attracted wider ranges of investors. Castlelake's latest issuance, for $916 million, attracted investors from Asia for the first time.

Goshawk's first unsecured deal also stuck out in an otherwise quiet summer. The lessor closed a debut $231 million of unsecured notes, carrying a coupon of about 4%. The lessor attracted support from 10 investors in total, including US institutions.

There are also more deals expected on the private placement side. Several banks and investment funds are understood to be preparing to issue enhanced equipment trust certificate (EETC)-type structures. These work similarly to an airline EETC, except the debt is issued by a lender which has bought up existing aircraft-secured loan portfolios of an individual airline and then raised debt against them in the private placement capital markets.

Henry Morriello, the head of Kaye Scholer's structured finance practice, explains how it has worked on past deals.

"A structure similar to EETCs was used, where the loans were transferred into an special purpose entity, which issued debt in one or more tranches backed by the loan pool."

He adds: "The principal difference from EETCs is that the airline itself is not sponsoring the transaction – it is essentially the bank/investment fund repackaging the loan portfolio. The lack of involvement of the airline borrower can lead to certain issues that are specific to that lack of involvement, but a number of transactions of this nature have been successfully executed."

Because these are private transactions, the disclosure will be non-existent, or at least far more limited than that of public EETC deals. But the fact that several of these deals are in the pipeline is indicative of investors looking for airline-secured debt.

Alaska to close merger

On the commercial loan side, Alaska Airlines will close a $1 billion-plus debt agreement to finance its takeover of Virgin America in September, *Airfinance Journal* understands.

Sources suggest the airline has chosen a commercial loan facility, rather than an alternative product in the capital markets.

The carrier previously said it had chosen to raise secured debt against its fleet of Boeing 737-800s and 737-900ERs, which are relatively young and unencumbered. It chose to secure its aircraft because of the tighter pricing it could achieve over an unsecured offering.

In spring, there were rumours that Alaska would pursue a private EETC transaction to fund the takeover. However, the carrier has stated that it will close the merger by the end of 2016, and a complicated debut issuance would be a challenge to complete in time. But Alaska could also have preferred the price offered by its banking partners, which it has not identified at this stage.

A spokesman for the airline suggested that the deal is close to being signed and will likely be completed by the end of this month.

"There are also more deals expected on the private placement side"

SEC settlement

A vice-president of Baltia Air Lines, a New York-based airline company, ran into a spot of trouble with the security exchange comission (SEC) this month.

The company is a development-stage airline that is in the process of getting certification from the Federal Aviation Administration. Its plan is to operate flights from New York to Russia and other European destinations.

But Barry Clare, the vice-president of finance, has agreed to pay $1 million after an SEC investigation discovered he had acted as an unregistered broker for the airline, selling more than $26 million of common stock over a period of four years.

The SEC found that the airline – which owns one 1979-vintage 747-200B – has been funding its operations by selling stock to investors, despite not having operated a commercial flight.

The airline did not respond when contacted by *Airfinance Journal*.

LESSOR INTERVIEW

Bell rings out for Aircastle

On the US lessor's 10th anniversary as a public company, Ron Wainshal, its chief executive officer, speaks to Jack Dutton about the benefits of unsecured funding, competition in the narrowbody market and how the leasing landscape has changed since Aircastle's IPO.

Days before the 10th anniversary of Aircastle's initial public offering (IPO), its board held a meeting in New York. Despite being a few days early, at the end of the meeting, for nostalgic reasons, the board members rang the closing bell at the New York Stock Exchange.

For Ron Wainshal, the Stamford-based lessor's chief executive officer, the 10 years since his company went public feels like 20.

"With everything that has happened in the world since – with the global financial crisis, etc – it's been quite a time in our lives," he tells *Airfinance Journal*.

"An Aircastle banner hung on the outside of the stock exchange celebrated our 10th IPO anniversary very nicely. It's always good to go to the exchange because of the history, and you get a sense just looking at the exchange itself how much technology has progressed," says Wainshal.

Radical change

Not only has technology progressed in those 10 years, but aircraft leasing has too.

"There's been a radical change," he says. "We've reshaped ourselves very differently from our competitors. I think the biggest catalyst was the global financial crisis, when traditional financing resources suddenly became unavailable, particularly in the securitisation and the bank financing markets."

At the time, asset specialists which were mostly European dominated the bank financing market. Some of the European banks were forced out of business, while others had to redirect their businesses and curtail it in certain sectors.

"Secured financing for aircraft that weren't new was gone suddenly. About five years ago, we made a decision to go against the grain and not confine our investments to new aircraft, simply because that was the only possibility from traditional financing sources," he says.

Instead, Aircastle took advantage of its low leverage financial structure and background in managing aircraft and went to the ratings agencies. From there, it obtained ratings and got access to the unsecured debt markets.

"The unsecured market is bigger and different, and more flexible regarding the use of proceeds. We saw accessing unsecured funding as an opportunity because everybody else was moving in another direction. Being able to invest in any aircraft we saw fit, be it used or new, allowed us to fill an important market need where there was not much competition."

Wainshal believes that if Aircastle had done financing for new aircraft, his lessor would have had lower returns because of the higher competition. However, he still believes the lessor would have been able to carry on that way.

Adapting to competition

In 2010, the lessor closed its first unsecured bond deal and has continued to issue frequently, usually up to two times a year. Other lessors, such as Air Lease (ALC) and Aercap, often issue unsecured because it gives them access to a broader investor base, strengthens credit positions and leaves more of the lessor's assets unencumbered.

Aircastle has a portfolio of 120 aircraft, having sold 40 in the past year and more than 100 in the past three years. The lessor has bought 16 narrowbodies this year, and has commitments to buy about 20 more.

"Those deals will close over the course of the third and fourth quarter," says Wainshal. "We also acquired three widebodies this year on what we assumed were their last leases. We think that's a pretty conservative way to increase our exposure in that asset class."

The incoming narrowbodies will include Airbus A320s and Boeing 737-800s, with an average age of about seven years.

"Those aircraft are in strong demand in today's low fuel price environment, and we think they offer a good price point. The competition to acquire these aircraft for us is way better than what we've seen for the new aircraft.

"Last year and the year before that, we were more focused on buying new planes, particularly through larger sale and leaseback deals. Now the competition in that part of the market, especially out of Asia, is really strong. We think a lot of investors are attracted to these assets because they have good current yields and they're US dollar assets," he says.

Although Wainshal describes the yield environment as "pretty tough", he says that Aircastle has been able to find unleveraged returns in the 8% to 10% region.

"Our net cash interest margins are very strong and we like what we need on our new investments. Part of the reason that we're able to sustain and hopefully grow our dividends is because we're able to continue sourcing attractive new investments, even when low yields abound. That's got to be a plus from an investor perspective," he says.

"We made a decision to go against the grain and not confine our investments to new aircraft, simply because that was the only possibility from traditional financing sources"

Aircastle's board at the New York Stock Exchange in early August.

Russian removal

There are areas of the market where Aircastle is trying to reduce its risk. Earlier this year, at the 36th Annual North America Airfinance Conference in Miami, Wainshal said that Aircastle was looking to remove its aircraft operating in Russia by 2017, when they were due to come off lease.

"We've reduced our exposure to passenger airlines in Russia considerably because the business environment there is not strong. The ruble became weak, making airlines more financially vulnerable. I'm talking specifically about passenger airlines, who sell tickets in rubles while bearing a large portion of their costs in dollars. With the ruble's devaluation, it's very hard from them to make money."

Aircastle had 10 aircraft in Russia about two years ago, and now the count is down to three, with three different airlines.

"Two of our three remaining aircraft in Russia are older. We haven't made any decisions yet but there's a good chance that we'll probably part them out at the end of their leases."

The other part of Aircastle's Russia exposure is in the cargo market.

"You have the reverse situation in the cargo market because revenues are mostly in dollars," he says. "We have one Russian cargo airline customer – Air Bridge Cargo. Air Bridge has half of its cost structure in rubles and, as a result, they are a low-cost producer in the market."

It is not just the Russian market Wainshal is watching — he is also closely monitoring the markets, such as Latin America and Turkey, where demand for air travel is under pressure.

Wainshal knows Latin America well, having previously worked as executive vice-president, asset management, at Gecas, where he was responsible for the region.

"There's no doubt that certain current events, including increases in terrorism as well as other geopolitical tensions will reduce tourism and business traffic, so you have to be careful," he says.

Scaling back 747s

On the asset side, Aircastle has been trying to reduce its risk in the 747 segment. On an earnings call in early August, the lessor announced it had accelerated the sale of the two 747 freighters on lease to Martinair during the second quarter, selling them back to the lessee as the assets approached the end of their leases. One was 25 years old and one was 26, and they had both been out of service for nearly three years.

After the Martinair transaction, Aircastle owns nine 747 freighters overall.

"Four of the nine are older converted freighter aircraft, which are pretty much marginal capacity in the world today. As those aircraft come off lease, the plan is to scrap them. That will take our freighter fleet to five planes out of around 180," says Wainshal.

The 747 freighters Aircastle plans to continue leasing are much newer, aged between 10 and 12 years. With low fuel prices, Wainshal sees them as very competitive with 777 and 787-8 freighters. The older 747 freighters will leave when the leases end over the next two years.

An up and down market

As well as getting rid of unwanted aircraft, the lessor needs to consider how it will finance some of its incoming deliveries. Although the asset-backed securities (ABS) market is opening up again in 2016, Wainshal rules it out as a choice of financing.

"There's been a lot of risk on/risk off oscillation in market sentiment over the course of the year. We started out doing ABS deals in our early years, but it takes many months to put them together, and a lot can change during that time. When you look at the costs of ABS deals compared with unsecured bonds, it doesn't make sense for Aircastle at this time," he says.

"The good news for us with the ABS market coming back is that I think it opens up an asset sales outlet for us. As we began the year, we saw the ABS market freeze up, and then sales activity dropped. Recently, we've seen a lot more interest and appetite in older assets. Part of the reason is that lending against older assets, both through ABS deals and from other sources, is now becoming more available again, but it's an up and down market."

Wainshal has found opportunities with some of the export credit agencies (ECAs) being temporarily closed for business. The lessor has just closed the first of two sale and leasebacks for new A321s with an undisclosed Asian carrier.

"This carrier was going to do ECA financing and found it wasn't available," he says. "I don't think there are going to be a ton of those opportunities for us or for the broader market, but we're always on the lookout for situations that provide good value for both sides."

Leaving at a good valuation

Other leasing companies have been exploring opportunities to sell equity, whether it is through selling some or all of the company or through an IPO. Singapore's BOC Aviation and China's CDB Leasing launched IPOs earlier this year, and US lessor CIT Aerospace is either going to be sold or it too will go public.

Wainshal believes the BOC Aviation IPO went out at a good valuation, but adds that it has traded down since. He is more sceptical about the CDB Leasing IPO, because the placement was dominated by a handful of state-affiliated cornerstone investors.

"The market has been interesting if you're invested in a smaller, below critical mass leasing company. There's an opportunity to exit at good valuations via asset or whole company sales, and I think some people will. I don't believe an IPO works for most of those situations, though. I think that's for the bigger players, if at all.

"What form does consolidation take? I don't know. I think the complicating factor here is that with so many investors around the world chasing aircraft investments to obtain yield, they could well compete with industry consolidation play."

It looks likely that the leasing industry will witness some more radical changes before Wainshal next rings the bell of the New York Stock Exchange.

HELICOPTER MONEY

Ready for take off

Governments have used various ways to stimulate economies since the global crisis of 2008, and many economists are talking up helicopter money as the next instrument to boost growth. Not all agree, and some aviation insiders remain sceptical. Laura Mueller reports.

A state of feverish anxiety could be felt in the financial markets as the northern hemisphere summer came to a close.

Investors were frantically trying to assess what governments and central banks would do to spark demand and restore growth when European bankers returned to their desks.

Almost a decade on from the 2008 financial crisis, and numerous bouts of monetary stimulus, the global economy remains fragile and at risk of another recession.

It should come as no surprise that various economic circles are showing interest in unconventional forms of Keynesian policies, particularly helicopter money, which can take various forms to spur growth and boost inflation through the permanent monetisation of government debt.

> "Critics say once unleashed, no matter how it is deployed, helicopter money is difficult to control and could lead to hyperinflation."

American economist Milton Friedman first used the metaphor in 1969 in a research paper to describe how governments could lift their economies out of a slump by dropping dollar bills out of the sky to trigger a cycle of consumption. The idea was also mooted by former US Federal Reserve chairman Ben Bernanke in a 2002 speech to support his theory about how central banks could combat deflation through monetary-financed tax cuts. That is also how he earned the nickname, Helicopter Ben.

To what extent helicopter money could impact the aviation finance market, which is enjoying a steady flow of cheap liquidity, is anybody's guess. Until now, it has been considered more of an academic theory discussed around dinner tables rather than a viable monetary strategy.

Stall speed

The Bank of Japan (BoJ) is due to review its monetary stimulus programme in September, but analysts anticipate it could adopt some form of helicopter money because the economy has been dogged by deflation for nearly two decades. In January, the BoJ cut its deposit rate to negative territory for the first time in history.

In another bid to kick-start inflation, Japan's prime minister, Shinzo Abe, announced in July a massive fiscal package worth more than ¥28 trillion ($275 billion).

However, the head of a leading lessor tells *Airfinance Journal* that after discussions with senior finance figures in Japan, it is "unclear whether there is a real opportunity for aviation financiers to access liquidity that would be made available through helicopter money... as the criteria appears very strict".

Regardless, the lessor anticipates "more influence from Japan and other areas where negative interest rates apply" on the aviation finance sector.

He adds: "Investors, or lenders, really do focus on certain names if they have access to low-cost capital. For instance, the recent IAG deals on [Boeing] 787s and [Airbus] A330s saw lease rate factors at or below 0.7% per month, as investors in Japan want to put money out at positive returns versus negative ones in bank deposits.

"Bottom line, there will be little impact on the general aviation market from helicopter money, but certain credits will definitely benefit from whatever cheap liquidity is out there."

Critics say once unleashed, no matter how it is deployed, helicopter money is difficult to control and could lead to hyperinflation.

A US-based hedge fund manager agrees that the untried financial device "is worrying" but stresses "it is a necessary evil".

He adds: "Every government is trying to stimulate its economy as the world is not moving forward. Last summer, we had Greece; this summer we had an attempted coup in Turkey, Brexit and Brazil's economy contracted for its fifth consecutive quarter in June, not to mention the mountain of bad debt in China."

Ultra-low interest rates are keeping defaults down, he argues, and helicopter money "will allow companies to live to fight another day".

For the aviation finance sector, the hedge fund anticipates that liquidity will continue to be available to the sector at attractive rates.

"And, as long as have we have cheap oil, we are all merry until some other force comes around with the potential to rock funding and oil prices. Remember, we still need the Italian and Spanish banking crises to play out."

The pressure continues. The Bank of England was forced to cut its base rate from 0.5% to 0.25% in August, a new historic low, after the UK's vote in June to leave the European Union (EU).

As *Airfinance Journal* went to press, Janet Yellen, chair of the US Federal Reserve, was due to speak at an annual symposium of central bankers in Jackson Hole, Wyoming.

In a highly anticipated speech, titled The Federal Reserve's Monetary Policy Tool Kit, Yellen was expected to shed some light on how the US Central Bank, after various approaches from rate cuts, quantitative easing and eventually a rate hike, could stimulate growth.

The latest report from the US Depart-

ment of Commerce indicates the US economy grew at an annual rate of 1.2% from April to June as business cuts wiped out consumer spending. Various market analysts speculate that US policymakers could be toying with the idea of helicopter money to ignite economic activity.

The same discussions are being held in Europe. In an open letter to the European Central Bank (ECB) president, Mario Draghi, in July, 18 members of the European Parliament urged the ECB to look at helicopter money as a possible solution "to enhance economic development through direct spending into the real economy".

ECB interest rates became negative in the summer of 2014 in a move to spur growth by prompting banks to lend, to avoid a 0.4% premium, and boost inflation. However, various Europeans banks are reportedly considering the best means to store cash to avoid paying the premium, due to the ECB's negative deposit rate for lenders.

The impact of any form of helicopter money on the aviation finance market, argues Steven Udvar-Hazy, chairman of Air Lease, "will most likely be a continuation of relatively low interest rates to stimulate investment".

Mark Lapidus, chief executive officer of Amedeo, agrees, adding: "These macro trends will likely keep on bringing more money into leasing – it [leasing] is better yield than perhaps speculative-grade corporate debt."

Whether falling from a helicopter or not, "loose money, will continue to increase aircraft deliveries relative to a more normal economy", observes Edward Hansom, chief investment officer of Seraph Aviation Management.

Aircraft values are not inflated by historic standards based on current market values versus replacement costs, he says, adding: "But deliveries are getting near historic peaks versus the installed base. Original equipment manufacturers (OEMs) have been the real beneficiaries of loose monetary policy."

While "such money infusions" have an impact on aircraft values, Adam Pilarski, senior vice-president and economist for Avitas, dismisses helicopter money as "being a big thing, now" that could impact the aviation finance sector.

Like quantitative easing, the effect of helicopter money depends on the implementation strategy, says Doug Brennan chairman of Aviation Finance (AFC).

All government-sponsored monetary programmes are worrisome, he says. "They are largely unprecedented and unwinding them has never been done."

Instead, Brennan urges governments to implement "tax rate cuts and to reform taxes in all countries, particularly corporate rates in the USA", as a better means to return the global economy to better health.

Helicopter money does not necessarily go into the hands of households, he cautions, so the nominal effect may be limited depending on the behaviour of the consumer.

"Today, consumption is limited globally as prices decrease. Japan and the USA save and spend money very differently, and so the exact policy in different regions of the world may in fact result in different behaviours, not necessarily creating stimulus," he says.

Brennan adds: "I still do not believe that rigging economies works, particularly when the net effect of quantitative easing (QE) on household spending is very limited. Banks have not reacted positively at the household level either, despite negative rates in the EU, for example."

He notes the deflationary pressures have had the exact opposite effect on consumer behaviour.

"We have seen consumer confidence numbers increase ever so slightly relative to other periods in modern history and we have seen no real impact on inflation apart from a few upticks in specific countries, and those, like the USA, often get muted with global events like Brexit."

Boeing declined to comment on helicopter money "as it is another monetary strategy that central banks can use to manage monetary policy. We remain confident that central banks have the tools and the expertise to manage current market conditions."

Airbus also declined to comment, saying: "Aircraft remain great investments and they are moveable. Moreover, in the world's fastest-growing markets for air traffic, Asian financing for Asian demand for new aircraft is increasing and appropriate given the growth in the region."

Deutsche Bank remains optimistic about helicopter money. In a research note, the bank states that the introduction of helicopter money in Europe could be a significant positive for equity markets, as it has the potential to support growth, and push up inflation expectations.

The head of a lessor notes that, although any impact of helicopter money on the aviation finance sector will be benign, it will prolong the boom times and this "makes it much more likely to overshoot the downturn and cause an even bigger crash.

He adds: "Central bank actions are suppressing volatility and distorting market signals and this is just another method to do so."

This, combined with the fundamentals in the airline business – "airlines that are not great credits, high asset risk in widebodies, last-off-the-line risk, debt funding that doesn't always come when you pick up the phone" – could make for a difficult environment.

But for now, Freidman's helicopter theory remains parked in the hangar, waiting to be deployed by the first central bank that calls on it.

ANALYSIS

Airlines grapple with labour costs

With low fuel prices, labour costs have overtaken fuel as the biggest single expense for many airlines. Joe Kavanagh speaks with Martin Kuehne, president and chief executive officer at Seabury Human Capital, to find out how airlines are managing this cost.

When fuel prices plummeted in 2014, labour overtook fuel as the highest expenditure for many airlines, reversing a decade-long trend.

Airlines have always tried to manage their labour costs as tightly as possible. But the re-emergence of labour costs as the highest single expenditure has brought the matter into the spotlight.

Martin Kuehne, president and chief executive officer at Seabury Human Capital, helps airlines to manage their operating costs. As he explains, one of the key concerns is that unions – particularly those in the US – are now in a stronger position to demand higher wages given the record levels of airline profitability. As US carriers see their net incomes rise, partly because of the low price of fuel, unions are demanding that staff see the benefits of their employer's improved cash position.

"You're starting to see contracts come out that are much more expensive," he notes.

Expensive contracts are a concern for the majority of the major US airlines that are currently engaged in negotiations with pilot unions. Even those that are recently signed will be amendable in the near future: United's agreement with its pilots will be under discussion again in early 2017, while Alaska Airlines' will be amendable in March 2018.

It is crucial for airlines to get it right. Failed negotiations can stall important strategic moves such as aircraft orders or even airline mergers. In July 2015, Delta Air Lines was forced to cancel an order for 20 used Embraer E190s and 40 new Boeing 737-900ERs after pilots rejected a tentative contract proposal, which was necessary for the order to proceed.

One solution available to airline management teams might be profit sharing. Such contracts have the advantage of sharing the benefits when times are good, but avoiding high fixed costs when times are bad.

"Right now the concept of profit sharing is a huge issue," says Kuehne. "Fuel has created these giant savings, and how much of this is coming back to labour? How much of what all these carriers are saving are they beginning to build back into their labour rate? What should they be doing with it?"

He adds: "I think any business would want to keep an expense that big as variable as they could. The more of that fixed cost that you layer in to these things, the more difficult it is."

Has profit sharing led to improvements for the airlines that have adopted it? Kuehne believes it is hard to say. "It's a question of correlation versus causality. I don't know that you could say that paying out more in profit sharing and therefore having happier employees causes more profitability. I don't think there's enough maths to tell you if that's the case."

In a recently published white paper, Seabury outlined some of the choices that airline management teams can make to control costs in the current labour environment.

Some airlines, it suggests, would benefit from prolonging negotiations until the operating environment is less favourable to the unions. While airlines continue to generate record profits, their negotiating position is weaker – but, if the trend reverses, and profits decrease from their record highs, carriers may be better positioned to resist more expensive contracts.

Seabury also suggests that airlines consider reducing costs through consolidation, although it notes that there are fewer opportunities to do so given the amount of consolidation that has taken place in recent years.

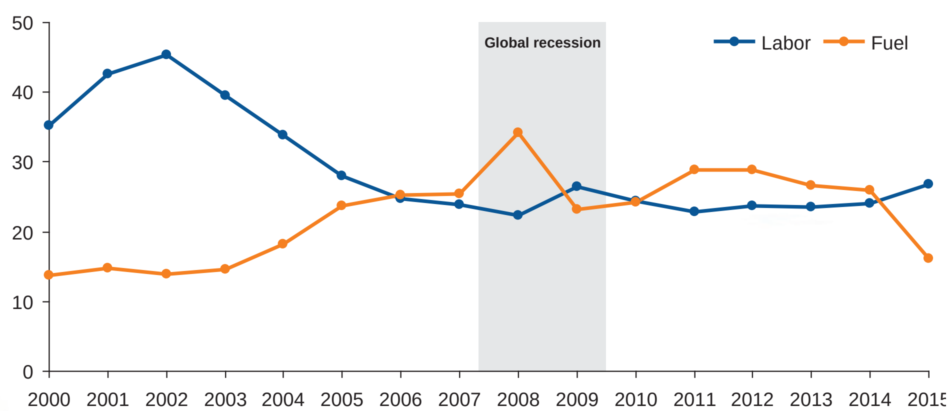
Carriers could also consider working with pilot schools to stimulate the market for students. By alleviating the pilot shortage, airlines will be better able to negotiate with unions.

Airline executives frequently cite labour disputes as a key concern. Resolving the conflict between staff and management has become the mission of Doug Parker, the chief executive of American Airlines. In 2014, when Parker became CEO after American Airlines' merger with US Airways, he said that the relationship between management and the workforce had got so bad that the airline "couldn't really achieve its potential".

Finding a solution that satisfies all parties is difficult. But airlines that do will certainly reap the rewards.

With fuel so cheap, labour has overtaken fuel as many airlines' highest expense.

Industry labour and fuel expense, 2000-2015 % of operating revenue



Source: Seabury Human Capital

VTB CAPITAL

Transaero's insolvency is good for Russian airlines

Elena Sakhnova, the Russian bank's head of transportation, speaks to Jack Dutton about the state of the Russian aviation market.

Elena Sakhnova

The Russian aviation market is not in the best shape. A weak ruble, caused by low commodity prices and economic sanctions, has dampened air traffic and passenger demand. Russia lost three million more passengers in the first half of 2016 compared to the previous year.

Although it is one of the biggest banks in Russia and has strong presence in its aviation space, VTB Capital is feeling the negative effects of the sanctions.

"Russian airlines and banks have experienced some problems with access to financing and so have other Russian companies," Elena Sakhnova, head of industrials, transportation and materials at VTB Capital, tells *Airfinance Journal*.

Despite the lack of passenger demand, the top-tier Russian airlines are not struggling financially.

"This is thanks to the bankruptcy of Transaero," says Sakhnova. "If Transaero was not bankrupt, all airlines in Russia, including Aeroflot, would be suffering. They're only gaining passengers right now because those are the passengers of Transaero. Overall, the industry is losing passengers."

Transaero, once the second-biggest airline in Russia, filed for bankruptcy protection in the final quarter of last year, after failing to meet payment requirements for its creditors. Aeroflot had planned to purchase about 75% of Transaero's shares, but the deal fell through because of delays.

Aeroflot has, however, confirmed it will take 16 aircraft from Transaero's orderbook: 10 Boeing 737s and six Airbus A321s. The airline is in the process of selecting a leasing company for the aircraft, which will deliver in 2017 as part of a sale and leaseback transaction.

The Aeroflot Group plans to take up to 34 aircraft from Transaero's fleet: 16 from the orderbook and up to 18 older aircraft, comprising Boeing 777s and 747s. Aeroflot has taken six Transaero widebodies so far: four 747s and two 777s.

Active Russian airlines such as Aeroflot have traditionally used operating leases to finance their aircraft. Russian banks are quite active, but only the largest ones: Sberbank with a special leasing department called Sberbank Leasing; VTB through VTB Leasing; and VEB Bank and its VEB Bank Leasing unit. These three companies account for more than 70% of the aircraft leasing deals on the Russian market.

International lessors account for the remaining 30% of the deals in the Russian market. According to Sakhnova, there are not many commercial banks in Russia which participate in aviation deals, because their size does not allow them to finance such large deals.

Although Russian airlines are exempt from sanctions, the Russian banks, such as VTB and Sberbank, are not. Although this can restrict Russian banks' access to capital, Sakhnova says that, surprisingly, it does not limit them from leasing out aircraft manufactured in countries outside Russia.

"This is because leasing companies operate as separate entities from the banks and they don't face all their challenges," she says.

On the manufacturing side, the Russian government is focusing on getting financing from the Russian export credit agency Exiar to promote its Sukhoi aircraft. Sakhnova says that the programme has a few problems.

"Sukhoi doesn't have a well-developed system of maintenance centres and spare parts warehouses. Given the huge fleet of Airbus and Boeing, if you have any problem in any airport in the world, you will be able to find spare parts if it's not too rare."

Sakhnova adds: "Sukhoi aircraft are not that widely used, even in Russia, so they are faced with the problem of spare parts. Sukhoi needs to invest a lot into their warehouses for spare parts and technical services, to make sure that aircraft is flying at least eight to 10 hours a day."

Commercial loans are less common in the Russian airline business than in many other aviation markets. Typically, Russian airlines take loans during the first quarter, which is the most financially difficult for everyone and then pay them off in the third quarter.

"So it's typically a very short-term financing and all their loan portfolios are mainly made up from financial leasing or from operating leasing, but operating leasing is off the balance sheet," says Sakhnova.

Aeroflot, for example, has a total debt of $10 billion, of which financial leasing accounts for almost $3 billion and operating leasing for nearly $6 billion. All the commercial loans amount to $1 billion, and Sakhnova says this relative split is "typical for any Russian airline".

She adds: "10 to 15 years ago, it was mainly international lessors providing financing for Russian airlines. But now, it has changed a lot – in the past 10 years, large Russian leasing companies became very active."

Despite the political and economic uncertainty in the region, Sakhnova believes that international leasing companies will go back to increasing their presence in Russia.

"I think it might be changing more again back in favour of foreign leasing companies because they have higher optionality and flexibility versus Russian banks," says Sakhnova. "And certainly against the cost of funding, it will always be cheaper for foreign companies versus Russian banks."

DEAL OF THE MONTH

Castlelake's third ABS is its largest… so far

The US-based asset manager's recent deal has younger pool of collateral than its previous asset backed securities. Joe Kavanagh reports.

In early August, US lessor Castlelake priced a $916 million asset-backed securities (ABS) deal, secured against 52 aircraft and one engine. It is Castlelake's third ABS issuance, after a $713 million offering in November 2015 and a debut $516 million offering in February 2014.

The latest ABS deal is the asset manager's largest to date, by more than $200 million, and also priced tighter than its previous two. The A tranche of 2016's deal carried a coupon of 4.45%, compared with 4.47% in 2015 and 5.25% in 2014.

This summer's deal uses a pool of collateral that is notably younger than those from its other deals. With a weighted average age of 12.1 years, the aircraft are the youngest group of assets to have been securitised by Castlelake in an ABS transaction.

The aircraft secured in the portfolio consist mostly of narrowbodies, with almost three-quarters comprising single-aisle aircraft. Less than half of the collateral in the other deals were narrowbodies. One-third of the aircraft securitised in 2014's issuance were turboprops, while not a single turboprop featured in the latest transaction.

The format is also different: 2015's deal was issued in a 144A bond format, while 2016's transaction was issued as a bank loan.

Matt Little, head of business development and capital markets at Castlelake, explains: "We maintain a pretty active dialogue with our debt-investing supporters, and some of those supporters have expressed a preference for loan format. As an issuer, loan format is actually a little bit easier than 144A, because you can do a deal a little bit faster."

He adds: "Basically, the documentation is quicker to put together. So given that some of our investors expressed a preference and it's quicker from an issuer perspective, it felt like the right thing to do."

Deutsche Bank and Goldman Sachs acted as joint structuring agents, while Citi acted as global coordinator and DVB Capital Markets acted as co-manager. Milbank advised the lenders and Vedder Price advised Castlelake.

CASTLELAKE ABS DEALS

	2016-1	2015-1	2014-1
Issue date	2-Aug-16	18-Dec-15	18-Feb-14
Collateral detail			
Number of assets	53	60	79
Number of lessees	20	23	26
Weighted average age (years)	12.1	15	17.5
Weighted average lease term (years)	4.5	4.7	4
Narrowbody	72.70%	47.60%	42.00%
Widebody	14.60%	32.40%	25.00%
Regional jet	8.90%	8.00%	n/a
Freighter	3.30%	4.70%	n/a
Engine	0.50%	4.80%	n/a
Turboprop	n/a	2.50%	33.00%
Tranche balance (nearest $m)			
Class/series A	715	529	354
Class/series B	130	106	162
Class/series C	71	79	n/a
Total	**916**	**713**	**516**
Initial loan-to-value			
Class/series A	64.00%	60.20%	48.00%
Class/series B	75.70%	72.20%	70.00%
Class/series C	82.00%	81.20%	n/a
Coupon			
Class/series A	4.45%	4.70%	5.25%
Class/series B	6.15%	5.75%	7.50%
Class/series C	8.00%	9.00%	n/a
Ratings			
Class/series A	Kroll: A, S&P: A	Kroll: A, S&P: A-	Kroll: A
Class/series B	Kroll: BBB, S&P BBB	Kroll: BBB, S&P: BBB	Kroll: BBB
Class/series C	Kroll: BB, S&P BB	Kroll: B+, S&P: B	n/a

Source: Kroll

Castlelake's ABS strategy

So why has Castlelake tapped this market so frequently in the past few years?

Evan Carruthers, a managing partner at Castlelake, describes the company as a "programmatic issuer of ABS deals". The lessor is particularly active in this market because it views ABS as an efficient corporate financing tool.

Castlelake issues ABS deals in a different way to some of the major aircraft lessors which have tapped this market in recent years. Some large lessors have used ABS deals to trade out large portfolios of their aircraft, by selling the equity in the collateral to third-party investors. But Castlelake retains the equity and continues to service the aircraft, using the securitisations as another form of corporate finance.

"We really view this market as being a corporate financing form in the sense that we buy aircraft on to our balance sheet and then we structure them up into pooled aircraft financings and sell the debt off. But we retain the equity in our structures and we also service the structures," he says.

Carruthers adds: "That's different from the vast preponderance of aircraft ABS deals, which are really trade sales of larger pools of aircraft by leasing companies. We approach the market a little bit differently from most other issuers in the sense that it is a corporate financing for us, as opposed to a mechanism to exit large pools of planes."

Asked whether the market can expect to see another Castlelake issuance in the near future, Carruthers replies: "If the market is open and it's receptive, we do want to be that programmatic issuer and go back to the ABS market every six to nine months, but to the extent it's not there, we can always just own the aircraft on our balance sheet."

However, he stresses that if the capital markets are not ripe at the time of Castlelake's choosing, the lessor has no issue with tapping up banks for commercial loans instead.

He adds: "We want it to be one of the financing tools in our toolkit, but we don't want it to be the only tool in our toolkit. So we've been spending a considerable amount of time with the traditional bank loan market, as well, doing more traditional term financings and going to the bank market as opposed to the capital markets to finance aircraft."

State of the market

Having issued more than $2.1 billion in ABS notes since 2014, Castlelake is very familiar with the process of bringing a capital markets product to the market.

Carruthers notes that the aircraft ABS market has developed in recent years. In particular, he says, the range of investors for aircraft ABS deals is notably larger than it was a couple of years ago.

"I would say that the aircraft ABS market certainly has evolved. It is slightly deeper, for example, than it was in 2015. If you look at our 2015 deal, we brought in some European investors to supplement the core group of US investors that buy aircraft ABS. And in 2016, in addition to European investors, we actually had significant interest out of Asia and were able to bring in some Asian investors as well."

As issuers tap the capital markets repeatedly, the process tends to become easier for an issuer: replicating a deal is easier than creating one. Plus, investors become more comfortable with issuers which have successfully closed offerings on more than one occasion.

But for debut issuers considering an ABS structure for the first time, Carruthers notes that there are significant hurdles to overcome.

"One is you're dealing with the capital markets, and the capital markets can be fickle. So it's not your most certain path from an execution perspective," he says.

He adds: "Challenge number two is that aircraft ABS is fairly complex and fairly expensive to issue as well. So when you layer in underwriting fees, legal fees and fees that get paid to the rating agencies, it can be quite expensive. Which is another reason why a larger deal makes more sense, because you can spread the fees related to getting the ABS done across a larger pool of equipment."

CASTLELAKE COLLATERAL

MSN	Lessee	Asset Type	Date of Manufacture
300	Aerolineas Argentinas	A330-200	6/30/1999
2180	Aigle Azur	A320- 200	2/27/2004
1988	Air Berlin	A321- 200	6/30/2003
15049	Air Canada	CRJ900	9/15/2005
15051	Air Canada	CRJ900	9/15/2005
15052	Air Canada	CRJ900	9/15/2005
15053	Air Canada	CRJ900	9/15/2005
339	Alitalia	A330- 200	6/30/2000
4520	Alitalia	A320- 200	12/8/2010
4523	Alitalia	A320- 200	12/10/2010
4536	Alitalia	A320- 200	12/20/2010
4759	Alitalia	A319- 100	6/30/2011
4764	Alitalia	A319- 100	7/21/2011
4910	Alitalia	A319- 100	11/17/2011
5294	Alitalia	A319- 100	1/15/2013
890	American Airlines	A319- 100	10/21/1998
922	American Airlines	A319- 100	12/3/1998
30100	American Airlines	B737- 800	12/15/2001
874449	AS Lux XV[2]	CFM56-7B22	10/11/1998
29170	Asiana	B747-400F	5/1/2002
1838	Brussels Airlines	A320- 200	7/2/2002
633	Dragon Air	A321- 200	4/10/1997
30675	Enter Air	B737- 800	7/27/2001
33555	Jet Airways	B737- 800	1/9/2004
33556	Jet Airways	B737- 800	1/8/2004
28497	Jet Time	B737- 700	3/20/1999
2553	Monarch Airlines	A321- 200	9/22/2005
2610	Monarch Airlines	A321- 200	11/16/2005
521	Qatar Airways	A330- 200	3/10/2003
638	Qatar Airways	A330- 200	11/26/2004
1895	Qatar Airways	A320- 200	10/22/2002
1928	Qatar Airways	A321- 200	2/18/2003
1957	Qatar Airways	A320- 200	2/18/2003
2107	Qatar Airways	A321- 200	3/16/2004
2138	Qatar Airways	A320- 200	10/21/2003
2161	Qatar Airways	A320- 200	1/14/2004
2288	Qatar Airways	A320- 200	9/16/2004
3274	Qatar Airways	A321- 200	10/4/2007
15102	Skywest Airlines	CRJ900	12/4/2006
15103	Skywest Airlines	CRJ900	12/7/2006
15110	Skywest Airlines	CRJ900	1/10/2007
15112	Skywest Airlines	CRJ900	1/18/2007
2929	Spirit Airlines	A319- 100	11/15/2006
2963	Spirit Airlines	A319- 100	12/15/2006
27983	Tailwind	B737- 800	6/30/1999
29038	Ukraine International	B737- 800	6/15/1999
28776	United Airlines	B737- 800	8/4/1998
28777	United Airlines	B737- 800	7/31/1998
28781	United Airlines	B737- 800	8/27/1998
28784	United Airlines	B737- 700	9/24/1998
28930	United Airlines	B737- 800	12/1/1998
28931	United Airlines	B737- 800	11/20/1998
29282	United Airlines	B757- 200	12/22/1998

Source: Kroll

ANALYSIS

Japanese financiers and foreign lessors join forces

Two Japanese aircraft financiers have linked up with foreign leasing companies this year to boost their operating leasing businesses. Michael Allen examines both structures, and asks the companies involved how that will benefit their businesses.

In February, IBJ Leasing (IBJL), the Japanese equity arranger which is part of Mizuho Group, formed a joint venture (JV) with Aircastle. The US lessor is servicing the platform, and IBJ is the majority shareholder: it has a 75% stake, with the remaining 25% held by Aircastle.

Aircastle and IBJ Leasing had been in discussions about the joint venture since January 2014, and the move is part of IBJL's goal of expanding its business in the aviation sector. IBJL already has a well-established Japanese operating lease with call option (Jolco) business and aircraft finance business, but wants to diversify into pure operating leases, for which Aircastle will be contributing its leasing expertise.

"We think that in expanding our aviation business, diversifying our business is important to diversify the business risk. While the Jolco has been our core business for a long time, it is a tax-oriented product and a tax lease that naturally has been exposed to potential tax reform risk," says Kenji Kawahara, deputy general manager, aviation business department, IBJ Leasing.

He adds that IBJL has found it difficult to enter the sale and leaseback business on its own because of the competitiveness of that market, saying that his company would have to agree to underwrite five or 10 aircraft with a low lease factor to win a sale and leaseback request for proposal.

Kawahara believes the operating lease and sale and leaseback businesses need a strong operational experience, including repossession skills, operational skills and leasing and remarketing skills. Such skills are very difficult to acquire at a very short time.

He argues that the establishment of the joint venture creates a "symbiotic" relationship between IBJL and Aircastle, whereby the two companies can better manage their fleets.

"The operating leasing business will help us optimise our aviation portfolio," he says.

"Aircastle could easily purchase a package and transfer the aircraft which would not meet Aircastle's target to the joint venture. Of course, we [will still] want to judge whether we will purchase it or not, but generally there will be a high possibility that IBJ Leasing will prefer to purchase, so the remaining portion of the package might be a good credit with low lease rental internal rate of return which could meet IBJ Leasing's priority," explains Kawahara.

The joint venture could also help IBJL enter into the Japanese operating lease (Jol) business, he says.

"We might build a stable pipeline for Jol aircraft from Aircastle. We have not discussed this with Aircastle yet, but we envisage this for the future," says Kawahara.

Aircastle's perspective

The Aircastle-IBJL joint venture is the second such agreement that Aircastle has entered into. The first was formed in late 2013 with Ontario Teachers Pension Plan, an organisation responsible for administering pensions to schoolteachers in the Canadian province of Ontario. The company is a 10% shareholder of Aircastle, having replaced the original majority shareholder Fortress Investments.

The Ontario Teachers JV now has nine aircraft; the Aircastle-IBJL connection so far has just one, which was placed during the second quarter of this year.

"What this JV enabled us to do was go out and maybe take a larger position with an airline that would not otherwise be prudent from a diversification perspective," an Aircastle source tells *Airfinance Journal*.

The source uses the example of the JV's first deal to illustrate his point. Aircastle acquired four aircraft with leases attached to Garuda Indonesia and sold two of them into the Ontario Teachers JV.

"We were very comfortable with buying those planes, which may have taken our exposure to Garuda temporarily up to 14% of the overall book at the time, but by selling these two A330s into the JV brought our exposure down to 7% or 8%," says the source, who explains that the formation of the IBJL joint venture was for a "slightly different reason" to the one with Ontario Teachers.

"It enabled us to be a little more competitive in a part of the market where the return thresholds are below hurdle rates," says the source.

"We have a partner that has an interest in newer narrowbodies with higher quality lessees that may not have as much built-in return in terms of leverage and such, but it gives us the ability to provide that product to our clients with a partner that has a risk appetite that's a little bit different."

Marubeni Corporation, which holds a minority stake in Aircastle, introduced Aircastle and IBJL and facilitated the discussions.

"For IBJL, it's very comfortable the fact that Marubeni invested in Aircastle, as IBJL have limited knowledge about American companies." says Hitoshi Kawabata, business administration secretary, aerospace and defence systems department, Marubeni.

SMTB-Novus – seeking higher returns

The second foreign-Japanese aircraft finance partnership was announced in June. Tokyo-based lender Sumitomo Mitsui Banking Corporation (SMTB) and Dubai-based lessor Novus Aviation Capital established a joint closed-end fund.

The 50/50-owned fund, Ortus Aircraft Leasing, has a target size of $200 million and will purchase aircraft with investors' capital and from "other finance sources". The investors will receive dividends based on the cash flow coming from the lease rentals and sales proceeds of the aircraft.

From the Novus side, the creation of Ortus was led by George Young Ho Ai's team from the company's Hong Kong office, with Novus acting as the general partner on the fund.

Mitsuru Koguchi, who is associate general manager in SMTB's structured finance department and is leading the fund from SMTB's side, as a trust bank has experience offering various types of funds to Japanese institutional investors.

However, since the introduction of Japan's negative interest rate policy earlier this year, investors' appetite for new asset classes has been accelerated. As a result, Koguchi is seeing emerging interest from investors to put their money into aircraft investments.

"Interest rates are now at minus levels. Clearly we have seen appetite for investors to start shifting some of their money to new asset classes that offer higher returns," he says.

Koguchi adds that the Ortus fund has a target return of 10%, and though there are no guarantees it offers the potential for consistent returns. Koguchi sees the potential total number of aircraft investments for the fund as being between six and 10, depending on the aircraft type and the balance between narrowbodies and widebodies.

He says the reason for choosing Novus as a partner is because its business model is different to other operating lease companies.

"Novus has a large pool of co-investors that they work with and customise their search for aircraft according to the co-investors' needs," explains Koguchi.He adds: "We have done some financing for the aircraft agreed by Novus before, so we know their behaviour and business type. We have been discussing with Novus for one-and-a-half years and have come to the conclusion that we can work together again."

Although this fund has the potential of bringing benefits to SMTB and Novus, as well as its investors, Koguchi does not believe that the establishment will influence other Japanese aircraft finance players to create similar products.

"The fund business is a kind of unique product mainly done by banks or asset management companies. IBJ Leasing and Century Tokyo Leasing are leasing companies, so basically they don't do asset management in their business," he says.

Ortus differs significantly from the Aircastle-IBJL partnership in that it is not a joint venture but a fund. As with Aircastle-IBJL, SMTB and Novus will both contribute monies to the fund, but unlike with Aircastle-IBJL, they will also invite outside investors to join. The investors would not be small-to-medium enterprises as with Jolcos, but institutional investors such as pension funds linked to large Japanese conglomerates.

"I'm guessing it's not Ma and Pa investors – it's big pension funds who have got Ma and Pa's money," says a legal source.

"[The investors] have got all that money and they are thinking, 'I have got to put this into something low risk'. The fund is well-hedged because it's [targeted at] all sorts of airlines. It looks like Novus will be buying new aircraft or buying aircraft on the secondary market. They might use an airlines' existing sale and leaseback agreement to get aircraft."

The fund is structured through the Cayman Islands, one of the world's foremost tax havens. However, the lawyer says that, while the lack of corporate tax would certainly be a factor, lots of funds are set up in places like Cayman because there is a light touch on regulation and lighter touch on what documentation companies have to make public on a public register.

SMTB says that going through Cayman is "standard practice for the establishment of limited partnership".

Nothing new

These partnerships are not the first time that Japanese companies have sought out overseas partners for their aviation businesses.

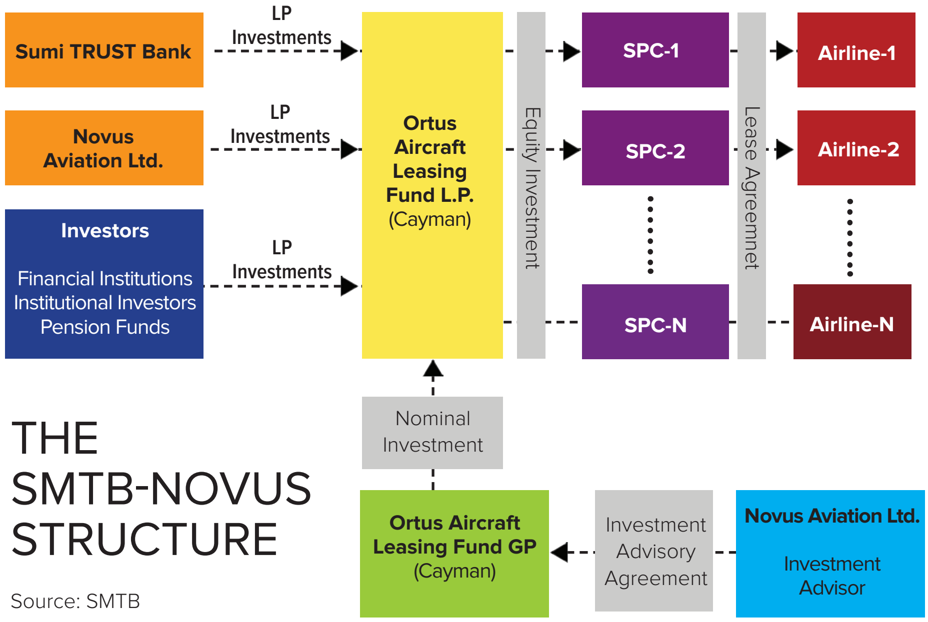
IBJL's Kawahara admits that his company is "kind of a latecomer" and that Orix, Nomura Babcock & Brown, Mitsubishi and SMBC Group already have their own well-established overseas ventures.

"I feel that there is a trend in the Japanese market that Japanese banks try to have a chance to make good returns other than in the lending business. The margin for aircraft finance has dropped. One idea is to enter into an operating lease business, but Japanese banks could not do an operating lease business on their own. Teaming up with overseas players might be one of the alternatives," he says.

A Japanese banking source says that to diversify the Japanese aircraft finance market away from reliance on the Jol and Jolco structures could be a good thing.

"Japan is a country that is subsidising foreign airlines with potential tax payment, so with a holistic view this doesn't bring any benefit to the Japanese market," says the source, adding that the Aircastle-IBJL and Novus-SMTB partnerships are only "the tip of the iceberg".

The source says: "While the market has already passed its peak in the aircraft value trend, other reasons like ample liquidity or older aircraft types approaching the end of the line could spur the formation of similar partnerships."



THE SMTB-NOVUS STRUCTURE

Source: SMTB

AIRLINE INTERVIEW

MIAT steps up aircraft leasing

Michael Allen speaks to Mongolia's flag carrier about its ambitions to transition into a leased aircraft portfolio.

Doing business in one of the world's least densely populated countries presents its own unique challenges for airlines. For the average Mongolian, flying is very expensive. MIAT Mongolian Airlines, the country's national carrier, relies on the government to provide an essential services subsidy programme for some of its routes, in order to make sure passengers can afford to fly and that the load factors are high enough.

Mongolia's extreme climate can make life difficult for MIAT. During the country's harsh winters, which can see temperatures plummet to -40 degrees Celsius, MIAT has to account for spend on keeping its aircraft warm in the hangar, providing warm winter clothing for its engineering and groundhandling staff and ensuring aircraft ice protection services.

But the airline has faced these challenges undauntedly for more than 60 years, transforming from an operator of Russian aircraft during the time of the Soviet-influenced Mongolian People's Republic to an operator of nearly new western aircraft in the post-Mongolian revolution period. It now plans on acquiring Boeing 787s before the end of this decade.

Tserenchimed's vision

Erdenebileg Tserenchimed, MIAT's vice-president financial, has been at the state-owned carrier since 1992, although he had a three-year period between 2012-15 when he worked for the Civil Aviation Authority of Mongolia.

Tserenchimed's vision is for his airline to grow and become not just the preferred way for people to travel into the country, but to compete with the likes of Emirates, Qatar Airways and Singapore airlines as a transit airline that connects Europe and Asia. Mongolia's only international airport, Chinggis Khaan International, is undergoing the development of a new transit area to attract more passengers to use Ulaanbaatar, its capital city, as a place to change flights, and MIAT sees this development as an opportunity.

Of course, the Gulf carriers and Singapore's flag carrier dwarf MIAT in fleet size, boasting hundreds of aircraft compared with MIAT's rather modest fleet of five Boeing units. Tserenchimed argues that the focus will be on quality rather than quantity.

"Our desire is not to become a big hub. We would like to become a hub that is easy and fast and provides a quality service," he tells *Airfinance Journal* in an interview in Hong Kong.

"As you see in Singapore, United Arab Emirates and Qatar – the main thing they used was their geographic location and their sixth-freedom rights. We have bigger land than them and a great location geographically."

> "Tserenchimed's vision is for his airline to grow and become not just the preferred way for people to travel into the country, but to compete with the likes of Emirates, Qatar Airways and Singapore airlines as a transit airline that connects Europe and Asia "

MIAT's fleet consists of just two 767-300ERs and three 737-800s. The most recently introduced aircraft is a 767-300ER from Pembroke which is on a 50-month lease starting June 2016 and ending in 2020. The idea is to use the 767 as a stop-gap aircraft before the planned introduction of a 787-9 by 2019.

"After the end of the lease agreement with Pembroke, we want to obtain one Boeing 787 Dreamliner aircraft through an operating lease arrangement and finance the monthly lease rentals through the company's operating income. We have discussed this opportunity with Air Lease and other global leasing firms," says Tserenchimed.

In July, MIAT agreed to lease two 737 Max aircraft from Irish lessor Avolon. Tserenchimed says his airline is also in discussions with Air Lease to lease another two 737 Max aircraft, so he hopes to add four in total.

Lease first, own later

It is likely that MIAT will lease the majority of its incoming fleet in the coming years, though it did manage to re-finance one May 2016-delivered 767-300ER in its fleet in December 2013.

The Ministry of Finance of Mongolia guaranteed the refinancing of the aircraft. The package consisted of a 10-year senior loan guaranteed by the US Export-Import Bank, a seven-year junior loan and a five-year commercial note. From the proceeds, MIAT refinanced the outstanding bridge loans it obtained from domestic banks.

"Due to short-term and long-term financing of the aircraft, MIAT has seen some financial constraint in our cash flow. Therefore, our focus is to obtain aircraft under operating lease arrangement in the near term," says Tserenchimed.

He believes leasing is the right way for the near-term fleet planning and modernisation of the airline. He looks to lease young aircraft

"Mongolian banks have provided short-term loans for aircraft; but they are not as active in providing long-term loans at low interest rates for aircraft purchase."

for terms of eight to 10 years, and return some of his airline's older aircraft to lessors when their leases end.

If the airline were to decide to own its aircraft, it would have to look outside Mongolia for the financing.

"Mongolian banks have provided short-term loans for aircraft financing; however, they are not as active in providing long-term loans at low interest rates in terms of aircraft purchase," says Tserenchimed.

He adds that a number of factors will determine the level of MIAT's fleet expansion. These include: the state of Mongolia's mining industry, which is a key user of MIAT's services; the progress of Chinggis Khan airport's transit hub development; Mongolia's overall economic situation; as well as its relations with neighbouring countries China and Russia – particularly the latter because MIAT hopes to expand its routes into Siberia.

MIAT is also considering acquiring regional jets, including Embraer E190s, as well as smaller 11- to 14-seat aircraft, as part of its goal to expand its domestic routes. Mongolia has 11 smaller, unpaved airports that cannot safely receive an aircraft as large as a 737-800.

Up until 1992, MIAT had Russian AN-2 aircraft for its 200 nautical miles or so short domestic routes. Passengers would sit facing each other on the sides of the aircraft rather than the front, in what seems more like a flying bus service than the kind of flight experience people are used to today. The service is now closed, but Tserenchimed hopes to relaunch a similar service using newer aircraft.

"Right now we are working with the government and discussing about having smaller aircraft," he says.

Since MIAT is 100% state-owned, government policy and intervention plays a role in the airline's operation, and representatives of the government sit on the company's governing board.

"The current financial situation of Mongolia is a little bit difficult for buying an aircraft, so probably the best way to go is to lease the aircraft – even for the smaller ones," says Tserenchimed.

"Mongolia's economic growth increase has been dependent on the mining sector. As a result of the decline in global commodity prices and sales for the past few years, the country's budget income and the financial situation have been challenged. In my opinion, the government is not in a good position to provide financial support in the aircraft purchase for the time being," he says.

From right to left: Purevsuren Sukhbaatar, Finance and International Contract Specialist, MIAT; Ganbat Dashdemberel, General Manager of Hong Kong Branch Office, MIAT; Erdenebileg Tserenchimed, Vice President of Finance, MIAT; Fan Yeung, head of Head of Aviation Conferences–Asia Pacific, *Airfinance Journal* Events ; Michael Allen, Senior Reporter (Asia Pacific), *Airfinance Journal.*

Other Mongolian carriers

Although Mongolia's airline industry has gone through some troubled times in recent years, MIAT seems to have weathered these better than other airlines.

In July last year, *Airfinance Journal* reported that US lessor Aviation Capital Group had repossessed two Airbus A319s from Mongolian carrier Hunnu Air that were in Hong Kong.

"The market is small still and there is only one route from Ulaanbaator to Europe and Asia, and then coming back to Ulaanbaator so the passenger flow is small. Hunnu Air received an Airbus aircraft and used this aircraft for flying out to Bangkok, Shanghai and Hong Kong," explains Tserenchimed.

He adds: "Because the passenger flow is so low, it affected the financial situation of the airline and that was the reason the lessors had to repossess the aircraft. One way to stop this situation happening again is to develop the transit and be able to fly out to the second and third markets."

Eznis Airways is another Mongolian airline that experienced problems. Founded by Mongolian investment company Newcom Group in 2006, the airline's name combines an abbreviation of the English word "easy" and the Mongolian word "nis" meaning "fly". Eznis operated Bombardier Q400s and Saab 340Bs for domestic routes, but easiness in flight did not translate into easiness in business and the carrier suspended operations from 22 May 2014 because of financial difficulties.

"The management of the company and the shareholders had done everything, everything during the last two years to survive, to keep positions of our employees and, most importantly, to serve the public, but they cannot subsidise the financial losses any longer," the airline said in a statement at the time.

Tserenchimed believes it was Eznis' aircraft selection that contributed to its demise.

"They actually took Saab 340 aircraft and it was too small. Instead of carrying like 30 or more passengers, they had like 20 or so, so that made other difficulties for them. Also, the distance and range was shorter. Basically, fewer passengers with longer distance – that was the challenge. Also, the fuel price was higher, so it was more expensive," says Tserenchimed.

He adds: "The reason why Eznis Airways went bankrupt is because they made some poor decisions. They got too many aircraft in a shorter period of time and there were more expenses in maintenance, training pilots and the crews, so that resulted in them to eventually become bankrupt – but this is my opinion."

Despite the troubles faced by its competitors and the expense of financing new aircraft from original equipment manufacturers, MIAT is confident its fleet expansion through a leasing-focused business plan will provide success in bringing more passengers through Ulaanbaatar.

**Tserenchimed's answers were translated into English by Purevsuren Sukhbaatar, finance and international contract specialist, finance and accounting department, MIAT Mongolian Airlines.*

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“MIAT’s Russian aircraft were showing signs of age in the early 1990s, so it switched to Boeing aircraft, obtaining three 727s from Korean Air.”

MIAT’S 60 YEARS

Tserenchimed highlights the key periods in the Mongolian carrier’s 60-year history.

During the first segment of MIAT’s history, spanning 1956-86, the first Antonov AN-2, a single engine Soviet-produce biplane, was introduced, in 1956.

“We were able to build 300 aerodromes and we used AN-2 and AN-124 for scheduled flights. We sent our people for advancing their education in the aviation sector,” says Erdenebileg Tserenchimed.

“The Russian school was used in Mongolia’s aviation for teaching and training and the technology, including pilot training and all of the systems, like navigation systems,” he adds.

The second period spans from 1987 to 2016. Chinggis Khan International Airport was built in 1986 and, starting in 1987, MIAT began to use its first jet aircraft Tupolev 154s for passenger flights. This period coincided with the Mongolian revolution of 1990 and the country’s transformation from being the Soviet-influenced Mongolian People’s Republic.

The airline became a member of the International Civil Aviation Organization and International Air Transport Association and developed several aviation laws, regulations and rules, and increased its understanding of international standards and their implementation in Mongolia.

MIAT’s Russian aircraft were showing signs of age in the early 1990s and the carrier switched to Boeing aircraft, obtaining three

Boeing 727s from Korean Air. The first aircraft was given as a gift and MIAT later purchased two more aircraft at a “low price” in 1994 from South Korea. These acquisitions made it possible for MIAT to operate international flights with its own aircraft.

In 1998, MIAT received an Airbus A310 and, in 2011, a Boeing 767. MIAT also started to perform maintenance and repairs for domestic and international airline companies, having its maintenance, repair and overhaul accepted into the European and US standards.

Tserenchimed says: “For the next 30 years, beginning in 2016, our hope is to be able to become a great transit location between the two biggest continents and become one of the biggest players in this globalised world.”

Mongolia as a leasing jurisdiction

Despite the image in some market players’ minds that Mongolia is a remote and difficult jurisdiction in which to do business, one source with experience in the region argues that it is not especially troublesome from a lessor perspective.

“There are certainly other jurisdictions I would rather not be in, and there is really no reason why a lessor should be scared away from Mongolia based simply on legal risk,” says the source.

Indeed, the legal system should be reasonably easy to grasp for a lawyer with experience of civil code in Roman-Germanic jurisdictions, such as those in continental Europe, because this framework also governs Mongolia’s legal system.

The region, unfortuntuately, is perhaps best known for the two Airbus A319s that were repossessed from Hunnu Air by US Lessor Aviation Capital Group in July 2015.

“I would not judge MIAT by the Hunnu example. There is a reason MIAT has lasted longer – obviously they are state backed,” says the source, who adds: “It’s a good, small airline with good management and they manage a tiny fleet. It’s not that troublesome an undertaking to maintain a national flag carrier with just five or so aircraft.”

But industry executives wanting to do business in the jurisdiction should not go in expecting to get one over on the locals and negotiate a deal that is strongly in their favour.

“I don’t think anyone who has ever negotiated a transaction of any sort or otherwise dealt across a table with Mongolians would categorise them as pushovers,” says the source.

“They are both savvy and intelligent. The entire country is a testament to the resilience of people. Just look at where it is: it’s a very difficult geographic location; it’s really quite remarkable. When you speak to people and meet with Mongolian business people – particularly in the aviation sector – you realise that there is a degree of sophistication and pride which you would be ill-advised to not take account of.”

The source encourages other market participants to explore Mongolia as a potential market, adding: “Mongolia is a fascinating place: it’s got what on the surface appears to be a simple agricultural and resource-based economy, but it’s also got a population of young, dynamic and very savvy professionals and good numbers go into aviation. I would not necessarily consider it a backwater.”

DODD-FRANK REFORM

How will aircraft ABS deals be affected?

In December, new regulations will force the issuers of certain asset-backed securities deals to retain about 5% of the credit risk of the collateral.
Joe Kavanagh speaks to lawyers and financiers as they try to establish its impact on commercial aviation.

In 2010, President Obama's government passed the Dodd-Frank Wall Street Reform and Consumer Protection Act, a wide-ranging piece of legislation that was created to end the dangerous financial practices that contributed to the 2008 financial crisis.

Among many other measures, the Act set out new restrictions on asset-backed securities (ABS). This is because certain types of securities – those secured against US mortgages, for example – helped to trigger a banking crisis that led to the largest economic meltdown since the Great Depression.

After the US housing bubble burst, most observers agreed on the need for regulation that could curb the industry. The public and mainstream media were angry at the recklessness with which issuers, banks, ratings agencies and the security exchange commission (SEC) had allowed risky deals to be sold to investors as sure bets.

This December, a fresh round of Dodd-Frank regulation is set to pass into law. While some legislation came into effect last year, which only affected mortgage-backed deals, this year's changes will affect all other types of securities.

It is possible that the regulation will create some restrictions on aircraft ABS deals. But given the uncertainty about the impact of the regulations, some sources were unwilling to be quoted speculating on the record. Despite this, all those who spoke to *Airfinance Journal* are keeping a close eye on the issue and are keenly aware of its significance.

What is the regulation and will it affect aircraft?

The aircraft finance community is grappling with the question of how the new legislation will affect aircraft ABS deals.

The market will not know for sure until issuers begin offering aircraft ABS deals after the regulations have taken effect. In the meantime, lawyers, lessors and financiers are investigating what the impact will be for the securitisation of commercial aircraft operating leases. Most are still undecided, and among those that have decided there is no consensus.

The upcoming changes are applied by Section 941 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

The most relevant section of the incoming regulation is the part relating to risk retention. Sometimes known as the skin-in-the-game requirement, this section requires future issuers of ABS deals to retain at least 5% of the credit risk of the assets in the collateral.

For some issuers, this will not be a crucial factor. But for others, particularly those that sell the equity of the collateralised aircraft on to investors, this requirement might make ABS deals less attractive than a straightforward portfolio sale.

Kevin MacLeod, shareholder and head of the New York capital markets group at Vedder Price, thinks it is likely that traditional aircraft ABS deals will be affected by the Dodd-Frank regulation.

He notes: "The credit risk-retention rules apply to asset-backed securities as defined by the US Securities Exchange Act of 1934, unless an exemption is available. For aircraft ABS deals with debt securities, the rules will likely apply."

However, others believe that aircraft ABS deals will escape the regulatory restrictions.

James Pascale, a partner in the New York office of Milbank, says that aircraft operating leases will not qualify under the regulation.

> "For aircraft ABS deals with debt securities, the rules will likely apply."
>
> **Kevin MacLeod, shareholder and head of capital markets, Vedder Price**

Wall Street bankers are scratching their heads over the proposed amendment to the Dodd-Frank bill.

He says: "I think the concern for aircraft ABS deals needing to comply with US risk-retention regulations is an unfortunate case of mistaken identity. While the US risk-retention regulations could certainly stand to be clarified, it seems a bit of a stretch to include traditional aircraft ABS."

Pascale explains: "The US risk-retention rules only apply to securities collateralised by self-liquidating financial assets, a term that, although not defined, doesn't equate well to the collateral backing a traditional aircraft ABS deal. Even if we ignore the physical aircraft and accept that an aircraft operating lease constitutes a self-liquidating financial asset, in a typical transaction there is likely too much reliance on cash flows from re-leasing or aircraft sales for the securities to fall within the Dodd-Frank definition."

A banker who spoke to *Airfinance Journal* off the record confirmed that there is "a lot of discussion about whether aircraft are a financial instrument or not".

How would it change the aircraft ABS market?

If aircraft operating leases are going to be affected by the regulation, there are a number of possible outcomes.

Those issuers which treat ABS deals like portfolio sales – by selling the equity (E-note) on to third-party investors – may start to view ABS issuances less favourably.

From the lessor's perspective, being forced to retain an equity stake in aircraft that you wish to remove from your balance sheet is undesirable.

It is important to note, however, that issuers complete ABS deals for a variety of reasons.

Marjan Riggi, managing director of financial institutions at Kroll, says the impact of the regulation on issuance levels will vary depending on the goals of the issuer.

She says: "If they are interested in outright sales, issuers can always sell the entire portfolio to a third party who will then securitise the assets; if they want to use ABS as a funding mechanism then they may have to retain part of the risk on their balance sheet if, indeed, the risk-retention rules would apply to aircraft lessors."

Anthony Nocera, managing director of ABS at the rating agency, points out that some recent ABS deals have been done for fleet management reasons.

He adds: "The reason you see these companies securitising large pools of aircraft is to sell older aircraft off their books. Several lessors have been using the ABS market for sales rather than financing of aircraft."

If issuers do see the upcoming regulatory change as an obstacle, they may choose to speed up any deals already in the pipeline. Even if they don't believe aircraft operating leases will fall under the regulatory guidelines, issuers that want to complete deals might try to avoid any potential hassle by ensuring their deals go to market before December.

Vedder Price's MacLeod thinks "there will be some pressure on lessors and sponsors to get deals done sooner."

A banker who chose to remain anonymous agreed that lessors might want to get some deals completed ahead of the changes. He says: "All things being equal, you want to issue now. But the truth is you can't rush these deals – there are too many moving parts."

But for those issuers that tend to retain the equity on ABS deals, such as US asset manager Castlelake, the mandatory retention of an equity interest will have little effect on their strategy.

Evan Carruthers, a managing director at Castlelake, notes that his firm's ABS issuances would not be affected dramatically, because Castlelake has always retained 100% of the equity of the collateral anyway.

Speaking about the incoming regulation, he says: "You have seen risk-retention rules in other forms of structured finance, where the issuer needs to retain a certain percentage of equity. So that concept does exist in parallel asset classes.

"So for us, even if those regulatory rules were implemented, it wouldn't hamper our ability to execute in the ABS market, but it clearly would have an impact on issuers that were looking to execute more of a trade sale, where the servicer or issuer that sold the equipment no longer retained an economic interest in that pool," he adds.

But reflecting on the needs of other lessor ABS issuers, he says: "It would certainly become a slightly less attractive option for the larger leasing companies that are looking to sell large pools of collateral into the ABS market where they sell the E-certificate."

In the absence of a ruling by the SEC, the market is waiting to see how aircraft ABS deals may be affected. In the short term, the changes may lead to a flurry of ABS transactions towards the end of the year, as issuers choose to close deals ahead of any potential change.

In the long term, there may be no change at all. Alternatively, ABS deals could become a less-attractive option for the lessors that would use them to divest from certain aircraft portfolios. The latter would clearly be a problem for some companies.

The changes are coming just as the ABS market is returning to its previous strength. Last year, five aircraft ABS deals were offered to the market with a total issuance volume of almost $3.7 billion – the most new issuances by volume a year since 2008.

It is hard to predict how many deals will cross the line before December, but any upcoming issuer that has the option will probably try to do so.

MIDDLE EAST

Low oil prices fail to slow up orders

Carriers in the Middle East are still popular with international financial institutions, despite troubled local economies.

Located between Asia, Africa and Europe, the Middle East is well positioned to connect these continents. Since 2014, the region's main hub, Dubai International Airport, has been the busiest airport by international passenger traffic, surpassing London Heathrow and Hong Kong International. Although low oil prices have challenged many economies in the Middle East over the past year, international financing is still plentiful for Middle Eastern carriers.

One of biggest Middle Eastern deals of last year was Emirates' $913 million UK Export Finance guaranteed sukuk, which funded four Airbus A380s. The deal was one of a kind, being the first sukuk bond guaranteed by the UK export credit agency (ECA).

For much of 2016, the aviation industry has seen a lack of ECA funding, because of an inquiry being launched into Airbus for its applications to get export credit funding. This has had an impact on the Dubai-based carrier's funding strategy, and forced it to look for financing elsewhere.

A source at the carrier tells *Airfinance Journal* that the airline still has 22 aircraft to deliver for the rest of this financial year and that it has received offers to finance these aircraft. The source adds that Emirates needs to raise between $8 billion- and $9 billion-worth of funding next year for its incoming Boeing 777s and A380s.

As well as the capital markets, the UAE based carrier has used Japanese operating leases with call options (Jolcos) and structured operating leases to fund its deliveries. Last year, the airline tapped both the German and Islamic markets to fund new and 2013-vintage A380s. The highly leveraged transaction featured a traditional senior loan provided by Deka Bank, a pari-passu senior tranche from Dubai Islamic Bank (DIB) and a 40% Islamic mezzanine tranche from DIB that uses a Murabaha commodities facility to maintain compliance with Islamic law.

Despite being smaller and newer than many of its Gulf competitors, Flydubai has proven that you do not have to be a big airline to be a success story in the capital markets. In 2014, the airline tapped the sukuk market, raising $500 million through an unsecured and unrated bond structure. It was a highly cost-effective funding for the airline and marked the first time a low-cost carrier issued a sukuk bond.

In June, the carrier mandated three lessors for its request for proposals to finance eight 737-800s. BBAM and Jackson Square Aviation are two of the lessors – the third was undisclosed. The airline also has another 75 737 Max 8s on order, which will deliver from the second half of 2017 to 2023.

Air Arabia, another low-cast carrier based in the UAE, has orders for five A320 aircraft that will join its fleet of 46 units of the type.

The carrier has been busy expanding its network. During the first half the year, Air Arabia received three new Airbus A320s and added new flights to Sarajevo in Bosnia and Herzegovina from its main hub at Sharjah.

Its sister carriers are also busy adding new flight destinations – Air Arabia Jordan launched a new route from Amman to Riyadh, while Air Arabia Maroc launched two new routes this year.

Emirates' main competitor, Abu Dhabi-based Etihad Airways, has 179 aircraft on order, according to *Airfinance Journal*'s Fleets. Among the aircraft ordered are 40 A350-900s, 22 A350-1000s, 32 787-9s, 30 787-10s and 26 A321neos.

For its recent 787-9 deliveries, the airline has turned to the sale and leaseback market, leasing one with Goshawk Aviation in July. In June, it mandated BBAM for the sale and leaseback of another five units.

Etihad also has tapped the Jolco market for its 787-9 deliveries, mandating Sumitomo Mitsui Finance and Leasing Company to provide financing for two aircraft.

Over the past two years, Etihad has also adopted a relatively new structure in aviation: the collateralised loan obligation. The structure allows Etihad to fund multiple obligors through the capital markets. Such a structure 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.

In June, it issued its second EA Partners bond, raising $500 million for itself and five of its equity partners – Alitalia, Air Berlin, Air Serbia, Air Seychelles and Etihad Airport Services. ADS Securities, Anoa Capital, Goldman Sachs International and Integrated Capital acted as placement agents and joint bookrunners for the offering.

Muscat-based Oman Air is expanding its fleet and aims to operate 57 aircraft by 2018 and 70 aircraft by 2020. The move is part of a wider fleet strategy, developed by consultants Seabury.

The carrier has 36 Boeing aircraft on order, including 27 737 Max 8s, four 787-8s, two 737-800s, two 787-9s and one 737 Max 9, according to *Airfinance Journal*'s Fleets.

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Dubai, home of the world's busiest airport.

The carrier has a fleet of 43 aircraft: 19 737-800s, six Airbus A330-300s, five 737-900ERs, four A330-200s, four 787-8s, four Embraer E175s and one 737-700, according to *Airfinance Journal*'s Fleets.

In July, Oman Air signed a sale and leaseback agreement with Dubai Aerospace Enterprise for two 737-800s. The aircraft were due to be delivered to the carrier in July and August as part of its fleet expansion.

Oman Air agreed to lease two 787-9s in May from Air Lease (ALC), with deliveries due in 2018 and 2020. However, those aircraft are both from ALC's orderbook with Boeing.

The agreement comes after Oman Air's August 2015 announcement of lease agreements covering 14 aircraft on lease from ALC: three new 737-800s, seven new 737Max8s, one new 787-9, one used 737-700 and two used 737-800 aircraft.

Oman Air agreed a sale and leaseback transaction covering two 737-800s with DAE Aerospace in July.

The carrier ordered 20 new 737 Max aircraft last October. Six of the 20 are converted from Next Generation orders the carrier previously placed.

The carrier is in discussions with Airbus and Boeing about widebody purchases, including the A350 and 787 models to replace 12 older A330 aircraft.

Qatar Airways is looking at more foreign investment opportunities, after lifting its stake in Oneworld partner IAG to 20% after stock market turmoil on the back of the UK's referendum to leave the European Union. The carrier first revealed its 9.9% shareholding in the carrier last year and is barred from owning more than 49.9% of IAG.

The investment comes as the Doha-based carrier continues to build its fleet. It holds orders for 190 units, according to *Airfinance Journal*'s Fleets: 50 777-9X, 37 A350-1000, 34 A350-900, 33 A320neo, 16 A321neo, 10 777-8X, four A380 and six 777-200 freighter aircraft.

Qatar Airways has agreed a sale and leaseback transaction for five A350-900s from Gecas. Two aircraft have been delivered and the remaining three units will arrive by the end of the year.

Airfinance Journal's Fleets shows that Qatar Airways operates nine aircraft of the type.

The Bahraini flag carrier Gulf Air has orders for 55 aircraft: 17 A321neos, 16 787-9s, 12 A320neos and 10 Bombardier CS100 aircraft.

The airline adjusted its narrowbody fleet plan in January to increase its order of Neo aircraft, which will be delivered from June 2018. The carrier already held a 2012-placed order for 10 A320neos, but the amended deals comprise 17 A321neos and two additional A320neos.

Gulf Air also dropped plans for six A330-300s and opted to build its widebody base around 16 787-9s. It also holds orders for 10 CSeries aircraft.

Saudia, or Saudi Arabian Airlines, took delivery in August of its first A330-300 regional from International Air Finance (IAFC), a sharia-compliant joint venture between Airbus and Jeddah-based Islamic Development Bank.

The remaining A330 deliveries will be leased from the lessor. Saudia is the launch customer for the newest member of the A330 family.

Last year, the carrier agreed to lease 50 Airbus units, made up of 30 A320s and 20 A330-300s from IAFC. Quantum Investment Bank and Palma Capital were arrangers on the deal.

The aircraft were ordered by IAFC.

Airfinance Journal understands that the two mandated banks will arrange the debt and equity financing for the delivery of the aircraft.

The A330s began to deliver in August and finish delivering at the end of 2017, according to an Airbus source, who adds that the A320s will deliver through 2018.

In April, the carrier issued a SR5 billion ($1.3 billion) sukuk issuance.

The sukuk bond will fund the acquisition of new aircraft. Saudia appointed HSBC as the lead arranger for the deal.

Saudia director-general Saleh bin Nasser Al-Jasser said in May 2015 that he looked to expand the airline's fleet from 119 aircraft to 200 by 2020.

The airline also holds an order for four 787-9s.

Fellow Saudi carrier Flynas is slightly smaller, with a fleet of 47 A320s. It owns 20 of its aircraft and the rest are leased from lessors, such as Gecas, CIT Aerospace and AerCap, according to *Airfinance Journal*'s Fleets.

ANALYSIS

Stretch will mainly help Max 7 customers

By announcing a 737 Max 7 stretch at the recent Farnborough Airshow, Boeing will look at boosting its market share in this segment. But the appraiser community says the new improved version, which will start to deliver in the second quarter of 2019, will mainly support customers' needs.

Boeing says the 737-7 stretch, which will feature two additional rows compared with its current 737-700 product, will fly futher, increase revenue and provide the lowest seat-mile cost of any aircraft in its class.

The US manufacturer, like Airbus, has struggled in the low end of its market segment over the years. The 126-seat 737-600 model only sold 69 units. But its 149-seat 737-700, a shrink version of the popular -800 series, has sold relatively well with more than 1,110 deliveries, according to *Airfinance Journal*'s Fleets. Backlog is now about 75 aircraft.

The Max 7 has been the least successful of the three Max models offered since launch in July 2011, and its main customers, Southwest Airlines and Westjet, have pitched Boeing for a larger version.

Fintech Aviation's managing director, Oliver Stuart-Menteth, says a stretch will help Boeing maintain its customer base and, in specific circumstances, may grow.

However, he does not believe it will lead to a resurgence of interest in the model.

"The development of the 737 Max 7X seems a tacit admission by Boeing that the lower end of the Max line is not well-positioned against the Airbus Neo series and is facing revitalised competition from the Bombardier CSeries," says Angus Mackay, a principal at ICF International.

For Mackay, the -7X could be construed as a move to mollify Southwest and Westjet while forestalling competition from the CS300 and gives rise to the view that the original 737 Max 7 may not be built.

Stuart-Menteth believes Boeing is not responding to a Neo threat but to the requirements of Boeing's VIP section, which required an effective competitor against the larger business jets.

"Boeing Commercial were then able to offer a civil variant to the small pool of established -7 customers. In addition, the original -7 design was competing directly with the CS300 in terms of capacity but the addition of 12 seats and extended range will provide some separation," he says.

"It is clear that development of the -7 is not Boeing's priority. The aircraft occupies the same space on the production line but profit margin is significantly reduced and whilst fuel is relatively cheap, existing customers are prepared to operate current equipment. In addition, Boeing continue to offer existing -700s at very attractive pricing," he adds.

Gueric Dechavanne, vice-president, commercial aviation services, Collateral Verifications, believes Boeing's move follows the trend to operate larger aircraft.

"The 737-7 stretch is a way for Boeing to keep up with the growing market trends, which require larger aircraft as traffic continues to grow," he says. "This is a trend that has been going on for some time and keeping the 737-7 the way it was originally offered does not provide potential operators the option to grow their capacity requirements as needed based on market trends."

Oriel's Les Weal says a stretch will not extend the customer base, as a few extra seats, at no extra costs, will help current 737 Max 7 customers.

"There was a power cap with the 737 Max original design, and the stretch may overcome this," he adds.

George Dimitroff, Ascend's head of valuation, agrees. "The improved Max 7 looks to be a tactical response to fulfil the two current customers' requirement for slightly more capacity and range potential from the aircraft," he says.

"The increase in seats does put a little water between it and the directly competing A319neo and CS300 models. But it also takes it closer to the Max 8/Max 200 and the relative success of each variant will be as much linked to seat-mile costs for each as performance and capacity," he adds.

Jonathan McDonald, IBA Group's senior analyst, says Southwest and Westjet will be satisfied with the new arrangement, but he highlights related issues with a stretch version.

"The extra two seat rows will raise maximum capacity but this will require additional over-wing exits, as well as the extra crew member. Still, all this should be offset by the better seat-mile costs afforded by the new arrangement," says McDonald.

He points out that the improved version is predominantly based on either adding one plug fore and aft of an original Max 7 fuselage – or removing a plug fore and aft of the Max 8 fuselage.

Mackay says Boeing has learned significant lessons from the 787 programme tribulations, and the Max development programme has proceeded well to date, with entry into service advancing from late 2017 to the first half of the year. "Compared to the 787 series, Boeing has adopted a more conservative approach with a stronger focus on programme execution, meeting or exceeding all milestones since launch in 2011," says Mackay.

The Max family.

"The Max 7X, dubbed by some the 737-Max 7.5, is likely to be a simple shrink of the 737 Max 8 and is considered to be simpler, easier to develop than a stretch of the smaller 737 Max 7. As such, and given the greatly improved ability on the part of Boeing to build aircraft on time, entry into service in mid-2019 is certainly achievable."

Flightglobal's Fleet Forecast predicts that fewer than one in 10 Max deliveries will be of the smallest 7 variant. "There are some potential benefits for Boeing, with increased commonality with Max 8 and thus potentially lower development and production costs. This could play out into slightly higher prices and values, although the latter will be inextricably linked to liquidity," says Dimitroff.

"Our prediction of lower market volumes will be the fundamental driver here. Overall, the Max family strategy seems to be a culmination of several tactical decisions and, with hindsight, perhaps the family would be different if designed today. The Max 8 looks well positioned in the market but above and below, the Max 200 and Max 7 seem to be converging on the Max 8, whilst the Max 9 appears to be poorly positioned against the A321neo."

Dechavanne believes Boeing did not want to find itself in a similar situation as the 737-9 versus the A321neo.

"Even though the A319neo has not sold well either, the additional seating capacity Airbus is now able to offer on the aircraft presents a challenge for Boeing," he says. "I don't believe they want to find themselves in a position whereby they have an aircraft family which is potentially made up of only one variant, the 737-8. There is also a potential threat from the CS300 variant."

He expects the 737-7 variant most likely to continue being a niche market aircraft, such as the 737-500 and -700 models. Europe and South America will probably be where some of the orders come from.

"Although potential operators may be pushing for a larger aircraft, I don't believe they are in such a hurry to get them since used aircraft are still a very viable option for them based on the low fuel prices and availability of used aircraft," says Dechavanne.

Stuart-Menteth of Fintech Aviation believes the aircraft may be of interest to those operators inaugurating routes. However, the operating empty weight and seat ratio will not be as competitive as the clean sheet designs.

Rubin is not sure of the business case for this aircraft or specific regions and applications for its successful deployment.

"It is smaller than the Max 8, but larger than the CS300 and the current Max 7. Even allowing for the well-known inefficiencies, the type is likely to prove superior to the CS300 and A319neo on performance and cost per available seat-mile unit operating costs given its higher seating capacity," he adds.

"Nevertheless, with a manifest tendency for airlines to up-gauge in aircraft size to preserve operating flexibility and drive down costs, the -7X will face significant competition from above in the form of the A320neo as the 787-8 has suffered from the 787-9.

"The proliferation of Max variants brings to mind the lacklustre derivative 737-900, 757-300 and 767-400ER programmes, which have not enjoyed market success. Absent the development of a solid and geographically dispersed operator base in excess of 20 airlines, operator concentration will have a damaging effect on market liquidity and residual values."

McDonald anticipates it is airlines which have operated 737-600/-700 models alongside -800s that will most likely commit for the improved Max 7 model, "assuming they transition to the Max and do not quite need the 189/196-seat capacity of the Max 8/Max 200", he says.

He recalls a purchase agreement by Canadian start-up carrier Jetlines announced in 2014 and a more recent memorandum of understanding signed by Chinese carrier Kunming Airlines for 10 Max 7s – soon after the improved version was announced.

He says: "We suspect other carriers will add orders but the version will not sell as many as the Max 8 variant, either by operating base or shipments."

AIRCRAFT PROFILE

Boeing 737-800 – previous generation

A panel of appraisers looks at the prospects for Boeing's best-selling narrowbody as its successor, the 737 Max 8, nears entry into service.

The Boeing 737-800 is the biggest selling member of the successful, so-called next-generation (NG) family. The other members are the 737-600, the -700 and the -900ER models.

The 737-800 was the second member of the family and entered service in 1998, succeeding the 737-400. It incorporated a new, larger wing with increased fuel capacity and optional winglets, an enhanced electronic flight instrument system (Efis) and upgraded systems. The aircraft was equipped with CFM56-7B engines, which provided a step change in fuel efficiency compared to the older technology engines that powered the Classic generation of 737s. The 737-800's most direct competitor is the slightly smaller Airbus A320.

The NG family has been continuously developed, notably with the addition of a blended winglets option.

In 2009, Boeing and CFM introduced the upgraded CFM56-7BE engine enhancement programme to coincide with airframe improvements. Boeing said at the time that the combination reduced fuel consumption by 2%. The interior has also been upgraded on several occasions, with the latest incarnation being marketed by Boeing as the Sky Interior.

Future developments

The 737-800 is being replaced by the similarly sized 737 Max 8 from Boeing's latest iteration of its single-aisle family, which will be powered by CFM Leap-1B engines. Boeing says the Max family "will deliver 20% lower fuel use than the first next-generation 737s". However, the advantage over the latest NG models is significantly smaller. The first Max aircraft are scheduled to enter service in 2017.

AIRCRAFT CHARACTERISTICS	
Capacity/range	
Maximum seating	189 at 30-inch pitch
Typical seating	162 at 32/34-inch pitch
Maximum range (winglets)	3,115nm (5,760km)
Technical characteristics	
MTOW	79 tonnes (174,200lb)
OEW	41.1 tonnes
MZFW	61.7 tonnes
Fuel capacity	26,020 litres
Engines	CFM56-7B
Thrust	27,300lbf (121kn)
Fuels and times	
Block fuel 200 nautical miles (nm)	2,000kg
Block fuel 500nm	3,530kg
Block time 200nm	54 minutes
Block time 500nm	94 minutes
Fleet data	
Entry into service	1998 (first delivery 1997)
In service	4,073
Operators (current)	192
In storage	40
On order	855
Built peak year (2015)	349
Planned production 2016	492
Average age	6.8 years

Source: *Airfinance Journal* Fleets

Indicative maintenance reserves	
C-check reserve	$65-$70 per flight hour
Higher checks reserve	$50-$55/flight hour
Engine overhaul	$115-$120/engine flight
Engine LLP	$120-$125/engine cycle
Landing gear	$45-$50/cycle
Wheels, brakes and tyres	$70-$75/cycle
APU	$80-$85/APU hour
Component overhaul	$210-$220/flight hour

Source: Air Investor 2016

“Reductions in values may be offset by the launch of a number of passenger-to-freighter conversion programmes.”

Angus Mackay, principal, ICF

ISTAT APPRAISERS’ VIEWS

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

ICF
Angus Mackay, principal

Oriel
Olga Razzhivina, senior Istat appraiser

Market availability of 737-800s continues to be limited for younger models because of the strong demand for the aircraft in recent years. The Boeing narrowbody has continued to fare well in the current environment because it is still viewed as one of the most desirable single-aisle models for operators and investors alike. However, with the 737 Max almost in service, CV is finding that aircraft more than 10 years old have become much less desirable for operators and investors. Published data indicates that the majority of available aircraft fall within this age category, which explains the softness in values for such models.

CV sees monthly rates for operating leases of new aircraft at between $340,000 and $360,000 a month. The increasing of the production rate by Boeing is a bit of a concern, because it potentially increases availability to the market – putting further pressure on the values and lease rates of older models. Nonetheless, CV believes the current value trends should continue in the near term.

Overall, CV feels that the long-term viability of this aircraft remains good, especially for younger aircraft. The new cargo conversion programmes for the aircraft (see box) will offer a solution for some of the fleet, but this will most likely be for small numbers relative to the overall fleet size. The diversified operator base, current order backlog and ease of marketability should ensure that this aircraft remains desirable in the marketplace for many years to come.

As of 15 August, there were about 4,070 737-800s in active commercial operation, with just 13 of the type advertised as available – a level of fleet availability indicative of a strong overall market for the aircraft type. The order backlog is also strong, with Boeing expanding production capacity to 52 NG and Max aircraft a month by 2018.

With significant operational flexibility, a large in-service fleet and a broad operator base, the 737-800 has achieved excellent market penetration. However, the A320 is a formidable adversary, also with a large in-service fleet and operator base. The latest variant of the Airbus aircraft can offer an increase in range over the 737-800 of about 200 nautical miles, albeit with slightly lower capacity.

The 737-800 faces significant competition from the new engine option (neo) A320 model. The early sales successes of the A320neo, which offers a choice of Pratt & Whitney’s PW1100G geared turbofan or CFM’s Leap-1A advanced turbofan, spurred Boeing to launch its new 737 Max family.

Thus the 737-800 must also absorb fraternal competition from its stablemate, which adds to the market expectation of diminished values and lease rates, particularly for late-build examples. However, ICF thinks value diminution will probably be limited until 737 Max deliveries begin in earnest. Reductions in values may be offset by the launch of a number of passenger-to-freighter conversion programmes (see box).

As the most successful member of the 737NG family, the -800 has achieved about 5,000 sales to date. The aircraft, which was first delivered in 1997, is likely to cease production at the end of this decade, as it is replaced by the 737 Max 8 – which appears to be the model that accounts for the lion’s share of orders for the Max family.

The 737-800 is to be found in all types of airline business models, including flag carriers, legacy airlines, charter operators and low-cost carriers. The largest fleet is with Ryanair, which has more than 350 aircraft. About 50% of the fleet is in the hands of lessors, which cherish the liquidity and strong residual value performance of the variant.

Despite the 737 Max 8 being set to supersede the -800 in the next year, orders are still coming in for the incumbent type, including more than 40 aircraft sold this year. Production lines are sold out for the foreseeable future, which points to continuing strong value performance. The variant has been the strongest narrowbody performer during recent financial crises, with any aircraft becoming available quickly finding a home.

The last-off-the-line effect will have an impact on values, but Oriel believes it is likely to be moderated by the large in-service fleet of the 737-800 and the relatively small operational differences between the NG model and its Max successor.

Not surprisingly, given lessor exposure

BOEING 737-800

Current market value ($m)

Build year	2000	2004	2008	2012	2016
CV view	17.2	21.4	29.2	34.4	46.5
ICF view	15.7	20.8	27.4	35.7	46.3
Oriel view	13.2	16.2	21.4	29.2	46.2

Assuming standard Istat criteria.

Indicative lease rates ($’000s/month)

Build year	2000	2004	2008	2012	2016
CV view	190	210	250	290	350
ICF view	170-210	200-250	230-280	270-350	330-400
Oriel view	165	185	225	265	335

> **"Lease rates and market values have weakened in the past 12 months as churn in operator fleets and competition among lessors softens the market."**
>
> **Olga Razzhivina, senior Istat appraiser, Oriel**

to the type, the lease placement market is very active, especially from lessors' orderbooks. Lease extensions were prevalent in 2014/15, but are becoming less common. As more 737-800s leave original operators' fleets, moves to storage and retirements are likely to rise.

Lease rates and market values have weakened in the past 12 months as churn in operator fleets and competition among lessors softens the market. However, it is more a case of the 737-800 coming back to earth after many years defying gravity. Oriel expects any further softening to be gradual given the large numbers that will continue to be in service.

However, lower values may be the stimulus for the freight conversion programmes (see box). Historically successful cargo conversions buoy residual values.

Cargo conversions support 737-800 values

Geoff Hearn looks at passenger-to-freighter conversion programmes for Boeing's most successful single-aisle aircraft.

Industry insiders have been suggesting for several years that, from an operational perspective, the Boeing 737-800 is an ideal candidate for passenger-to-freighter conversion. However, residual values of the passenger version have remained stubbornly high and made conversion uneconomic. There is now a consensus among appraisers that 737-800 passenger-to-freighter conversion programmes are set to play a role in determining values of older models of the type (see Appraisers value 737-800 conversion models, *Airfinance Journal*, June 2016, page 10).

Capital cost is a key driver in the operating cost of small freighter aircraft, because utilisation is typically much lower than what can be achieved for passenger models. There are several reasons for this, but essentially the number of hours an aircraft can fly is limited by the schedules of freight carriers and the tendency to operate on short sectors. Low utilisation means that the lower fuel consumption and other efficiencies of newer-technology aircraft do not offset their increased capital costs.

David Tokoph, chief operating officer of US aviation consultancy MBA, says 737-800s that are suitable for conversion (feedstock in industry parlance) can be acquired for between $10 million and $14 million, which compares to values of $2 million to $3 million for suitable 737-400s. Tokoph adds that, for typical freight operations, the variable cash cost savings the 737-800 offers over the -400 do not offset this difference in capital cost.

However, the operating cost argument is academic because there are few remaining 737-400 feedstock aircraft. Tokoph says that to be suitable for conversion to freighters, feedstock aircraft need to have operated relatively few cycles, so that they have sufficient remaining life to operate the high cycle schedules typical of short-haul freighter operations.

The 737-800 appears to be an attractive proposition for freight conversion specialists, not least because of the prospect of a large pool of feedstock aircraft. Boeing launched the 737-800 Boeing Converted Freighter (BCF) in early 2016, setting up a competition with specialist US conversion company AEI, which formally launched its 737-800SF in October 2014. Israel's Bedek has also launched a programme but, unlike Boeing and AEI, it has yet to announce any orders.

Boeing is bullish about demand for converted freighters in the 737-800 category, suggesting that over the next 20 years about 1,000 such aircraft will be required, with Chinese domestic airfreight carriers accounting for nearly one-third of the total.

Early order trends suggest that Boeing's optimism may not be misplaced. The manufacturer says it has up to 59 orders and commitments for the 737-800BCF.

Robert Convey, senior vice-president sales and marketing, AEI, tells *Airfinance Journal* that a recent order from an unannounced customer has taken the company's 737-800SF orders to 85. Convey says the conversion company expects to have 100 orders by the end of the year. He agrees with Boeing that China will be an important market, but he believes Boeing's estimate of a requirement for 1,000 aircraft is high.

In addition to acquiring feedstock aircraft, potential purchasers of 737-800 conversions need to factor in the cost of conversion. Convey says that the cost of a conversion from AEI is $3.5 million at January 2017 price levels. *Airfinance Journal* understands that the price of the Boeing conversion is between $4.5 million and $5 million.

MBA's Tokoph says feedstock 737-800s can be acquired for between $10 million and $14 million

There is a view in the industry that current 737-800 values mean that conversion does make sense for owners of aircraft, but it is unlikely that third parties will purchase aircraft with a view to converting them. One analyst suggests to *Airfinance Journal* that values would need to be closer to $8 million to make it economic for third parties to acquire aircraft speculatively.

The prominence of lessors in the orderbooks lends weight to this argument. Lessors and financiers will no doubt be hoping that this strategy will support 737-800 values as the availability of competing new-generation models increases.

LOANS/FINANCE LEASES

Borrower	Country	Asset	Amount	Structure/status (closed unless stated)	Arranger	Debt/Equity
August						
Bangkok Airways	Thailand	1xATR72-600	$16.4m (CMV*)	Commercial loan	CA-CIB	Bangkok Bank Public, CA-CIB, Kasikornbank
NAC	Denmark	7xATR72-600	Undisclosed	Commercial loan	KfW IPEX-Bank	KfW IPEX-Bank
Amedeo	Ireland	1x777-300ER	$150m	Commercial loan		Westpac Banking, China Construction Bank, National Bank of Abu Dhabi
Wings Capital Partners	US	9 aircraft	$275m	Secured commercial loan	CA-CIB	CA-CIB, DVB Bank
Allegiant Travel Company	US	3xA319	$42m	Secured commercial loan		
Etihad	UAE	787-9	$136.2m (CMV*)	Jolco	CA-CIB	CA-CIB, ING
Cathay Pacfic	China	1xA350-900	$144.5m (CMV*)	Commercial financing	CA-CIB	
American Airlines	US	3xA321s	$157.8m (CMV*)	Commercial financing	BNP Paribas, KFW IPEX-Bank, Sumitomo Mitsui Trust Bank	
July 2016						
CALC	China	2xA320	$88.4 (CMV*)	Jolco	Asset Brok'Air	CA-CIB
Guggenheim Aviation Partners	US	9x737-900ER	$445.5m (CMV*)	Term loan	CA-CIB	
AWAS	Ireland	1x787-9	136.2m (CMV*)	Commercial loan	CA-CIB, DVB Bank	CA-CIB, DVB Bank
China Airlines	China	2xA350-900	Undisclosed	Yuan-backed financing	Bank of Taiwan, Bank of Communications (Taiwan)	
Avation	Singapore	1xA321	$52.6m (CMV*)	Commercial financing	CA-CIB	CA-CIB, Investec Bank
June 2016						
Jackson Square Aviation	US	1xA321	$52.6m (CMV*)	Term loan	CA-CIB	
Aircastle	US	17 aircraft	$400.5m	Term loan	BNP Paribas, CA-CIB, Bank of Tokyo-Mitsubishi UFJ	ING Bank, Columbia State Bank
Awas	Ireland	1xA320	Undisclosed	Commercial loan	Bank of America	
Turkish Airlines	Turkey	2xA321	$105.2m (CMV*)	French tax lease	CA-CIB	
NAC	Denmark	1xATR72-600	Undisclosed	Jolco	FPG	FPG, DVB Bank, Korea Development Bank
AerCap	Ireland	Undislosed	Undisclosed	Jolco	FPG	Sumitomo Mitsui Bank, CA-CIB
Shenzen Airlines	China	1xA320	$44.2m (CMV*)	10-year finance lease	CCB Leasing	
Ethiopian Airlines	Ethiopia	A350s	$107.5m	PDP financing	ING Capital	ING Capital
CALC	China	1xA320	$44.2m (CMV*)	Commercial financing	CA-CIB	

EXPORT CREDIT DEALS

Borrower	Country	Asset	Amount	Structure/status (closed unless stated)	Arranger/status (closed unless stated)	Debt
August 2016						
AeroCentury	US	2xCRJ1000	19.7 million	ECA loan from EDC		
July 2016						
Braathens Aviation	Sweden	6xATR72-600	Undisclosed	First unit closed	Deutsche Bank, Credit Agricole-CIB	Deutsche Bank, Credit Agricole-CIB
June 2016						
Air Nostrum	Spain	4xCRJ1000	Undisclosed	ECA loan from EDC		
CityJet	Ireland	8xCRJ900	Undisclosed	ECA loan from EDC		

DEAL PIPELINE (MANDATES)

Borrower	Country	Asset	Structure	Amount	Status
June to August 2016					
EasyJet	UK	25 A319	Sale and leaseback	Undisclosed	RFP out
Turkish Airlines	Turkey	3x777-300ER, 1xA330-200, 2xA321, one spare engine	TBD	TBD	RFP out
Air Astana	Kazakhstan	3x787-8	Ex-Im guaranteed loan	TBD	
Air India	India	2x787	Bridge financing	$225m	Shortlist imminent

*Current market value (as per Air Investor 2016 unless stated)

DEAL WATCH

CAPITAL MARKETS

Borrower	Country	Asset/Security	Amount	Structure/status (closed unless stated)	Arranger/status (closed unless stated)	Coupon/Rating
August 2016						
CALC	China	Unsecured	$300m	Senior notes	CEBHK, DBS Bank	4.9%
GTLK	Russia	Unsecured	$500m	Eurobond	JP Morgan, Renaissance Capital, UBS	5.95%
Castlelake	US	52 aircraft	$916m	ABS	Deutsche Bank, Goldman Sachs	4.45% (A), 6.15% (B) and 8.00%
July 2016						
SMBC Aviation Capital	Ireland	Unsecured	$500m	Senior notes	Citibank, JP Morgan, Royal Bank of Canada, SMBC Niko, Credit Agricole	2.65%
Norwegian	Norway	Unsecured	$20.7m	Senior notes	N/A	4.76%
June 2016						
Aergen	Ireland	ABS	$325m	ABS	Deutsche Bank	N/A
ABC Leasing	China	Unsecured	$500m	Senior notes	ABC International, Agricultural Bank of China, CICC HK Securities	2.5%
EA Partners	UAE	Unsecured	$500m	CLO	ADS Securities, Anoa Capital, Goldman	6.75%
American Airlines	US	8 aircraft	$226.9m	EETC	Credit Suisse, Deutsche Bank	4.38%
United Airlines	US	18 aircraft	$1.05bn	EETC	Citigroup, Deutsche Bank, Bank of America Merrill Lynch , Barclays, BNP Paribas, CA-CIB	3.1% (AA), 3.45%

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SALE AND LEASEBACKS

Borrower	Country	Asset	Lessor/Arranger	Amount	Status
August 2016					
Iberia	Spain	4xA330-200	CIT Aerospace	$379.2m (CMV*)	10-year leases
Avianca	Colombia	4x787-8	SMBC Aviation Capital	$472.8 (CMV*)	All delivered
TransAsia Airways	Taiwan	2xA321	Aircastle	Undisclosed	12-year leases, one delivered
Air India	India	3x787-8	Fly Leasing	$354.6m (CMV*)	12-year leases
Thai Lion	Thailand	737-900ER	BOC Aviation	$49.5m (CMV*)	12- year leases
Lion Air	Indonesia	3x737-900ER	Novus	Undisclosed	
Lion Air	Indonesia	2x737-800, 2x737-900ER	BOC Aviation	Undisclosed	
July 2016					
Oman Air	Oman	2x737-800	DAE	$95m (CMV*)	
Etihad	UAE	1x787-9	Goshawk	$136.2m (2016 CMV*)	Will be delivered in 2017
Ibex Airlines	Japan	1xCRJ-700	Showa Leasing	$22.3m (CMV*)	Five-year lease
9 Air	China	1x737-800	Shanghai Guojin Haisheng Leasing	$47.5m (CMV*)	Delivered, 12-year lease
June 2016					
Flydubai	UAE	8x737-800	BBAM, JSA, undisclosed leasing company	$380m (CMV*)	Eight-year leases
Shangdong Airlines	China	1x737-800	SODB Financial Leasing	$47.5m (CMV*)	Delivered, 12-year lease
TransAsia Airways	Taiwan	2xA321	Unidentified	Undisclosed	
Emirates	UAE	1xA380	AFC	$221.4m (CMV*)	Delivered, 12-year ijarah lease
Etihad	UAE	5x787-9	BBAM	Undisclosed	
SAS	Sweden	13xA320neo	SMBC Aviation Capital, JSA	Undisclosed	

* Current market value (as per Air Investor 2016 unless stated)

AIRFINANCE JOURNAL DEALS

RATINGS

AIRLINE FINANCIAL RATINGS

Airline	Fitch	Moody's	S&P
Aeroflot	B+(stable)	-	-
Air Canada	B+(pos)	B1(stable)	B+(pos)
Air New Zealand	-	Baa2(stable)	-
Alaska Air Group	BBB-(watch	-	BBB-(watch neg)
Allegiant Travel Company	-	Ba3(stable)	BB(stable)
American Airlines Group	BB-(stable)	Ba3(stable)	BB-(stable)
Avianca Holdings - IFRS	B(neg)	-	B(stable)
British Airways	BB+(pos)	Baa3(stable)	BB(pos)
Delta Air Lines	BBB-(stable)	Baa3(stable)	BB+(stable)
Easyjet	-	Baa1(stable)	BBB+(stable)
Etihad Airways	A(stable)	-	-
GOL	CC	Caa3(neg)	CCC(neg)
Hawaiian Airlines	B+(stable)	B1(stable)	BB-(stable)
Jetblue	BB-(stable)	Ba3(stable)	BB-(stable)
LATAM Airlines Group	B+(neg)	B1(stable)	BB-(neg)
Lufthansa Group	-	Ba1(pos)	BBB-(stable)
Qantas Airways	-	Baa3(stable)	BBB-(stable)
Ryanair	BBB+(stable)	-	BBB+(stable)
SAS	-	B2(stable)	B(stable)
Southwest Airlines	BBB+(stable)	Baa1(pos)	BBB(stable)
Spirit Airlines	BB+(stable)	-	BB-(stable)
Turkish Airlines	-	Ba3(neg)	BB-(neg)
United Continental Holdings	BB-(pos)	Ba3(pos)	BB-(pos)
US Airways Group	-	B1(stable)	-
Virgin Australia	-	B2(neg)	B+(neg)
WestJet	-	Baa2(stable)	BBB-(stable)

Source: Ratings Agencies - 23rd August 2016

LESSOR CREDIT RATINGS

Lessor	Fitch	Moody's	S&P
AerCap	BBB-(stable)	Ba1(stable)	BBB-(stable)
Air Lease Corp	-	-	BBB-(pos)
Aircastle	-	Ba1(stable)	BB+(stable)
Avation PLC	B+(stable)	-	B(stable)
Aviation Capital Group	BBB(stable)	-	A-(stable)
AWAS Aviation Capital Limited	-	Ba3(stable)	BB+(neg)
BOC Aviation	A-(stable)	-	A-(stable)
CIT Group Inc	BB+(stable)	Ba3(stable)	BB+(stable)
DAE Aviation Holdings	-	-	B-(stable)
Fly Leasing	-	B1(pos)	BB(stable)
ILFC (Part of AerCap)	-	Ba1(stable)	-
SMBC Aviation Capital	BBB+(neg)	-	BBB+(stable)

Source: Ratings Agencies - 23rd August 2016

AVIATION COMPANY RATINGS

Company	Fitch	Moody's	S&P
Airbus Group	A-(stable)	A2(stable)	A(pos)
Boeing	A(stable)	A2(stable)	A(stable)
Bombardier	B(neg)	B2(stable)	B(neg)
Embraer	BBB-(stable)	Ba1(neg)	BBB(neg)
Rolls-Royce	A(neg)	A3(stable)	A-(neg)
United Technologies	A-(stable)	A3(stable)	A-(stable)

Source: Ratings Agencies - 23rd August 2016

AIRFINANCE JOURNAL
DEALS

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AIRCRAFT ORDERS

COMMERCIAL AIRCRAFT ORDERS BY MANUFACTURER

	Gross orders 2016	Cancellations 2016	Net orders 2016	Net orders 2015
Airbus	373	50	323	117
Boeing	384	49	335	183
Bombardier	244	12	232	136
Embraer	45	0	45	30
ATR	40	0	40	40

Based on *Airfinance Journal* research and manufacturer announcements as of 24 August

COMMERCIAL AIRCRAFT ORDERS BY CUSTOMER

Customer	Country	Quantity/Type
May 2016 to August 2016		
Trident Jet	UK	4xCRJ900
Awas	Ireland	12xA320s / 3xA321
Air Canada	Canada	45 CS300
ALC	US	1xA321
ALC	US	3xA350-900
Standard Chartered Bank	UK	10x737-800
Virgin Atlantic	UK	8xA350-1000
AirAsia	Malaysia	100xA321neo
Air Cote d'Ivoire	Ivory Coast	1xA320neo
ALC	US	6x737 Max 8
Arkia Israeli Airlines	Israel	6xE195-E2
Arkia Israeli Airlines	Israel	4xA330-900neo
Calc	China	30xARJ21-700
Germania Group	Germany	25xA320neo
Kalstar Aviation	Indonesia	5xE190-E2
NAC	Denmark	4xE190
Porter Airlines	Canada	3xQ400
TUI Group	Germany	10x737 Max 8, 1x787-9
Volga-Dnepr Group	Russia	20x747-8
Wow Air	Iceland	4xA321
Ruili Airlines	China	6x787-9
Synergy Aerospace	Colombia	62xA320neo
Air Europa	Spain	20x737 Max 8
Egyptair	Egypt	9x737-800
Donghai Airlines	China	25x737 Max 8, 5x787-9
Allegiant Travel Company	US	12xA320
Xiamen Airlines	China	6x787-9
Malaysia Airlines	Malaysia	50x737Max
Tanzanian Government	Tanazania	2xQ400
Jet Blue	US	15xA321, 15xA321neo
Cebu Pacific	Phillipines	2xA330

PRICES AND VALUES

CURRENT PRODUCTION AIRCRAFT PRICES AND VALUES ($ MILLIONS)

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

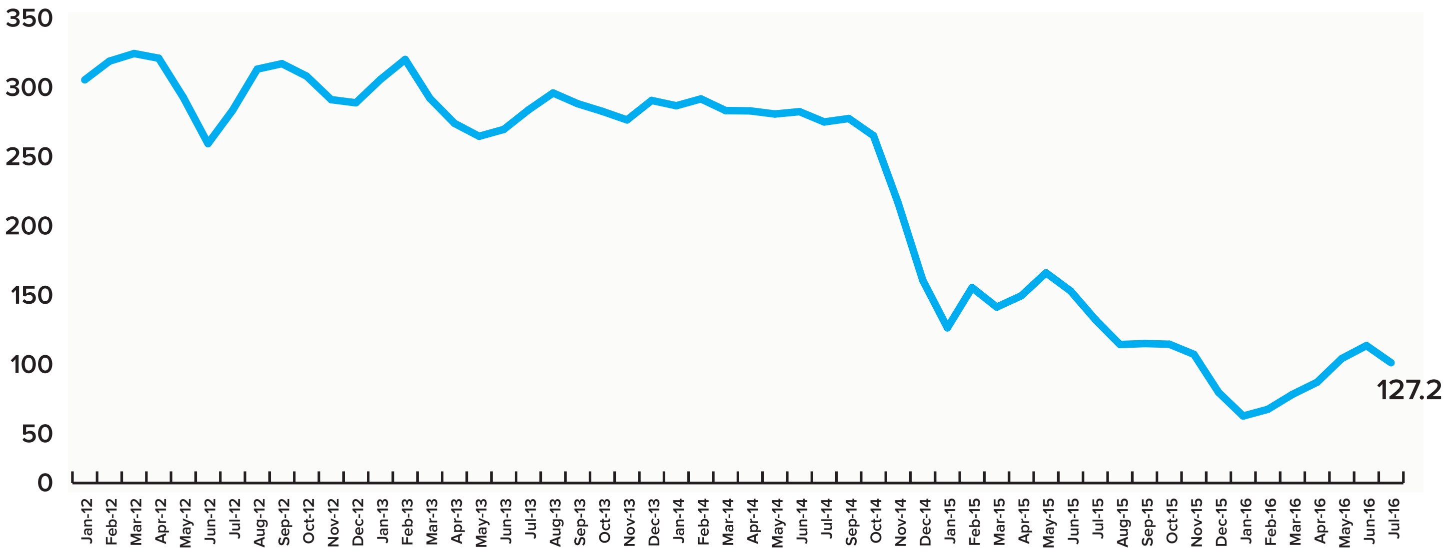
*Based on Istat appraiser inputs for Air Investor 2016

AIRCRAFT LIST PRICES - NEW MODELS

Model	$ millions
Airbus (2016 prices)	
A319neo	98.5
A320neo	107.3
A321neo	125.7
A330-800neo	252.3
A330-900neo	287.7
A350-800	272.4
A350-1000	355.7
Boeing (2016)	
737 Max 7	90.2
737 Max 8	110.0
737 Max 9	116.6
777-8X	371.0
777-9X	400.0
787-10	306.1
Bombardier (2015)	
CS100	71.8
CS300	82.0
Embraer (2016)	
E175-E2	50.8
E190-E2	58.2
E195-E2	65.6

FUEL AND LEASE RATES

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



Source: US Energy Information Administration

LEASE RATES ($000s)

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

Based on Istat appraiser inputs for Air Investor 2016

PILARSKI SAYS

Dark clouds of globalisation

Standardisation in airlines is making it boring to fly in the USA, writes Adam Pilarksi, senior vice-president at Avitas.

A well-known industry pundit recently wondered how come the big three US airlines are beginning to resemble each other in service, fees and amenities.

He claims that from the flying public point of view, the big three mirror each other and pursue strategies that will ensure such a reality prevails for a long time.

They look alike – their aircraft do – they act alike and, if one institutes changes, the others follow in amenities, policies and the like.

This standardisation does not always work to the benefit of consumers. If one of the three changes their reward system to the detriment of the passengers, others immediately follow. The times of innovative personalities and a desire for uniqueness is a way of the past.

Today, boredom and sameness are in. Flying in the USA is boring and the only opportunity we get to experience something different is to fly foreign carriers.

Anybody who took one economics class can easily figure out the reasons for such developments. As six huge airlines were allowed to merge into three mega carriers, competition took a subjugated role to airline industry profitability. Such development has to happen unless foreign competition is allowed.

And since it is not, boredom it is.

The big three airlines proclaim that the developments in the way they operate are driven by what consumers want, though sometimes such claims are hard to stomach, such as when they all raise penalty fees for flight changes.

Such statements in general are correct and the airlines do include some improvements that the flying public desires. That sentiment though neglects the simple fact that competition by outsiders would expose the consumers to experiences they do not even know exist and that would continuously change the flying experience.

Airlines would not appreciate such inputs since they would involve moving from their comfort zone, but under real competition, they would have to be more creative and change.

One of the greatest benefits of international flying is that it exposes the passengers to different realities and changes their behaviour and world outlook. This enhances innovations across the globe. In the US airline industry, we do not have such a push for improvements.

Right now globalisation is under strong attack around the world. In the US, one major presidential candidate talks about building walls and imposing massive tariffs on our major trading partner to combat globalisation. The other candidate talks about creating an "exit" tax to prevent US companies benefiting from the advantages of globalisation by moving jobs abroad.

In Europe, the surprising vote in the United Kingdom regarding Brexit showed how some significant segments of the society feel about integration with the continent.

Economists are as close to unanimous as they can be in supporting free trade and specialisation. As everything in economics, there are trade-offs. It has been recognised that some gain while some may lose because of trade but overall the gains to society greatly outweigh the losses. It is not surprising that those who lose are not happy.

Some jobs in the US are disappearing but overall the unemployment rate is fairly low at 4.9%. Still, those losing out are unhappy and may have found a champion in Mr Trump.

There are three reasons for job losses that are being raised by people dissatisfied with their lot in life who support political candidates previously considered too marginal to gain traction. One is competition from other countries causing jobs to leave the US for those other countries such as China. Another is the existence of government regulations that restricts job creation and the final one is new technology.

After the 18th century when Luddites were smashing machines, the electorate has no longer accepted an anti-technology platform. So attacking those unscrupulous foreigners who work for next to nothing and do not have environmental or labour rights protection is a favourite of the populist movement all over the world. While the facts are fairly clear that most jobs are lost because of technological advancements and that countries previously seen as cheap labour suppliers eventually lose that position, there obviously are a number of people who suffer from change.

The brilliant Austrian economist Joseph Schumpeter called the side effects of economic progress "creative destruction". It is good and necessary for society as a whole, but negative for some. When cars became reality, an elderly horse and buggy driver did not have a good life or good future. Today, he may vote for somebody who can attempt to stop progress.

A new economic order may be brewing, one that relies less on efficiency and more on hearing the voices of those who consider themselves harmed. It is not exactly analogous to communism but potentially a significant change in our way of life.

And how about the boring airline industry in the USA? As long as new foreign entrants are forbidden from changing our customary way of flying I foresee continuation of boredom.

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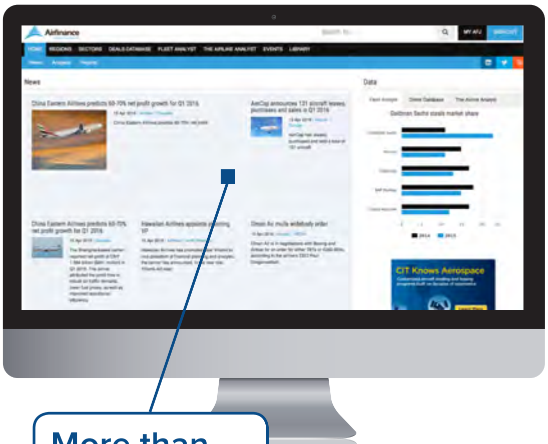

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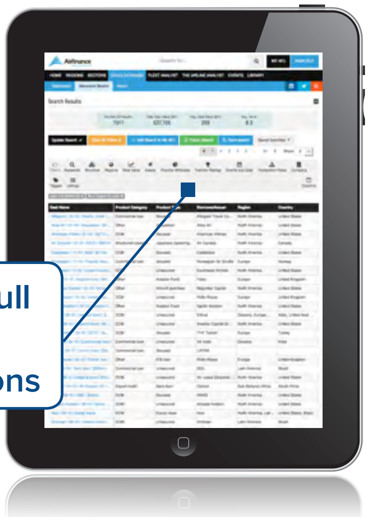

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2nd Annual Africa Airfinance Conference
Addis Ababa, 16th Feb - 17th Feb 2017

The Inaugural Korea Airfinance Conference
Seoul, 9th Mar - 10th Mar 2017

6th Annual Japan Airfinance Conference
Tokyo, 20th Apr - 21st Apr 2017

37th Annual North America Airfinance Conference
18th May - 19th May 2017

15th Annual China Airfinance Conference
Shanghai, 7th Jun - 8th Jun 2017

13th Annual Latin America Airfinance Conference
Rio De Janeiro, 12th Sep - 13th Sept 2017

15th Annual Middle East Airfinance Conference
Dubai, 2017

18th Annual Asia-Pacific Airfinance Conference
Hong Kong, 2017

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