



# Airfinance JOURNAL

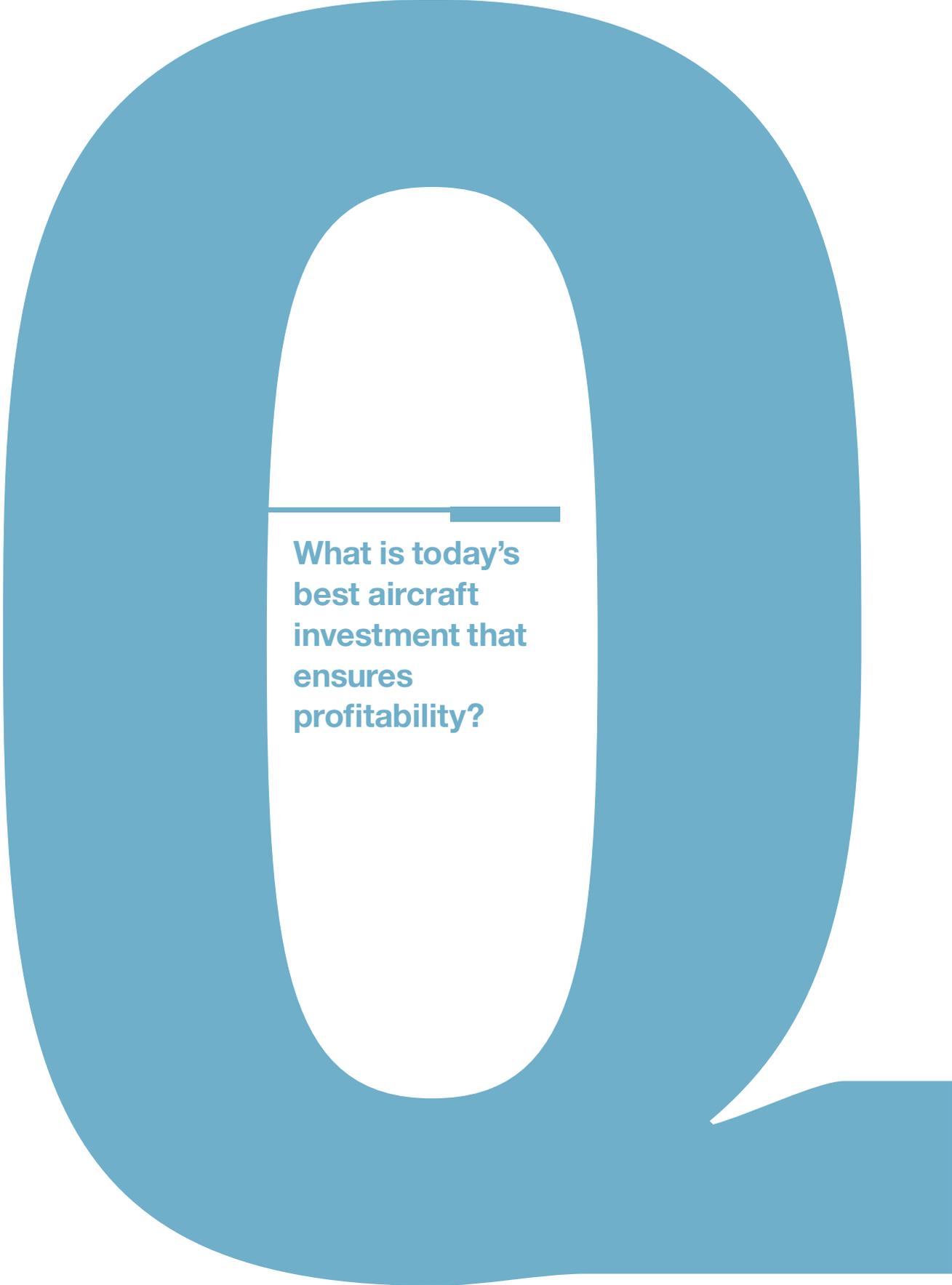
A SUPPLEMENT TO AIRFINANCE JOURNAL SEPTEMBER 2015

FINANCIAL INTELLIGENCE FOR COMMERCIAL AVIATION



A SPECIAL SUPPLEMENT

## The Leasing Top 50 2015



**What is today's  
best aircraft  
investment that  
ensures  
profitability?**



**AIRBUS**

Airbus Widebody aircraft.  
Offering standard 18 inch wide  
seats in economy. Unrivalled low  
operating costs of the A330, 25%  
less fuel burn with the A350 XWB,  
up to 65% more profit per flight with  
the A380.

**Airbus is the answer.**





## EDITORS' LETTER

# Attractive returns

Geoff Hearn, *Airfinance Journal's* technical editor, and *The Airline Analyst's* managing director Michael Duff take a look at the largest lessors in the market, and how changing aircraft technology and other risks might impact them.

Judging by the appetite of large financial institutions to acquire them, commercial aircraft leasing companies must be doing something right. The financial world may be very nervous about China's economic problems, but the country's financial worries do not seem to have dampened the enthusiasm of Chinese corporations for the acquisition of lessors. HNA Group's recent agreement to buy Irish lessor Avolon, valuing its market capitalization at about \$2.5 billion, is a clear case in point.

There also seems to be an appetite for acquiring large portfolios of aircraft when they become available. The agreement by Macquarie to acquire \$4 billion-worth of Awas's portfolio earlier this year took place after a competitive bidding process, which included some established big names in the aircraft leasing sector. So industry insiders also seem to think that things are looking good.

This confidence and the pursuit of higher returns in a low interest rate environment may in part explain the growth in new institutions getting into the sector. Cheung Kong, New World and Chow Tai Fook of Hong Kong have all entered the sector in the past year through their lessor entities Accipiter, Vermillion and Goshawk. Both Accipiter and Goshawk have made it into the Top 50 list – the Vermillion fleet continues to be managed by MCAP. In the turboprop sector, Oaktree/Elix have significantly increased their investment with their fleet size up to 44, though still a long way behind market leader Nordic Aviation Capital with 235.

Industry optimists, who presumably include those mentioned above, will point to the steady and attractive returns to investors (aircraft value impairments notwithstanding) that aircraft leasing has provided in recent years. These are analyzed in the section Lessors' Financials on page 6.

So is there no need for caution? In an industry that is highly dependent on the value of its assets, the arrival of new models that provide significant technological benefits must surely be of concern and raise the threat of obsolescence?

The Boeing 737 Max and the A320neo certainly provide significant advantages over their predecessors as the huge number of orders for the types testifies, and some might wonder where all those new aircraft will go.

The optimists have an answer, pointing to the prediction that growth, not replacement, will be the main driver of aircraft acquisitions. They have a point; demand for air travel continues to grow and, importantly, many airlines seem to have mastered capacity management with the consequent benefits for profitability.

But things can go wrong. The small regional jet market was once thriving, but now owners are scratching around to place aircraft. More tellingly, the headline "777-300ER – a remarketing challenge" in the July/August edition of *Airfinance Journal* points to problems for a type that was once considered the gold standard for widebody aircraft. If the 777 is proving difficult to place, then other types may really be in trouble and there is perhaps room for tempering the optimism about the assets that are central to the business.

Another area of risk is lessee credit quality. The past year has seen a bankruptcy in Japan (Skymark) that has severely impacted its primary lessor. The downsizing of Russian airlines' leased fleets has had a broader impact, as has the restructuring and shrinking at MAS. SpiceJet has given a number of lessors severe headaches. As the airline industry becomes more concentrated, diversification of lessee risk will become more difficult.

One other area for caution is the outlook for interest rates. Lessors have enjoyed unprecedented access to liquidity at record low interest rates for the past few years. BOC Aviation achieved the lowest average cost of debt in 2014 at 2%. The 15 lessors whose financial results are in the public domain made an aggregate net profit of \$2.3 billion in 2014/15. However, adding 200 basis points to their debt interest rates would add about \$1.7 billion to their pre-tax costs.

Our conclusion: the returns are attractive but are not without risk. Proceed with caution. ▲

GEOFF HEARN  
Technical editor  
*Airfinance Journal*

MICHAEL DUFF  
Managing director  
*The Airline Analyst*



Supplement editor  
**Geoff Hearn**  
 +44 (0)20 7779 8853  
 geoff.hearn@euromoneyplc.com

Contributor  
**Michael Duff**  
 The Airline Analyst  
 +44 (0) 7736 804460

Reporter  
**Joe Kavanagh**  
 +44(0)20 7779 8072  
 joe.kavanagh@euromoneyplc.com

Reporter  
**Michael Allen**  
 +44(0)20 7779 8029  
 Michael.allen@euromoneyplc.com

Reporter  
**Jack Dutton**  
 +44(0)20 7779 8734  
 Jack.Dutton@euromoneyplc.com

Group sub editor  
**Peter Styles Wilson**

Production editor  
**Clare Wood**

Publisher  
**Bryn Hossack**  
 +44 207 779 8857  
 bhossack@euromoneyplc.com

Advertisement Manager  
**Chris Gardner**  
 +44 (0)20 7779 8231  
 chris.gardner@euromoneyplc.com

Senior Account Manager  
**Chris Welding**  
 T: +44 (0) 207 779 8015  
 chris.welding@euromoneyplc.com

Senior Marketing Executive  
**Eva-Maria Sánchez**  
 +44 (0) 207 779 8450  
 eva.sanchez@euromoneyplc.com

Business group manager  
**Andy Cook**  
 +44 (0)20 7779 8207  
 andy.cook@euromoneyplc.com

Divisional director  
**Danny Williams**

SUBSCRIPTIONS / CONFERENCES HOTLINE  
 +44 (0)20 7779 8999 / +1 212 224 3570  
 hotline@euromoneyplc.com

CUSTOMER SERVICES  
 +44 (0)20 7779 8610  
 4 Bouverie Street, London, EC4Y 8AX

Executive chairman: Richard Ensor  
 Directors: Sir Patrick Sergeant, The Viscount Rothermere,  
 Neil Osborn, Dan Cohen, John Botts, Colin Jones, Diane Alfano,  
 Christopher Fordham (managing director), Jaime Gonzalez,  
 Jane Wilkinson, Martin Morgan, David Pritchard, Bashar Al-Rehany  
 Printed in the UK by Buxton Press.  
 No part of this magazine can be reproduced without  
 the written permission of the Publisher. The Airfinance  
 Journal Ltd. Registered in the United Kingdom 1432333  
 (ISSN 0143-2257).  
 Airfinance Journal (USPS No: 022-554) is a full service business website and  
 e-news facility with printed supplements for \$1,850/£1,395/€1,085\*  
 a year by Euromoney Institutional Investor PLC. (\*£ and € prices are  
 subject to VAT)

Although Euromoney Institutional Investor PLC has made every effort to ensure the accuracy of this publication, neither it nor any contributor can accept any legal responsibility for consequences that may arise from errors or omissions or any opinions or advice given. This publication is not a substitute for specific professional advice on deals.  
 ©Euromoney Institutional Investor 2013

# CONTENTS



[Editors' letter /02](#)

[Top 50 lessors by number of aircraft /04](#)

[Top 50 lessors by fleet value /05](#)

[Lessors' financials compared /06](#)

An in-depth analysis and comparison of the financials behind some of the leading aircraft leasing companies.

[Top 10 leasing profiles /18](#)

The leading lessors ranked by size of fleet.

[Change at the top /28](#)

Norman Liu, chief executive officer, Gecas, talks about recent changes at the company and reveals some of the lessor's strategies.

[Sponsored editorial /31](#)

Paul Smith, senior vice-president, TES, looks at the issues facing investors as their aircraft near retirement.

[Analysis: The world's leased fleet /33](#)

[Regional profile: Russia /41](#)

Russian lessors are operating in a difficult climate.

[Lessor profile: VEB Leasing /42](#)

[Regional profile: China /43](#)

Five Chinese lessors are ranked in our Top 50.

[Lessor profile: HKAC /44](#)

[Regional profile: Japan /45](#)

Japanese lessors continue to be prominent industry players.

[Lessor profile: MCAP /46](#)

[Regional profile: Middle East /47](#)

The region has seen several leasing companies start up in the past year.

[Lessor profile: Novus /48](#)

# Top 50 lessors by number of aircraft

Rank	Lessor	Total	Turboprop	Regional Jet	Narrow-body	Wide-body
1	GECAS	1,608	31	374	1,035	168
2	AerCap	1,279	-	4	970	305
3	BBAM (incl NBB & Fly)	413	-	2	357	54
4	SMBC Aviation Capital	393	-	7	378	8
5	CIT Aerospace	313	-	30	235	48
6	AWAS <sup>1</sup>	295	-	-	242	53
7	Aviation Capital Group	273	-	-	264	9
8	BOC Aviation	256	-	16	204	36
9	Air Lease Corporation	251	18	27	162	44
10	Nordic Aviation Capital	249	219	19	11	-
11	Macquarie AirFinance <sup>1</sup>	176	-	4	160	12
12	ICBC Leasing	173	-	13	131	29
13	Avolon	166	-	6	140	20
14	ORIX Aviation	148	-	2	132	14
15	Aircastle	141	-	5	77	59
16	Avmx	136	89	47	-	-
17	CDB Leasing	120	-	20	68	32
18	Pembroke	119	-	-	96	23
19	Jackson Square Aviation	110	-	-	97	13
20	MC Aviation Partners	92	-	-	69	23
21	VEB-Leasing	84	3	20	32	29
22	Skyworks Leasing	76	-	19	42	15
23	Hong Kong Aviation Capital	76	-	12	47	17
24	Falko	67	4	54	9	-
25	DAE Aerospace	62	7	-	31	24
26	Apollo Aviation Group	61	-	1	49	11
27	Cargo Aircraft Management	57	-	-	10	47
28	Castlelake	55	-	6	33	16
29	Investec	52	12	2	28	10
30	ASL Aviation Group	51	26	-	25	-
31	BOCOM Leasing	49	-	-	38	11
32	Sky Holding	49	-	-	40	9
33	ALAFCO	49	-	-	46	3
34	CALC	47	-	-	43	4
35	Century Tokyo Leasing Corporation	46	-	8	26	12
36	Aircraft Purchase Company	45	-	2	38	5
37	Amentum Capital	45	-	5	28	12
38	Elix Aviation Capital	44	44	-	-	-
39	Accipiter	44	-	-	42	2
40	Guggenheim Aviation Partners	43	-	-	21	22
41	Ilyushin Finance Corporation	43	-	15	22	6
42	Aerocentury	40	27	13	-	-
43	VTB Leasing	40	-	2	24	14
44	Jetscape	38	-	36	2	-
45	Doric	38	2	-	5	31
46	GOAL	36	9	12	12	3
47	Goshawk Aviation	35	-	1	34	-
48	DVB/Deucalion	35	-	-	19	-
49	Aergo Capital	35	-	2	33	-
50	Avation	31	20	6	5	-
	<b>Total</b>	<b>8,184</b>	<b>511</b>	<b>792</b>	<b>5,612</b>	<b>1,253</b>

Source: AtlasData: as of 31st July 2015

Includes aircraft on lease and off-lease/stored; excludes lessors who have more aircraft stored than leased

<sup>1</sup> Includes transfer of first 37 of the 90 aircraft sale from AWAS to Macquarie



# Top 50 lessors by value of fleet (\$m)

Rank	Lessor	Total	Turboprop	Regional Jet	Narrow-body	Wide-body
1	AerCap	\$36,645	-	\$56	\$21,597	\$14,992
2	GECAS	\$35,507	\$407	\$2,755	\$22,981	\$9,364
3	BBAM (incl NBB & Fly)	\$13,617	-	\$41	\$8,902	\$4,674
4	SMBC Aviation Capital	\$12,310	-	\$147	\$11,412	\$752
5	BOC Aviation	\$10,396	-	\$473	\$6,630	\$3,293
6	CIT Aerospace	\$9,588	-	\$769	\$6,257	\$2,561
7	Air Lease Corporation	\$9,393	\$308	\$677	\$4,960	\$3,448
8	AWAS <sup>1</sup>	\$8,772	-	-	\$6,464	\$2,308
9	ICBC Leasing	\$7,144	-	\$228	\$4,428	\$2,488
10	Aviation Capital Group	\$7,022	-	-	\$6,834	\$188
11	Avolon	\$6,890	-	\$134	\$4,763	\$1,993
12	Pembroke	\$4,996	-	-	\$3,081	\$1,915
13	Jackson Square Aviation	\$4,921	-	-	\$3,440	\$1,481
14	Aircastle	\$4,885	-	\$137	\$1,316	\$3,432
15	CDB Leasing	\$4,840	-	\$525	\$2,158	\$2,157
16	Macquarie AirFinance <sup>1</sup>	\$4,506	-	\$69	\$4,019	\$418
17	Doric	\$4,003	\$28	-	\$119	\$3,856
18	ORIX Aviation	\$3,588	-	\$55	\$3,059	\$473
19	VEB-Leasing	\$3,367	\$38	\$393	\$886	\$2,050
20	MC Aviation Partners	\$3,190	-	-	\$2,320	\$870
21	DAE Aerospace	\$3,082	\$94	-	\$816	\$2,172
22	Nordic Aviation Capital	\$3,029	\$2,576	\$423	\$31	-
23	Hong Kong Aviation Capital	\$2,418	-	\$313	\$1,268	\$838
24	BOCOM Leasing	\$2,377	-	-	\$1,280	\$1,098
25	Intrepid Aviation	\$2,131	-	-	\$47	\$2,084
26	Amentum Capital	\$1,803	-	\$94	\$727	\$981
27	CALC	\$1,743	-	-	\$1,429	\$314
28	Accipiter	\$1,714	-	-	\$1,519	\$195
29	ALAFCO	\$1,669	-	-	\$1,346	\$324
30	Century Tokyo Leasing Corporation	\$1,610	-	\$172	\$775	\$662
31	Investec	\$1,574	\$172	\$39	\$774	\$589
32	Guggenheim Aviation Partners	\$1,315	-	-	\$208	\$1,107
33	Goshawk Aviation	\$1,032	-	\$27	\$1,005	-
34	Banc Of America Leasing	\$994	-	-	\$483	\$512
35	Dragon Aviation Leasing	\$994	-	-	\$895	\$99
36	DP Aircraft	\$978	-	-	-	\$978
37	DVB/Deucalion	\$958	-	-	\$293	\$665
38	Novus Aviation	\$948	-	\$5	\$55	\$889
39	Apollo Aviation Group	\$939	-	\$2	\$689	\$248
40	Aircraft Purchase Company	\$930	-	\$45	\$669	\$216
41	Aircraft Leasing & Management	\$879	\$10	-	\$587	\$282
42	Titan Aviation Leasing	\$839	-	-	\$59	\$780
43	Showa Leasing	\$833	\$129	\$115	\$257	\$331
44	Castlelake	\$794	-	\$75	\$579	\$140
45	Jetscape	\$763	-	\$722	\$41	-
46	GOAL	\$615	\$124	\$251	\$207	\$33
47	East Merchant	\$594	-	-	-	\$594
48	Skyworks Leasing	\$580	-	\$43	\$416	\$121
49	Aldus Aviation	\$552	-	\$552	-	-
50	Minsheng Financial Leasing	\$544	-	-	\$544	-
<b>Total</b>		<b>\$234,811</b>	<b>\$3,885</b>	<b>\$9,338</b>	<b>\$142,623</b>	<b>\$78,965</b>

Source: AtlasData as of 31st July 2015/Avitas current market values as of August 2015

Includes aircraft on lease and off-lease/stored; excludes lessors who have more aircraft stored than leased

<sup>1</sup> Includes transfer of first 37 of the 90 aircraft sale from AWAS to Macquarie

## ANALYSIS

## Lessors' Financials Compared

This study offers a comparison of the financial performance and capital structures of the aircraft leasing companies based on their most recent available financial statements (ending either in 2014 or 2015).

To make this report as comprehensive as possible, we have reached beyond the publicly listed lessors to the public filings of lessors in Ireland, Denmark and Singapore.

Figure 1 identifies the entities included in the study. In total we have been able to source the financials for 15 leasing companies. Financials are not available for Gecas, but some headline numbers are available in the GE and GECC annual reports.

In addition to the obvious major players, we include AviaAM from Lithuania (listed in Poland) and Avation plc from Singapore (listed in the UK). Most of the lessors in the study are incorporated in the USA or Ireland, though two of the largest, AerCap and BOC Aviation, are incorporated in the Netherlands and Singapore, respectively. The abbreviations used to refer to the lessors through the rest of this study are also indicated in Figure 1.

In aggregate, the lessors included in the study represent a total current fleet of 5,250 aircraft, or 52% of the 10,026 aircraft analyzed in the World's Leased Fleet section of this supplement. The significant absences from our coverage include CIT and Macquarie, which do not file financial information publicly other than a few headline numbers, and BBAM (though we do include Fly).

**Figure 1 - Lessors Included in the Study**

Lessor	Country	FYE	Abbreviation
AerCap Holdings NV	Netherlands	31-Dec-14	AerCap
Air Lease Corporation	USA	31-Dec-14	ALC
Aircastle Limited	USA	31-Dec-14	Aircastle
ALAFCO Aviation Lease & Finance Co KSC	Kuwait	30-Sep-14	ALAFCO
Avolon Investments SARL	Ireland	31-Dec-14	Avolon
Avation PLC	UK	30-Jun-14	Avation
AviaAM Leasing AB	Lithuania	31-Dec-14	AviaAM
Aviation Capital Group Corp.	USA	31-Dec-14	ACG
AWAS Aviation Capital Limited	Ireland	30-Nov-14	AWAS
BOC Aviation Pte Ltd	Singapore	31-Dec-14	BOCA
China Aircraft Leasing Group Holdings Ltd	China	31-Dec-14	CALC
FLY Leasing Limited	Ireland	31-Dec-14	Fly
GECAS	USA	31-Dec-14	GECAS
MCAP Europe Limited	Ireland	31-Mar-14	MCAP
Nordic Aviation Capital	Denmark	30-Jun-14	NAC
SMBC Aviation Capital Limited	Ireland	31-Mar-15	SMBC AC

Source: company reports and The Airline Analyst

Some lessors we have included previously are not included because they had not filed their 2014 financial statements at the date of preparing this compilation. These are AerDragon, Banc of America Leasing (Ireland), CIT Aerospace International, Lease Corporation International, Pembroke Capital and Triangle (Falko).

Note that for some lessors, the entities analyzed do not represent the entirety of their global leasing business and may be impacted

by internal funding arrangements and inter-company transactions. This applies particularly to MCAP and SMBC AC, which have been heavily funded by shareholder loans, so please interpret their numbers accordingly.

### Adjustments

In order to enhance comparability in treatment and presentation of the financial statements, we have made some adjustments as described in Figure 2.



**Figure 2 - Adjustments to Enhance Comparability**

Item	Treatment
Gain on sale of aircraft	Net gain included in Revenue
Recognition of "excess" maintenance reserves	Included in Lease Revenue but not separately disclosed by every lessor
Maintenance and transition costs	Recognised under its own heading when disclosed, but not disclosed by every lessor
Impairment costs	Included in in operating costs
Staff cost, including stock based compensation	Included in SG&A expenses
Interest income	Included in Other Revenue

Source: company reports and The Airline Analyst



# OPTIMISES

Your profitability.  
Our priority.

CFM56 spare engine lease solutions that  
optimise your business performance.

The CFM engine specialists. Go to [www.ses.ie](http://www.ses.ie)

SES is a wholly owned subsidiary of CFM International

**SES** Power to Fly Now

# Profitability

## Profitability

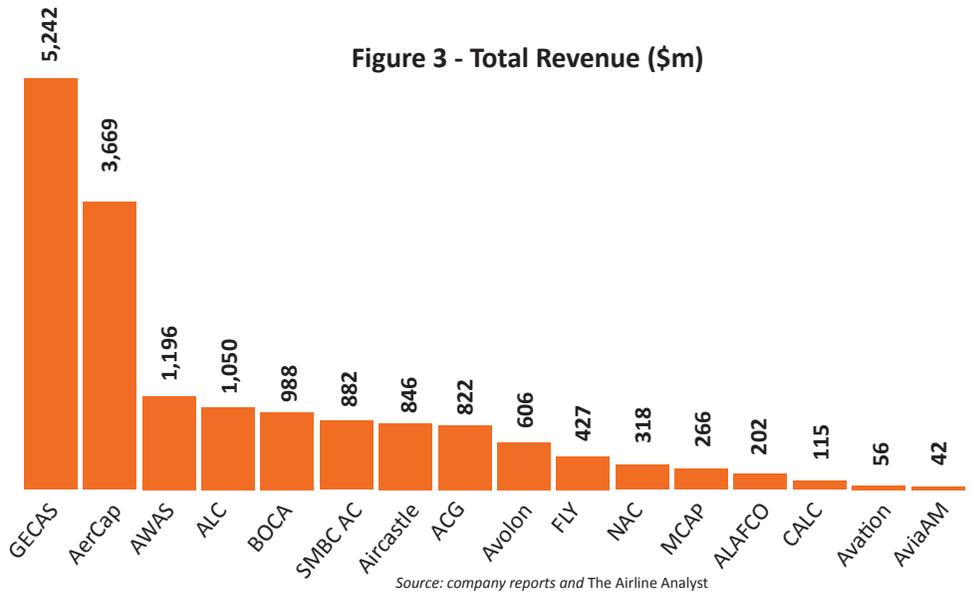
Figures 3 and 4 show the lessors ranked by revenue and net income. The revenue range of the lessors in the study is from \$5.2 billion for Gecas to \$42 million for AviaAM. The chart shows clearly how far the two leading players are ahead of the next tier of lessors, including Awas, ALC, Boca and SMBC AC.

In the most recent financial years, a number of lessors reported downward pressure on yields for lease renewals and some reported declining revenues.

In aggregate, the profit generated by the lessors in the study was \$3.3 billion, a 100% increase on the previous year's \$1.7 billion. Gecas headed net income at \$1.05 billion (up from \$896 million in 2013), followed by AerCap at \$810 million. Boca came third in profitability, followed by ALC, up from \$190 million last year.

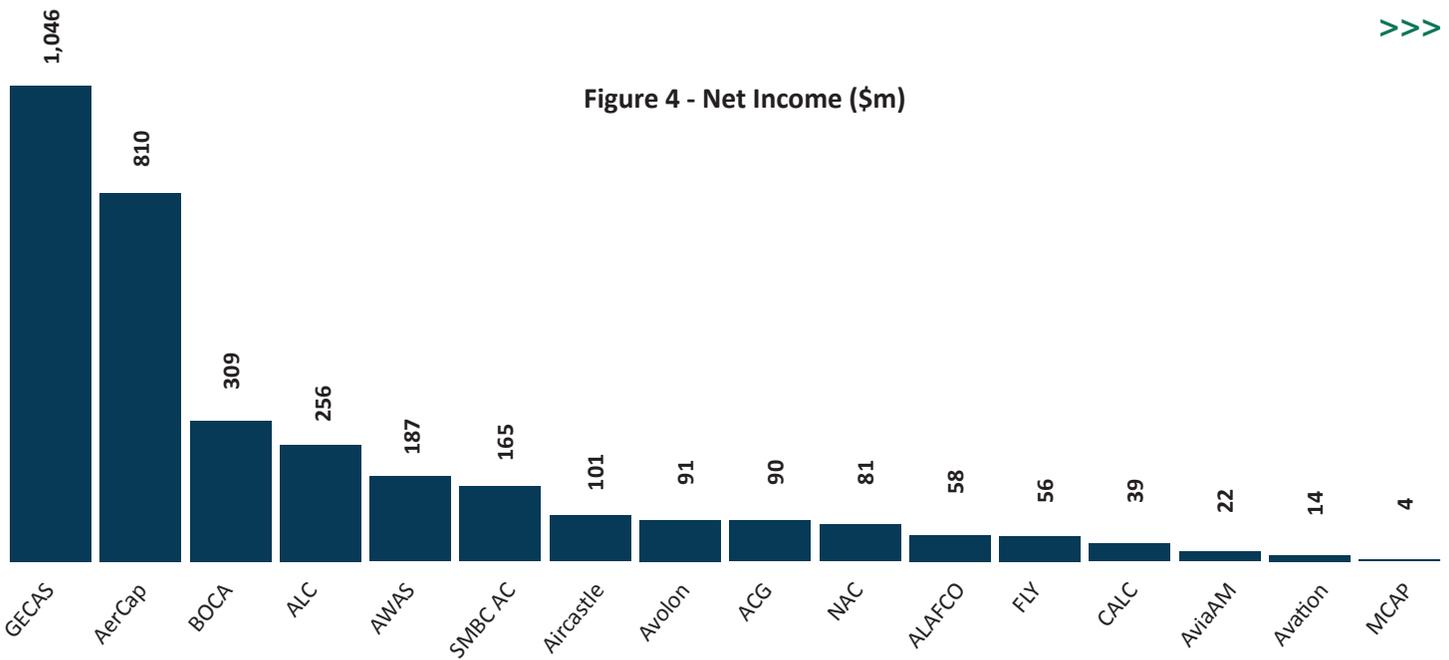
Among the key drivers of lessor profitability is the spread between lease yield and debt cost of funds. Figure 5 shows all three, ranked in descending order of yield.

We do not show AviaAM in this chart because its values are so much higher than



for the other lessors. NAC comes second, followed by AerCap, though its yield is exaggerated by the average debt calculation resulting from the ILFC acquisition. Then come Aircastle and Aviation, but their

relatively high debt costs result in lower margins. Surprisingly, Boca comes second bottom of the lease yield ranking at 9.8% but makes it up with the lowest debt finance cost of 2%, resulting in a spread of 7.8%.





cutting through complexity

# Global Leaders in Aviation Finance

KPMG is the leading provider of cross-border advisory services to the international aviation finance and leasing sector

To find out how we can help please contact **Tom Woods**  
t: **+353 1 410 2589**  
e: **tom.woods@kpmg.ie**



[kpmg.ie/aviation](http://kpmg.ie/aviation)

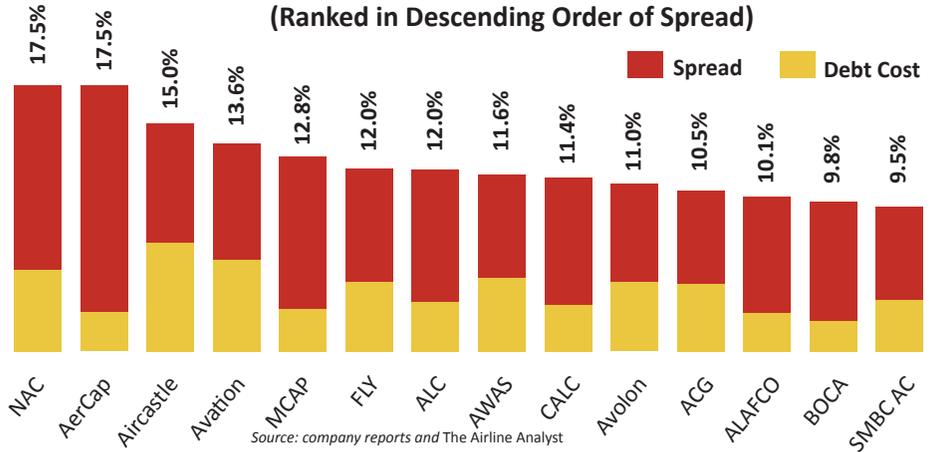


# “Gains from aircraft sales made a significant contribution to the profitability of a number of lessors.”

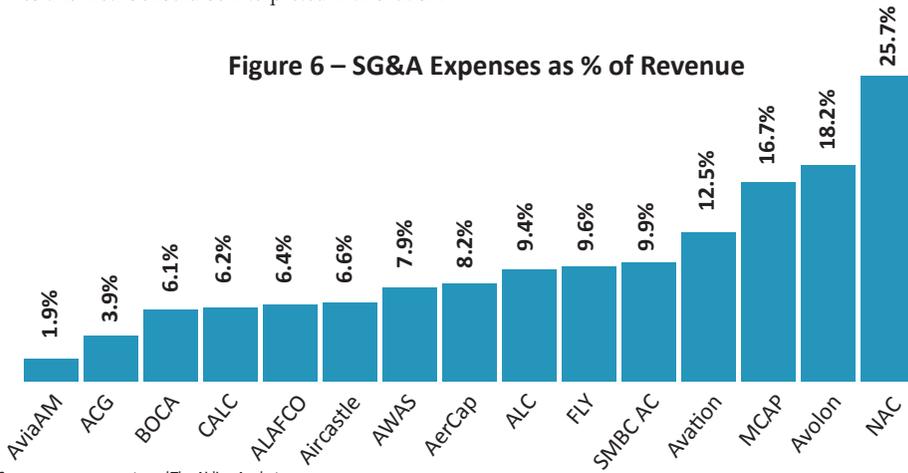
Finance costs range from Boca's low of 2% to AviaAM's 24.1%. Others at the low end of the scale include Alafco and AerCap. MCAP and SMBC AC have low debt costs but both have large amounts of shareholder provided debt. ALC shows a very creditable 3.3% average cost of debt. At the higher end are Aircastle, Avation, Avolon, Fly, ACG and Awas. With its strategy to increase the proportion of unsecured debt, NAC is also showing a relatively high cost of borrowing.

Another measure of efficiency is selling, general and administrative (SG&A) expenses as a percentage of revenues as shown in Figure 6. The growing and larger lessors should benefit from economies of scale and operating leverage. Unfortunately, the disclosure on this parameter is inconsistent between the lessors, so this metric should be interpreted with caution.

**Figure 5 – Yield, Finance Costs and Spread (Ranked in Descending Order of Spread)**



**Figure 6 – SG&A Expenses as % of Revenue**



At the efficient end of the scale are AviaAM, with the benefit of its Lithuanian cost base, ACG, Boca and Calc. MCAP, Avolon and NAC are at the higher end.

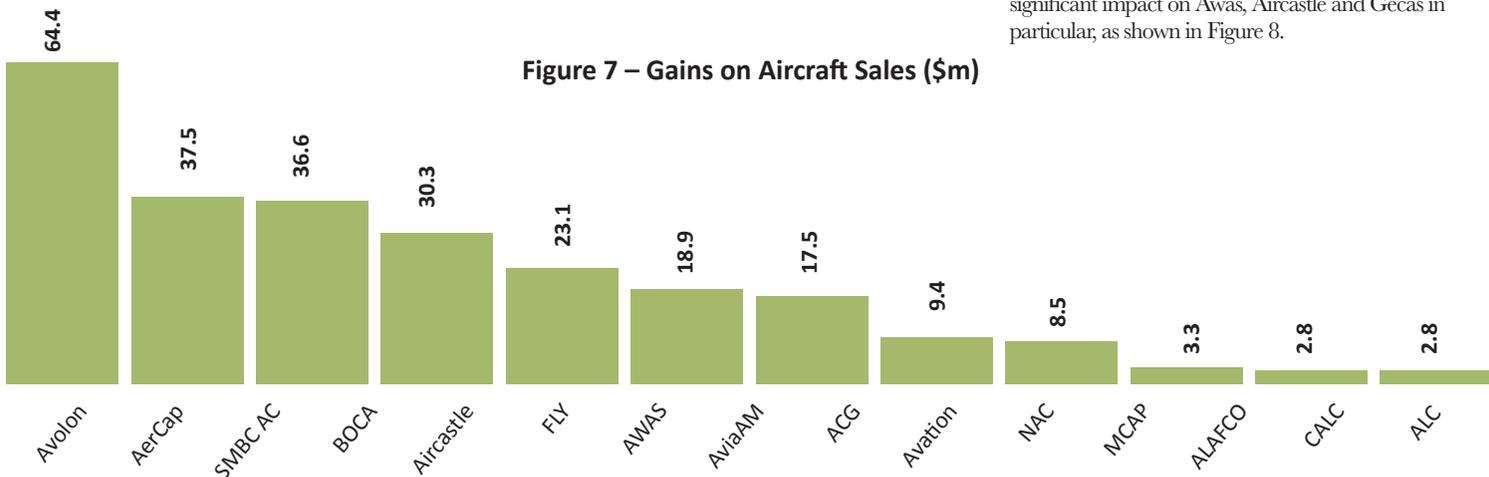
**Gains/losses on sales**

Aggregate plant, property and equipment for the lessors in the study is \$42.2 billion. Gains booked were \$255.1 million, 35% below the previous year, and were 7.7% of reported net income. Although gains from aircraft sales were relatively thin on the ground, they nevertheless made a significant contribution to the profitability of a number of lessors as shown in Figure 7.

**Impairments**

Impairments were similarly not universal but had a significant impact on Awas, Aircastle and Gecas in particular, as shown in Figure 8.

**Figure 7 – Gains on Aircraft Sales (\$m)**





# Financial flexibility

## Financial flexibility

We assess four elements of financial flexibility – leverage as measured by the debt/equity ratio, level of secured debt relative to tangible assets, Ebitda (earnings before interest, taxes, depreciation and amortization) interest coverage and liquidity.

## Leverage

The debt/equity ratio is the simplest measure of capital structure and is universally understood. Figure 9 shows the majority of lessors in a range of two times to four times on this measure, with SMBC AC and Calc above this range. Note that much of SMBC AC's debt is provided by its shareholders, which enables it to support a more highly leveraged debt structure.

## Debt structure

Borrowing on an unsecured basis has many attractions, being more flexible and having lower transaction costs than borrowing on a secured basis, though at the cost of higher coupons or margins. ALC obtained an investment-grade rating from Standard & Poor's (S&P), which cited its low level of secured debt as being a key consideration.

The only other lessors with an investment-grade rating are ACG, which benefits from its ownership by Pacific Life and which has been issuing unsecured debt and paying down secured debt in recent years, and Boca, which benefits from its Bank of China ownership. AerCap lost its investment-grade

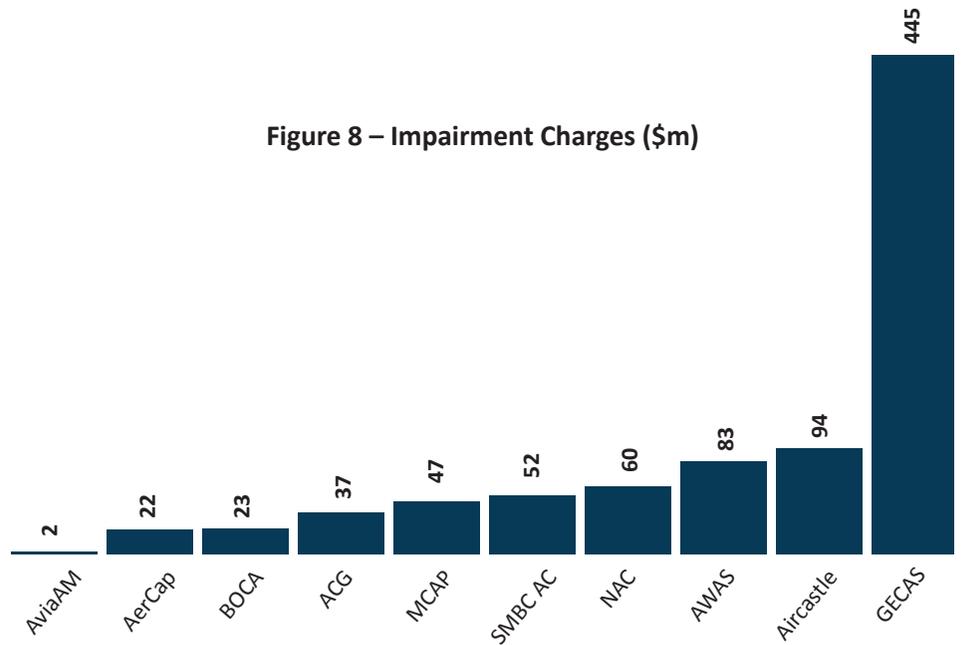
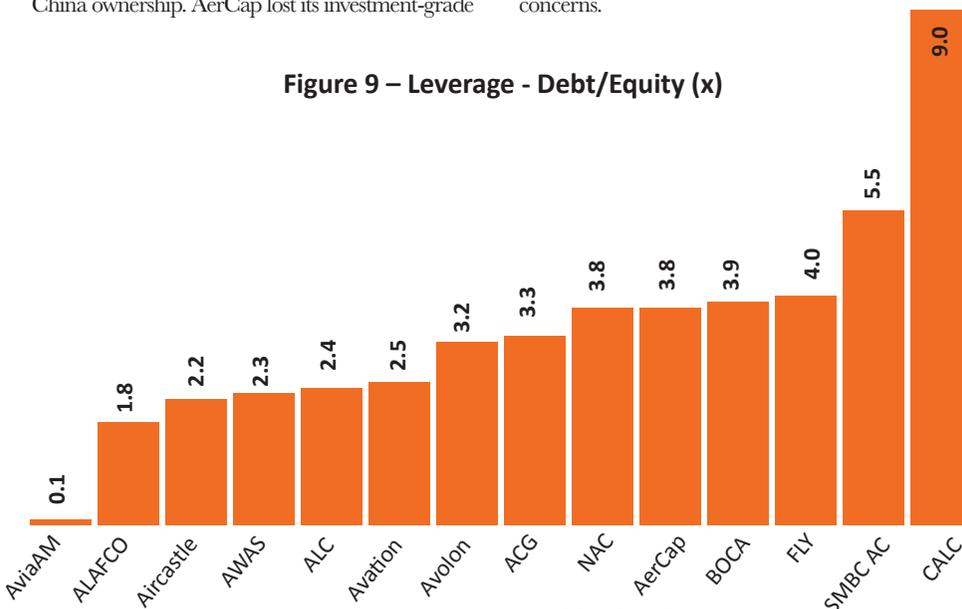


Figure 8 – Impairment Charges (\$m)

Source: company reports and The Airline Analyst

ratings as a result of its acquisition of ILFC, which increased leverage significantly. The lessor, however, has the intention of selling assets and reducing leverage with a view to regaining investment-grade levels as soon as possible in order to obtain an improvement in its financing terms. S&P cites a ceiling of a BB+ unsecured rating for private equity-owned lessors such as Awas because of financial policy concerns.

Figure 9 – Leverage - Debt/Equity (x)



Source: company reports and The Airline Analyst

Figure 10 – Lessor credit ratings

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

Source: Ratings Agencies - 8th September 2015



## “S&P cites a ceiling of a BB+ unsecured rating for private equity-owned lessors.”

Figure 11 shows the debt structures on a proportional basis for the lessors ranked in order of the highest proportion of unsecured debt at the top to least at the bottom. The chart also shows shareholder loans and other loans that could not be classified because of lack of information.

ALC comes top of the list, with its 83/17 unsecured/secured debt structure, which supports its BBB- investment-grade rating. Then come Aircastle, ACG, AerCap and Boca, which all have significant por-

tions of unsecured debt in their debt structures. AerCap had \$16 billion of unsecured financing outstanding at balance date, most of it acquired with ILFC, but this represented only 53% of its total debt.

Boca has been a regular visitor to the unsecured capital markets in several jurisdictions and significantly increased its proportion of unsecured debt in 2014. Fly increased its unsecured debt from \$292 million to \$690 million in 2014. NAC raised a \$230 million unsecured five-year

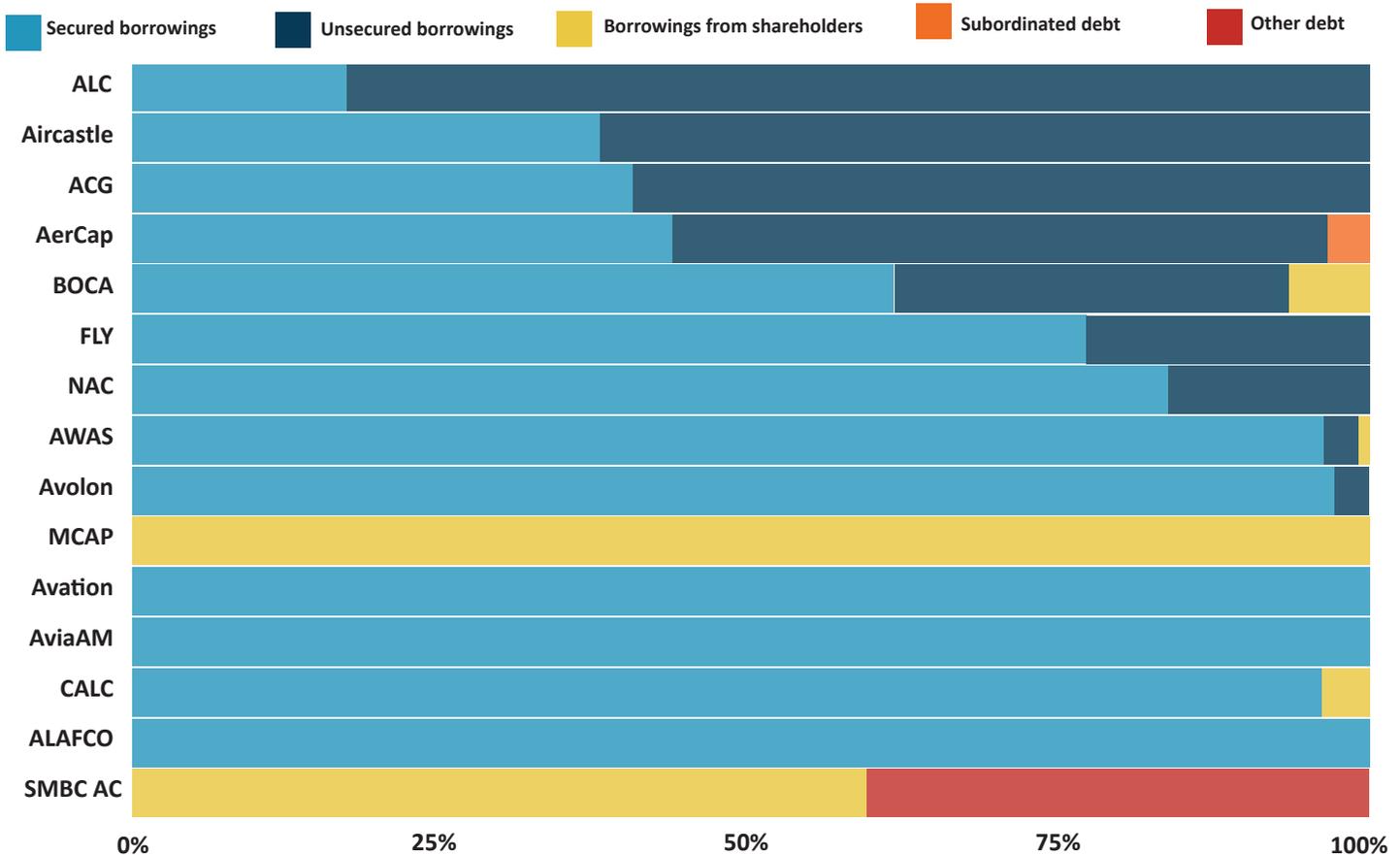
term loan facility in 2012/13, which was fully outstanding at balance date.

Ranking with the least secured debt is MCAP, which is 100% funded by shareholder loans. SMBC's debt structure also features a large element of shareholder funding and \$2.6 billion of loans from third parties, the source and structure of which is not disclosed in the financial statements.

The remaining lessors all have 100% or near 100% secured debt structures.



Figure 11 – Debt Structure



Source: company reports and The Airline Analyst

# Protect your asset.

GE's TRUEngine™ designation confirms an engine has been maintained to strict GE standards, which can result in as much as 50% higher residual value.\* Ensure you're getting the most out of your fleet at [geaviation.com/TRUEngine](http://geaviation.com/TRUEngine).

Imagination at work.



\*Based on GE, CFM and independent third-party research.

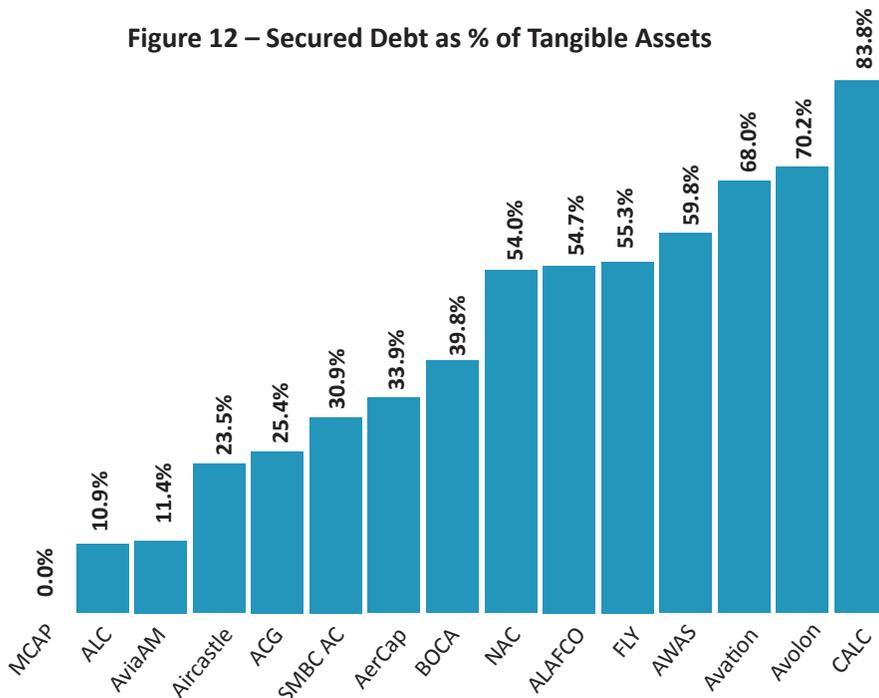


“Much of Avolon’s secured debt does not have recourse to the general credit of the company.”

**Level of Secured Debt**

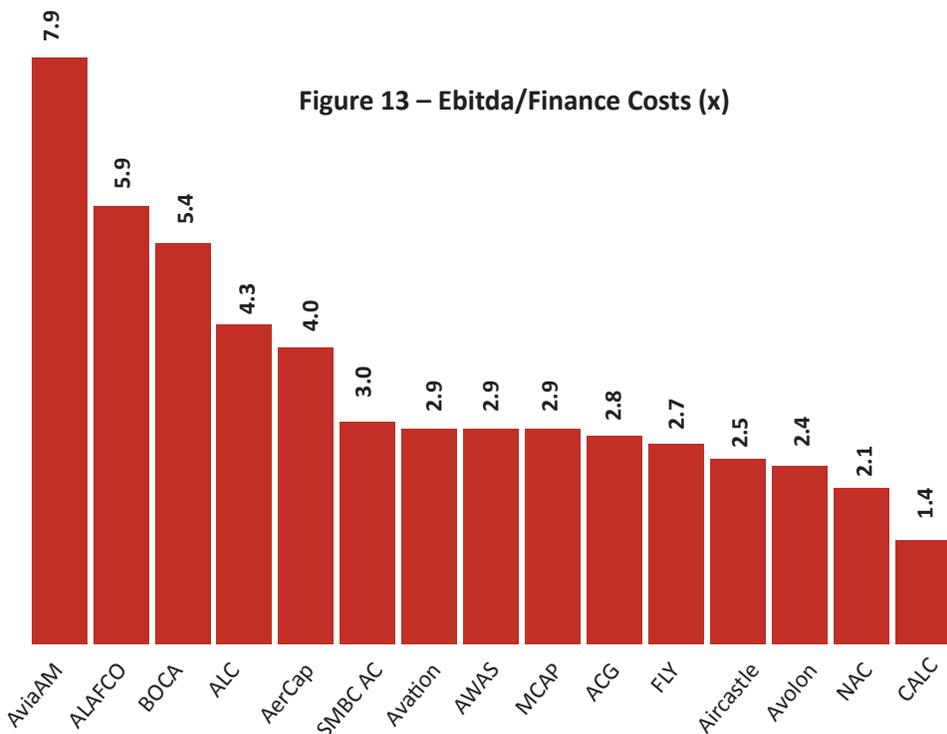
Figure 12 shows secured borrowing as a percentage of tangible assets, which indicates the level of protection available for unsecured creditors. The data for MCAP reflects its 100% shareholder funding debt structure. For SMBC, we have assumed that its \$2.6 billion of third-party loans are unsecured. The next five best-ranked lessors reflect significant amounts of unsecured funding. The two with the least protection for unsecured creditors are those that most recently completed initial public offerings: Avolon and Calc. Notably, however, much of Avolon’s secured debt does not have recourse to the general credit of the company.

**Figure 12 – Secured Debt as % of Tangible Assets**



Source: company reports and The Airline Analyst

**Figure 13 – Ebitda/Finance Costs (x)**



Source: company reports and The Airline Analyst

**Interest coverage**

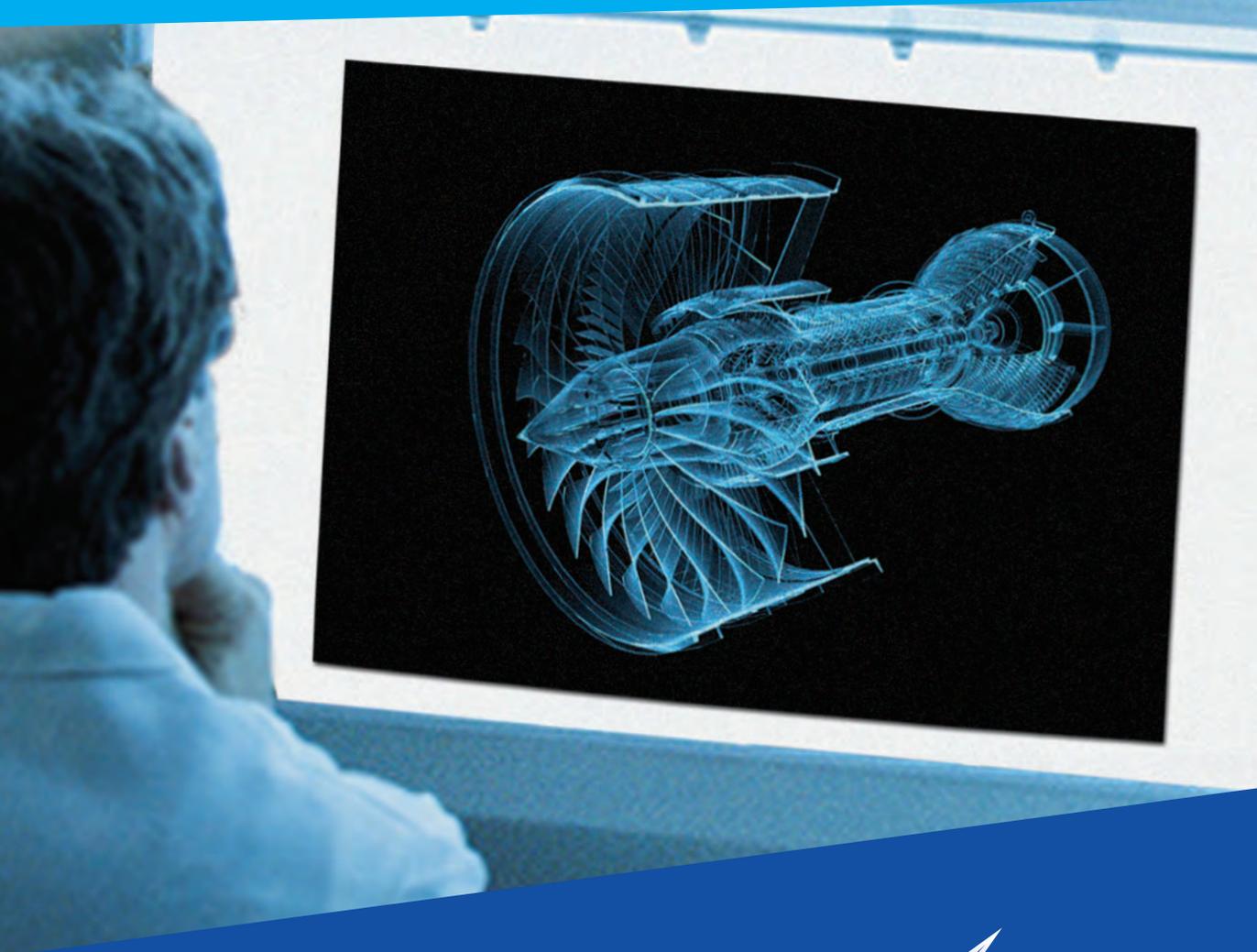
Interest coverage measured as Ebitda/finance costs is another key aspect of financial flexibility. From Figure 13 we see that the majority of lessors covered by the study have a healthy coverage of at least two times and many have much better coverage than that, particularly AviaAM, Alafco, Boca and ALC. A sharp contrast can be seen with those further down the chart.



# ASSET ANALYSIS AND ADVISORY

NEED A DIAGNOSIS? ASK AN EXPERT.

TES Aviation have knowledge and skills to look internally and provide impartial solutions on engine assets.



CREATING INNOVATIVE  
ENGINE SOLUTIONS;  
POWERING PARTNERSHIPS

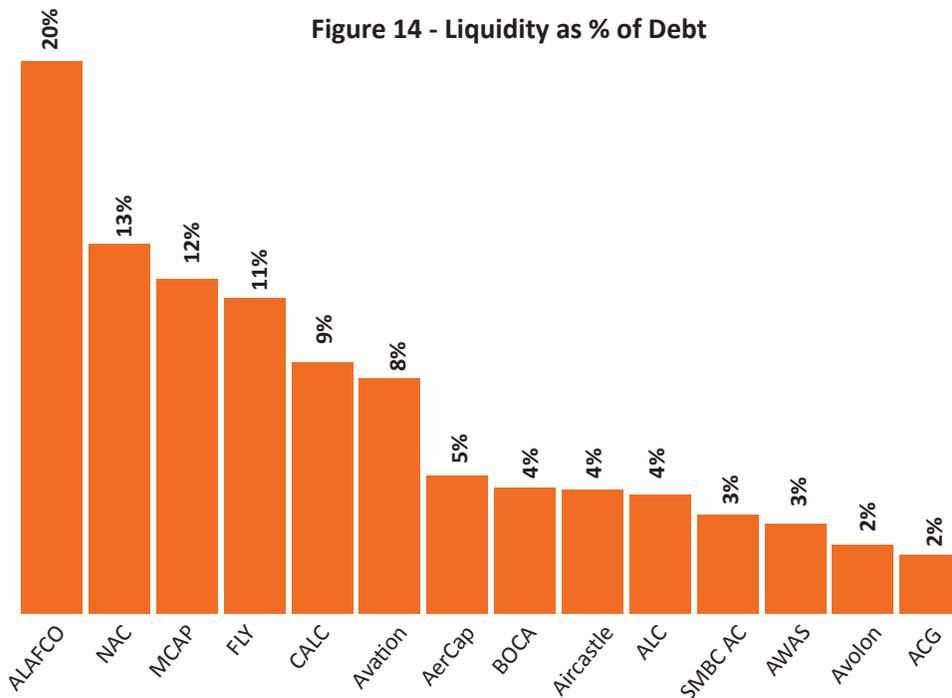
T: +44 1656 765 200  
sales@tesaviation.com

**TES** AVIATION

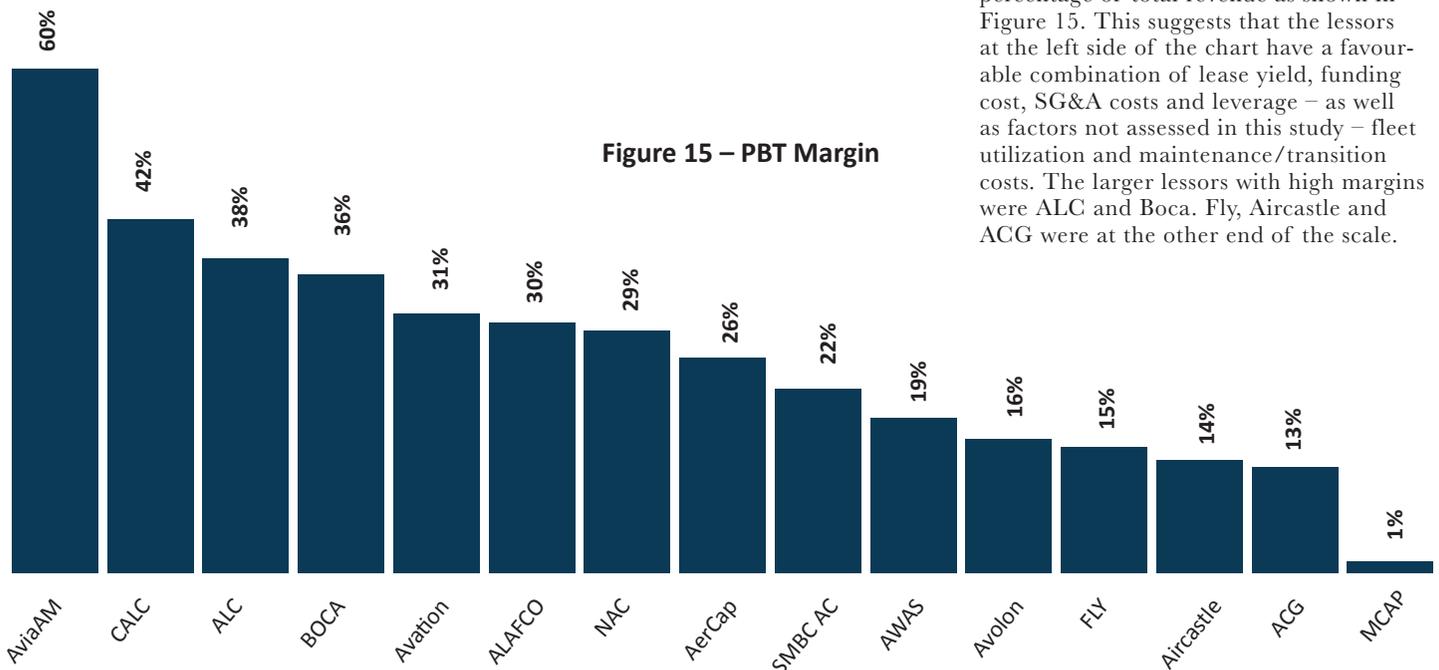
[www.tesaviation.com](http://www.tesaviation.com)

“AerCap had a committed four-year \$2.9 billion unsecured revolving credit facility.”

Figure 14 - Liquidity as % of Debt



Source: company reports and The Airline Analyst



Source: company reports and The Airline Analyst

### Liquidity

Figure 14 shows unrestricted cash liquidity as a percentage of total borrowings. We have removed AviaAM from this chart because its value of 137% is much higher than the others. For the remainder, this measure ranges from a low of 2% for ACG and Avolon, 3% for Awas and SMBC AC (which has access to parent funding) to a high of 20% for Alafco.

Some of the lessors additionally have committed bank facilities, such as Boca, which had \$2 billion of such lines from its parent group, Aircastle, which put in place an increased \$600 million unsecured revolving credit in January, and ALC, which has a \$2.1 billion unsecured revolving bank facility, with maturity in May 2018. As of December 31 2014, ACG had slightly in excess of \$1.1 billion available under its unsecured revolving credit facilities and AerCap had a committed four-year \$2.9 billion unsecured revolving credit facility.

### Returns: profit before tax

As an overall measure of profitability, we have assessed profit before tax as a percentage of total revenue as shown in Figure 15. This suggests that the lessors at the left side of the chart have a favourable combination of lease yield, funding cost, SG&A costs and leverage – as well as factors not assessed in this study – fleet utilization and maintenance/transition costs. The larger lessors with high margins were ALC and Boca. Fly, Aircastle and ACG were at the other end of the scale.



“The aircraft leasing business can offer substantial Libor-plus returns to equity investors.”

**Tax charge**

The tax rate on profits is one of the drivers of net profitability. Figure 16 shows that, with two exceptions, tax charges were all below 20%. So it is not just Ireland and Singapore that would appear to offer attractive fiscal regimes for aircraft operating lease companies.

**Return on equity**

Return on average equity is shown in Figure 17. Returns in all cases exceeded 5%, thereby generating a return at least 400 basis points above Libor. Towards the higher end of the scale we see returns comfortably exceeding 10%, with NAC’s 19.5% presumably being the attraction for new equity investor EQT and the arrival of growing competition in the turboprop sector from Elix Aviation Capital and others. Calc’s return is commendable but should be interpreted in conjunction with its high leverage.

Figure 16 - Tax Charge

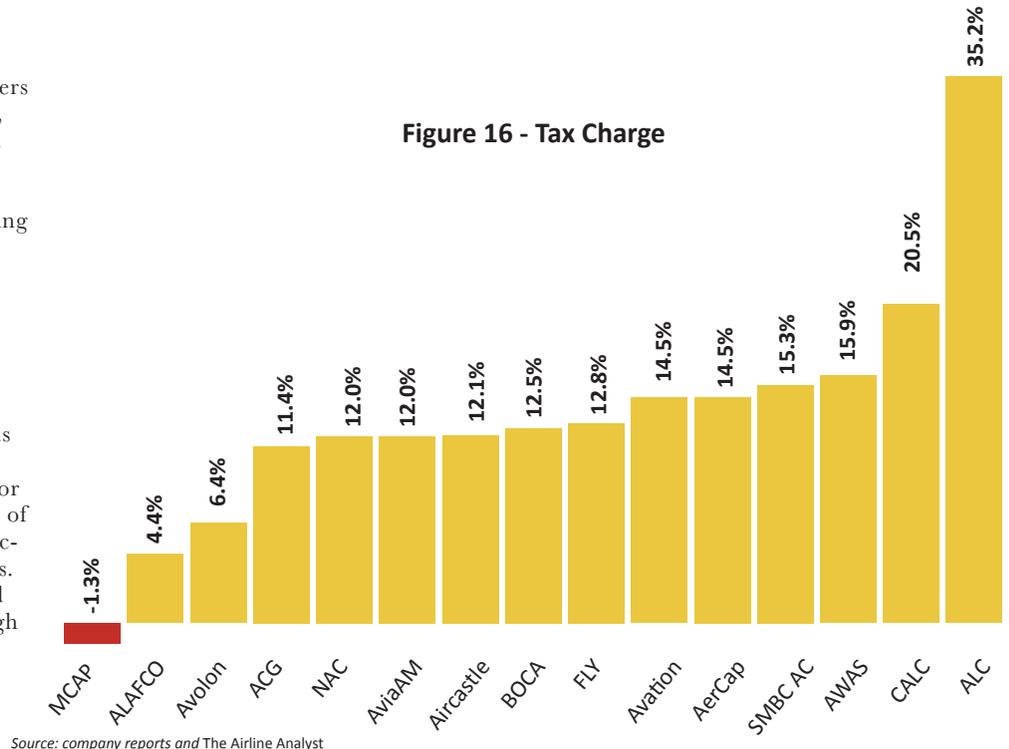
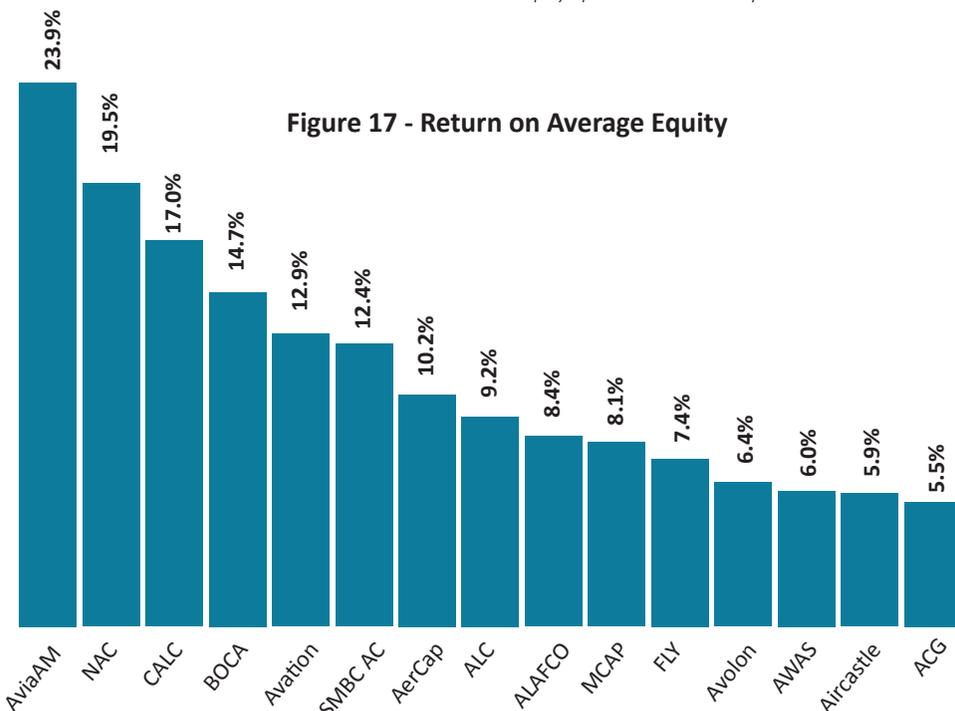


Figure 17 - Return on Average Equity



**Conclusion**

This study has shown some of the key dynamics affecting aircraft lessors’ business models, which are more varied than they would appear at first inspection. Lease yield, debt cost, asset selection, asset utilization and remarketing capabilities are all critical components of the aircraft operating leasing business. Get these right, and the aircraft leasing business can offer substantial Libor-plus returns to equity investors. ▲

Please direct any questions or comments to [mduff@theairlineanalyst.com](mailto:mduff@theairlineanalyst.com).



## TOP TEN LESSORS

# GECAS

Gecas is once again the world's largest lessor by number of aircraft, with more than 1,620 aircraft and a further 423 on order, and about \$46.1 billion-worth of assets on its books. Speaking with Airfinance Journal, the lessor confirms that aircraft demand is strong, with rent levels for all in-production types remaining "solid".

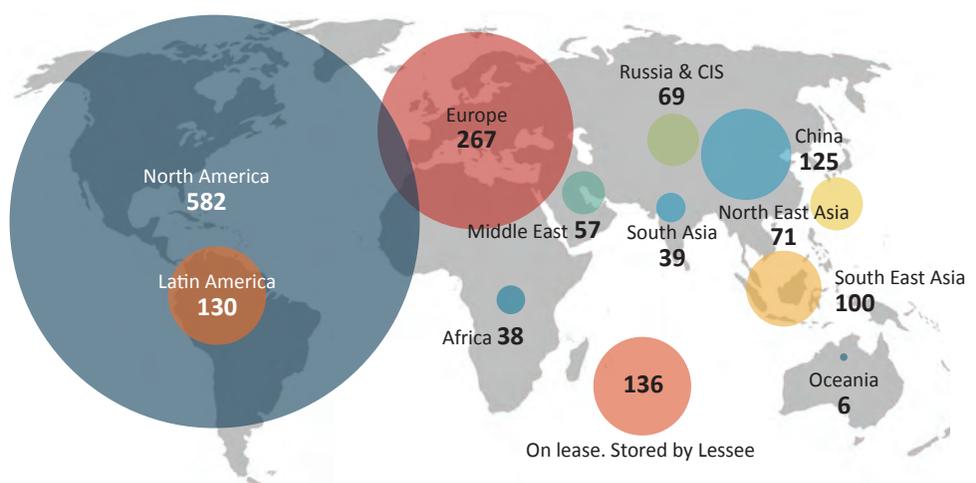
Gecas begins taking delivery of the Airbus A320neo in September 2016. The US lessor has five of this aircraft model delivering next year, and all are already leased, according to Gecas.

Commenting on the firm's new fleet, the lessor states: "We continue to see strong demand for this narrowbody aircraft that offers airlines a more fuel-efficient aircraft with lower operating costs, and our order for another 60 aircraft at this year's Paris Air Show ensures we have supply to meet this demand. We continue to take advantage of market conditions and strong investor appetite for aircraft as a seller of assets. In 2014, Gecas actively sold \$4 billion in assets."

There has been plenty of speculation as to whether or not aviation is reaching the top of its cycle. Gecas comments: "A downturn depends on GDP, fuel prices and other macroeconomic factors. Things seem to be in balance, but nothing goes up forever."

Gecas may be the world's largest lessor, but others are in consolidation. AerCap's acquisition of ILFC has created a second mega-lessor. Does

### GECAS Fleet by Region of Lessee



Source: AtlasData

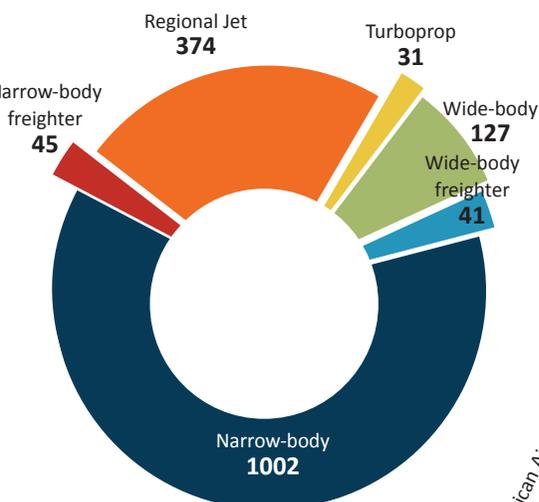
Gecas anticipate that more leasing consolidation will occur in future? "Consolidation in aircraft leasing is inevitable," replies the firm. "Gecas's size, global reach and breadth of products – from turboprops and helicopters to widebodies – offer several advantages, and we believe smaller lessors inevitably will combine to emulate Gecas's position." ▲

### GECAS Key Facts

<b>Name:</b>	GE Capital Aviation Services (Gecas)
<b>Country:</b>	USA and Ireland
<b>Founded:</b>	1993
<b>Ownership:</b>	General Electric Company
<b>Head office:</b>	Shannon, Ireland, and Norwalk, Conn, USA
<b>Number of employees:</b>	500
<b>Size of fleet:</b>	1,550 fixed wing (owned and serviced), 190 rotary wing
<b>Average age of fleet:</b>	7 years
<b>Number of lessees:</b>	270-plus
<b>Order book:</b>	423 aircraft
<b>Delivery commitments (as of June 30 2015):</b>	\$30.3 billion at list prices
<b>Unsecured Credit Ratings:</b>	
No standalone credit rating for Gecas (is part of GE Capital, which has a AA+ rating)	
<b>Total assets (as of June 30 2015):</b>	\$46.1 billion
<b>Net income (as of June 30 2015):</b>	\$668 million (2015 to date)

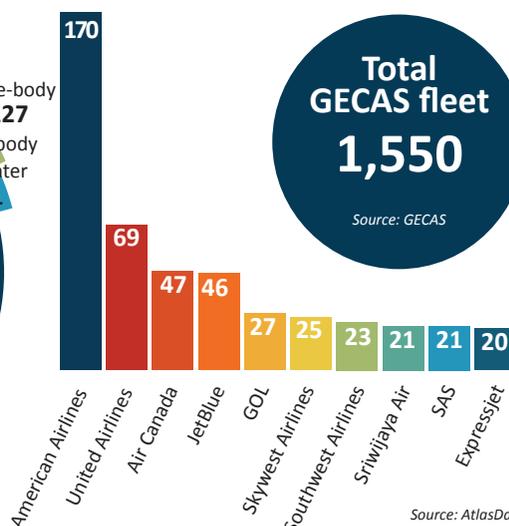
Source: GECAS/Ratings Agencies

### GECAS Aircraft Categories



Source: AtlasData

### GECAS Top 10 Lessees by number of aircraft



Source: AtlasData

**Total GECAS fleet**  
1,550

Source: GECAS



# TOP TEN LESSORS

## AerCap

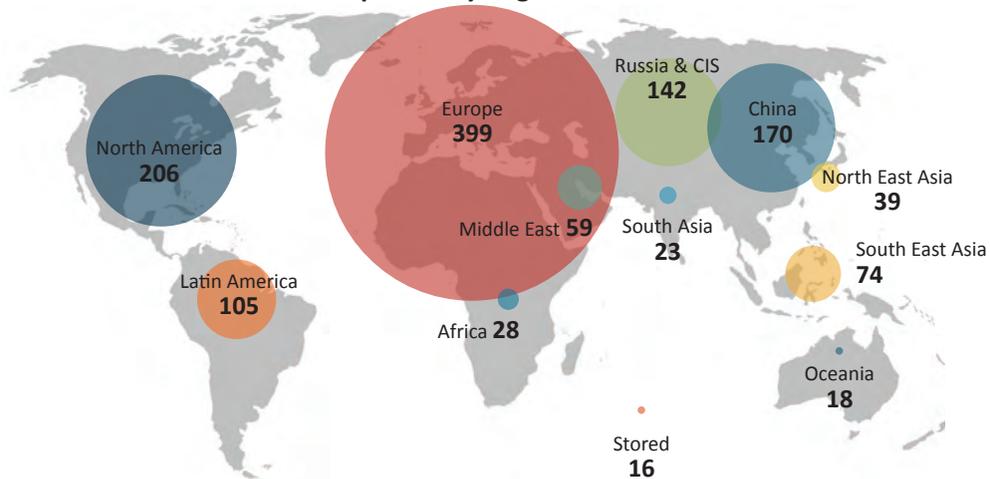
Amsterdam-based AerCap became the world's second-largest lessor after acquiring International Lease Finance Corp (ILFC) from its parent company AIG in 2014. The \$7.6 billion deal was one of the most important transactions in leasing history, adding a 1,000-aircraft portfolio to AerCap's fleet. The deal was remarkable because it saw one lessor acquire a rival lessor three times its size.

Founded in 1995, AerCap owns and manages 1,260 aircraft with an average age of 7.6 years. It works with more than 200 lessees in about 90 countries. AerCap also works a lot with start-up airlines, with Airfinance Journal research showing the lessor has leased 19 aircraft to start-up airlines since 2013.

As of June 30 2015, AerCap's total assets were worth \$44.05 billion, while its delivery commitments amounted to \$26.9 billion. The company has \$19.01 billion-worth of committed unsecured debt and \$14.05 billion of committed secured debt, according to its financial statements for the second quarter of 2015. The unsecured debt is made up of a mixture of ILFC legacy notes, AerCap Aviation notes and several revolving credit facilities.

AerCap has 106 aircraft secured against export credit facilities, 146 aircraft secured against senior secured notes, 194 aircraft secured against term loans, along with 30 aircraft secured against ALS II debt and an AerFunding revolving credit

**AerCap Fleet by Region of Lessee**



Source: AtlasData

facility. The lessor also has 103 aircraft secured against other types of debt, coming to maturity between 2015 and 2026.

The lessor looks to expand its fleet further in the coming years, having ordered 100 737 Max 8s at the 2015 Paris Air Show, which begin delivery in 2019. In total, AerCap has 461 new aircraft due to deliver up to 2022.

Earlier this year, AerCap priced an offering of \$1 billion aggregate senior notes, made up of

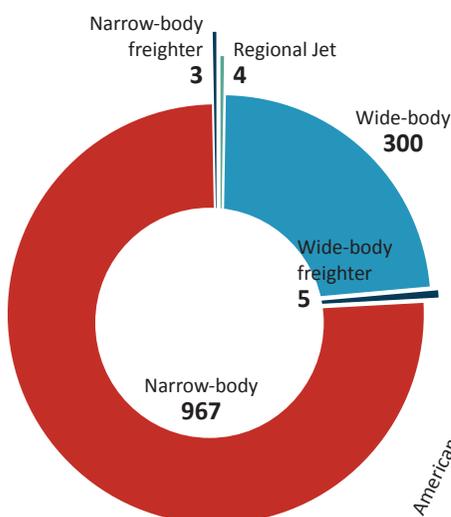
two tranches of \$500 million senior notes with a coupon of 4.625% due in 2022. The notes are spread over treasuries of 254 basis points. Credit Suisse Securities (USA), Deutsche Bank and Goldman Sachs acted as the joint bookrunners for the deal. ▲

### AerCap Key Facts

<b>Name</b>	AerCap
<b>Country</b>	The Netherlands
<b>Founded</b>	1995
<b>Ownership</b>	Public company
<b>Head office</b>	Amsterdam Schiphol Airport
<b>Size of fleet</b>	1,730 owned, managed, on order
<b>Average age of fleet</b>	7.6 years
<b>Number of lessees</b>	200+ in about 90 countries
<b>Order book</b>	470
<b>Delivery commitments: (as of March 31 2015)</b>	\$26.9 billion (market value of aircraft)
<b>Unsecured Credit Ratings:</b>	
<b>Fitch</b>	BB+ (positive)
<b>Moody's</b>	Ba2 (positive)
<b>S&amp;P</b>	BB+ (positive)
<b>Total assets (as of March 31 2015)</b>	\$44 billion
<b>Net income (as of March 31 2015)</b>	Reported \$311.5 million, Adjusted \$304.6 million
<b>Net income (full-year 2014)</b>	\$668 million (2015 to date)

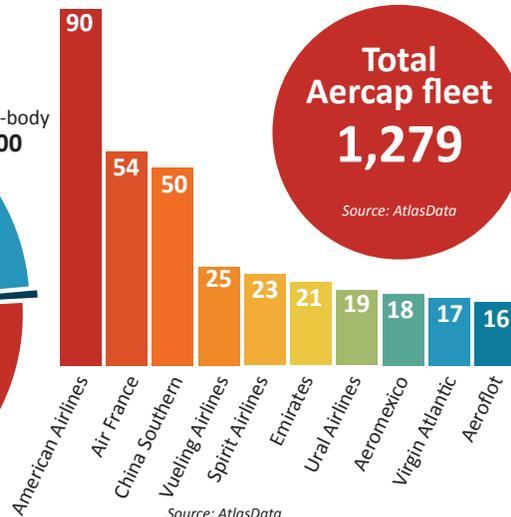
Source: AerCap

**AerCap Aircraft Categories**



Source: AtlasData

**AerCap Top Lessees by number of aircraft**



Source: AtlasData

## TOP TEN LESSORS

# BBAM (incl Fly and Nomura Babcock & Brown)

BBAM is the largest independent aircraft manager, with about 412 aircraft under its management.

Owned 50% by private equity firm Onex, BBAM sources and remarkets aircraft for Fly Leasing and Nomura Babcock & Brown. Alongside Nomura Babcock & Brown, BBAM has become the largest arranger of Japanese equity capital to the airline industry, having financed more than 300 aircraft with Japanese operating lease deals.

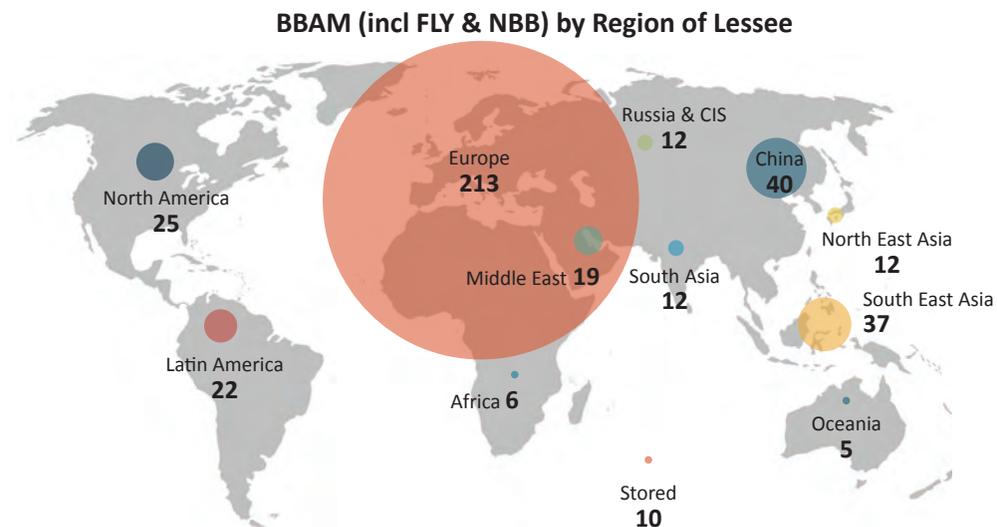
In June, BBAM priced a \$1.2 billion asset-backed securities (ABS) deal, backed by 49 aircraft with an average age of 6.5 years.

The deal, which BBAM used to assist a portfolio sale, was innovative in the way the E-notes were bought and sold. Unusually for ABS deals, the E-notes were syndicated out to buyers, rather than being snapped up by a single buyer. This may lead other ABS deals to be structured in a similar way.

The bulk of the aircraft covered by the ABS came from Fly Leasing's portfolio. The 33 aircraft – which mostly consisted of in-production narrowbodies – were sold to Element Financial Corp. Fly Leasing states that the sale will generate \$425 million of unrestricted cash for Fly, and will reduce the number of aircraft in its portfolio that are 10 years or older from 61 to 33.

Speaking to *Airfinance Journal* in June, Fly Leasing chief executive officer Colm Barrington said that the lessor planned to use the cash generated by its portfolio sale to fund aircraft purchases.

He explained that A330 and A350 aircraft represented “good opportunities” and that BBAM



Source: AtlasData

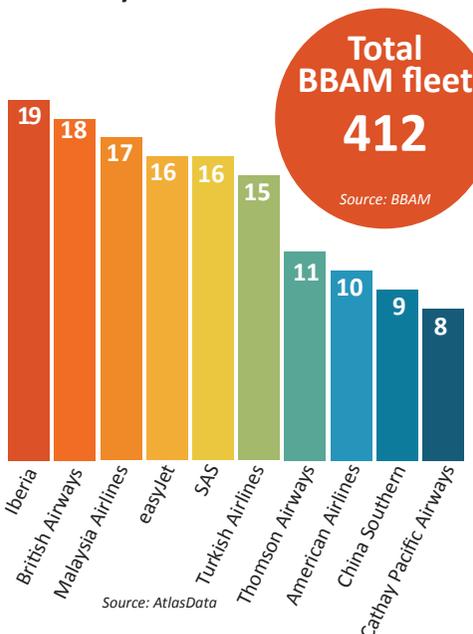
was in the market for sale/leaseback deals on the lessor's behalf. He added: “They're out in the market all the time, they've got the people, they've got the locations, they've got the experience, they've got the reputation of being closers. So BBAM is out looking for additional aircraft for Fly.”

### BBAM/FLY Key Facts

Name:	BBAM LLC
Country:	USA
Founded:	1991
Ownership:	ONEX 50%, BBAM 50%
Head Office:	San Francisco
Number of Employees:	-
Size of Fleet:	412
Average Age of Fleet:	-
Number of Lessees:	107
Order Book:	None
Delivery Commitments (as of 30 June 2014):	-
Unsecured Credit Ratings (FLY):	
Moody's (FLY):	B1
S&P (FLY):	BB
Total Assets (BBAM) (as of 30 June 2015):	\$16 Billion
Net Income (BBAM):	N/A

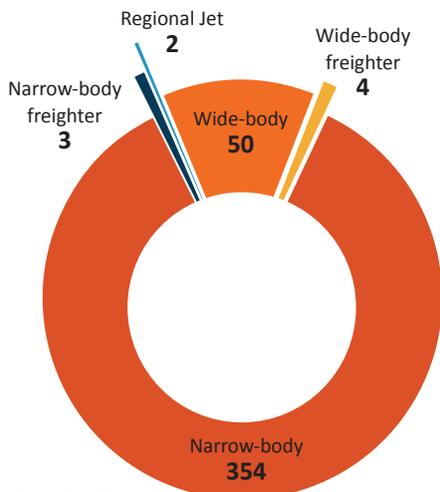
Source: BBAM/Ratings Agencies

### BBAM (incl FLY) Top 10 Lessees by number of aircraft



Source: AtlasData

### BBAM (incl FLY) Aircraft Categories



Source: AtlasData

# TOP TEN LESSORS

## SMBC Aviation Capital

Dublin based SMBC Aviation Capital was formed in January 2012 when Sumitomo Mitsui Banking Corporation and Sumitomo Corporation purchased RBS Aviation Capital for \$7.3 billion. The Scottish bank was looking to dispose of some of its assets after a UK government bailout.

SMBC Aviation Capital has since achieved an investment-grade rating from both Fitch and Moody's, and is looking to access more third-party funding.

At this year's Paris Air Show, SMBC Aviation Capital increased its order for 737 Max 8 aircraft from 80 to 90, and also announced an order for CFM International's Leap-1B engines to power these 10 additional aircraft.

SMBC Aviation Capital recently sold five Embraer aircraft – three ERJ145s and two ERJ170s – to UK lessor Falco.

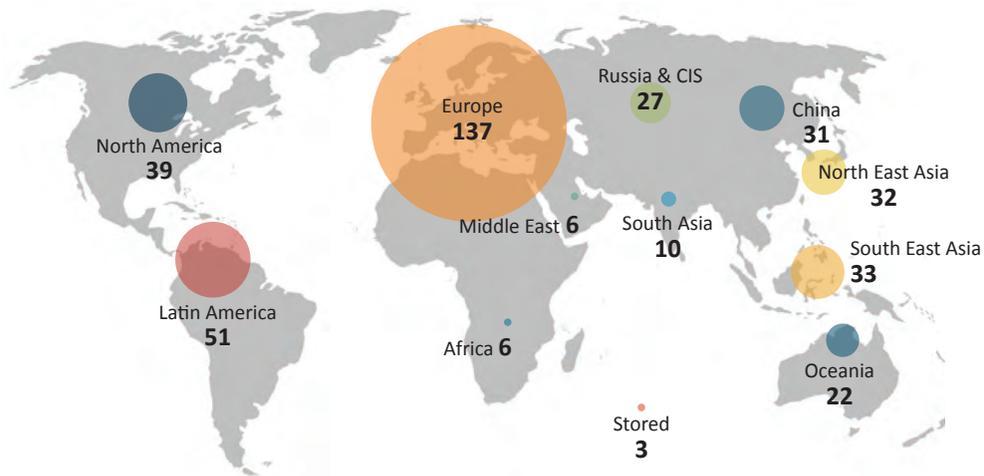
Its fleet consists of 283 aircraft on lease to 84 customers with an average age of 5.4 years. This represents an increase of 33 aircraft from last year. It also has an additional 214 on order.

Its customers range from small domestic Japanese airlines such as Peach, which has taken five aircraft from the lessor, to international lessees such as Aeroflot.

In December 2014, SMBC Aviation Capital was rated BBB+ by Standard & Poor's and BBB by Fitch Ratings.

"Lease rates are good for the aircraft that we

SMBC Aviation Capital Fleet by Region of Lessee



focus on and there is solid demand for well specced aircraft with perhaps a slight preference for the larger members of the A320 family," a company spokesman told Airfinance Journal.

"We are very focused on investing in young, best-in-class aircraft and therefore expect to add a net 20 to 30 aircraft in the coming year." ▲

### SMBC Aviation Capital Key Facts

<b>Name:</b>	SMBC Aviation Capital
<b>Country:</b>	Headquarters: Republic of Ireland
<b>Founded:</b>	2001
<b>Ownership:</b>	Consortium consisting of Sumitomo Mitsui Banking Corporation, Sumitomo Mitsui Finance & Lease and Sumitomo Corporation

**Number of employees:** 150

**Size of fleet:** 283 delivered aircraft

**Average age of fleet:** 5.4 years

**Number of lessees:** 84

**Order book:** 214

**Delivery commitments (as of end March 2015):** \$22.1 billion

#### Unsecured Credit Ratings:

**Fitch:** BBB

**Moody's:** n/a

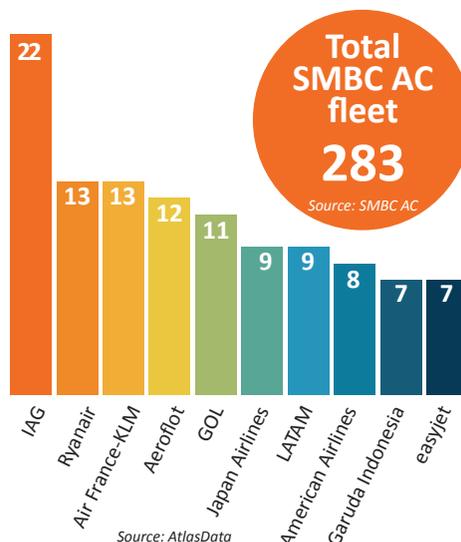
**S&P:** BBB+

**Total assets (as of June 30 2015):** Undisclosed

**Net income (as of June 30 2015):** Undisclosed

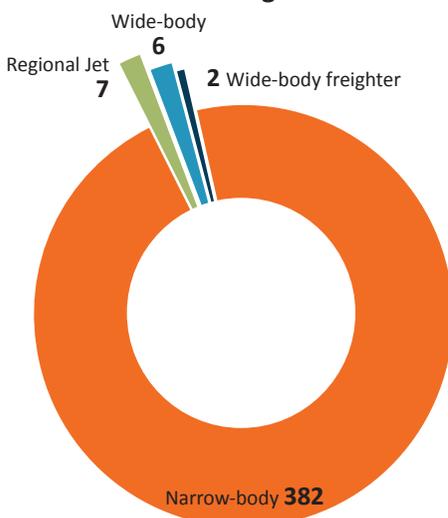
Source: SMBC

### SMBC Aviation Capital Top Lessees by number of aircraft



Source: AtlasData

### SMBC Aviation Capital Aircraft Categories



Source: AtlasData

## TOP TEN LESSORS

# CIT Aerospace

US-based CIT Aerospace owns a portfolio of about 350 aircraft. In terms of financing new deliveries, the lessor tends to use cash from unsecured debt raised by its parent company. CIT Aerospace has also accessed ECA-backed debt and bank facilities to fund its new aircraft.

The firm has also stated it will pursue sale/leaseback deals in order to achieve its expected annual growth rate of between 5% and 10%.

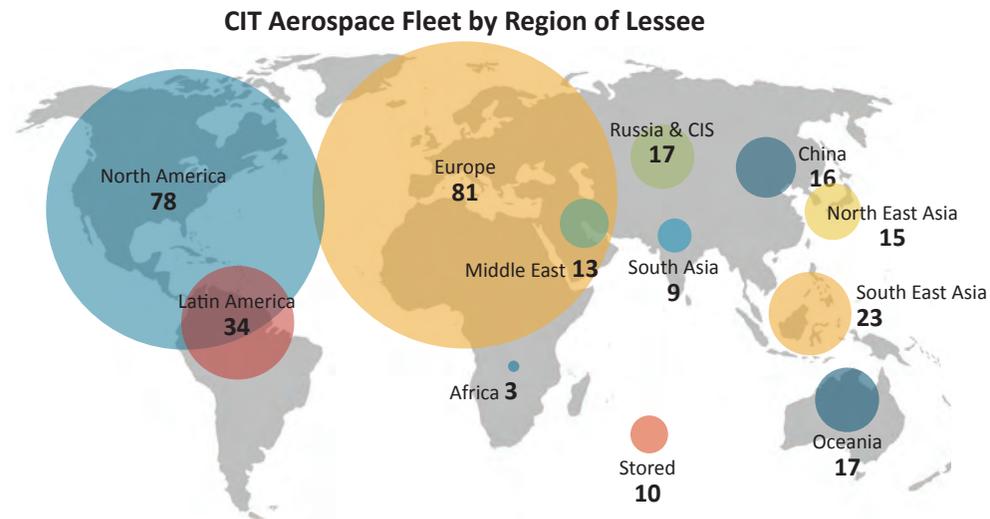
In August, CIT completed its acquisition of OneWest Bank, an American company with about \$26 billion in assets. Speaking to Airfinance Journal in March, its president, Tony Diaz, said the acquisition would allow CIT Aerospace to do more commercial loans and other financings.

Over the next four years the leasing firm's annual capital expenditure should average \$1.1 billion (in 2015-2017), increasing to \$3.2 billion (in 2018-2020), according to Gary Liebowitz, senior analyst at Wells Fargo Securities.

In its latest quarterly report, the leasing company stated it had 20 aircraft deliveries scheduled for the next 12 months, all of which have lease commitments with airline customers.

Last year, CIT became one of the first companies to place an order for the A330neo. In December 2014 it firmed up an order for 15 A330-900neos, as well as five A321ceos.

Speaking to Airfinance Journal, Diaz de-

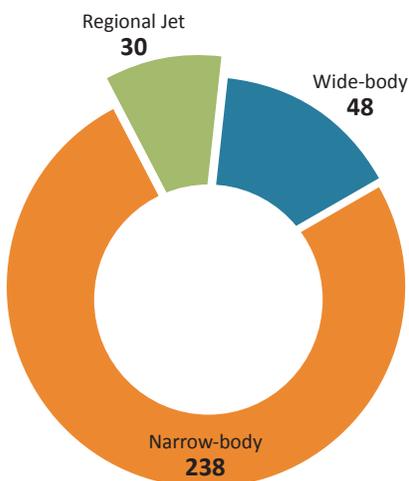


Source: AtlasData

scribes the appeal of the A330-900neo as “the minimal changes to the airframe”.

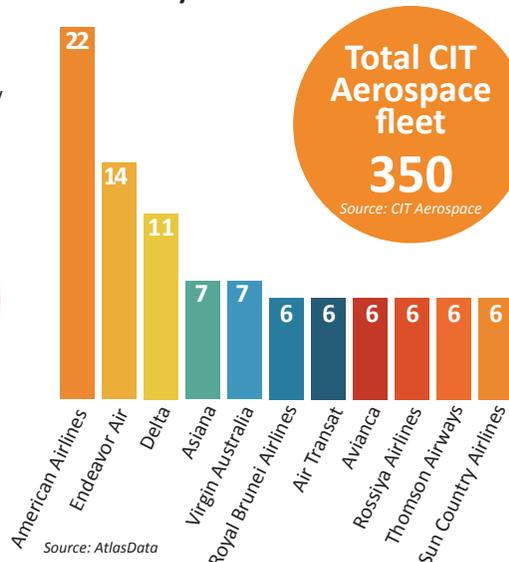
He adds: “The new engines really benefit from the development programme for the Rolls-Royce Trent 1000-Ten, which is the same engine that is on the 787 – so, minimal changes to the airframe, a proven engine, relatively simple changes to the wing.” ▲

### CIT Aerospace Aircraft Categories



Source: AtlasData

### CIT Aerospace Top Lessees by number of aircraft



Source: AtlasData

### CIT Aerospace Key Facts

<b>Name:</b>	CIT Aerospace
<b>Country:</b>	USA
<b>Founded:</b>	1908 (CIT Group Inc.)
<b>Ownership:</b>	CIT Group Inc. (Parent Company) – Public
<b>Head Office:</b>	New York, NY
<b>Number of Employees:</b>	3360 (CIT Group Inc.)
<b>Size of Fleet:</b>	350 (owned, financed, and managed commercial aircraft)
<b>Average Age of Fleet:</b>	6 years
<b>Number of Lessees:</b>	100
<b>Order Book:</b>	151 Aircraft
<b>Delivery Commitments (as of 30 June 2014):</b>	\$10.6Bn
<b>Unsecured Credit Ratings:</b>	
<b>Moody's:</b>	B1 (CIT Group Inc.)
<b>S&amp;P:</b>	
<b>Total Assets (as of 30 June 2014):</b>	BB- (CIT Group Inc.)
<b>Net Income (as of 30 June 2014):</b>	\$10Bn (Op lease Equipment & Loans)

Source: CIT Aerospace/Ratings Agencies



# TOP TEN LESSORS

## AWAS

Awais ranked sixth by number of aircraft in Airfinance Journal's Leasing Top 50.

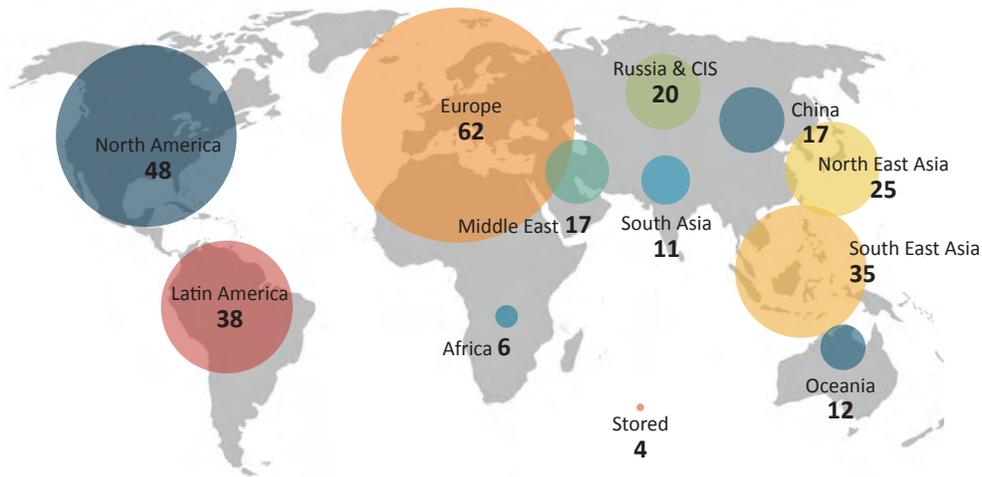
It has been an eventful year for the Irish lessor. In March, it was revealed that Australian lessor Macquarie AirFinance would buy a 90-aircraft operating lease portfolio from Awais. The portfolio, dubbed Skyfin, saw Orix Aviation, SMBC AC, HKAC and Cheung Kong Holdings make it through to the second round in a hotly contested and closely watched bidding war. The sale of the remaining aircraft is expected to close by March 2016.

Earlier in summer, Ray Sisson, Awais's chief executive officer for five years, announced his resignation, fuelling speculation as to whether he would join a rival lessor. A replacement for Sisson has yet to be announced.

In July, Awais launched a \$261 million asset-backed securitization supported by 30 aircraft through its subsidiary Diamond Head Aviation. The issuer also offered equity notes in the portfolio, which were purchased by Kahala Ireland Investments DAC. Awais will remain the servicer to the aircraft.

The lessor has commitments to purchase 12 aircraft from aircraft lessors and airlines, seven of

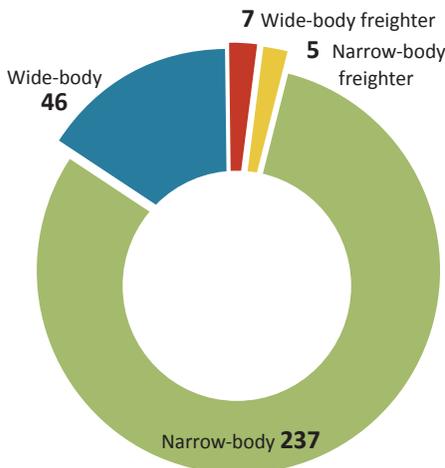
AWAS Fleet by Region of Lessee



which are due to deliver during the November 30 2015 year-end. This is in addition to five aircraft on forward order for delivery from June 1 2015 to 2018. Three of these aircraft are due to deliver also

during the year ended November 30 2015. Awais had closed a total of \$1.3 billion-worth of borrowings for the financing of aircraft and forward orders during the six months to May 31. ▲

AWAS Aircraft Categories



Source: AtlasData

AWAS Top Lessees by number of aircraft



Source: AtlasData

AWAS Key Facts

Name:	Awais
Country:	Ireland
Ownership:	Terra Firma and Canada Pension Investment Board
Head office:	Dublin
Size of fleet:	320
Number of lessees:	109
<b>Unsecured Credit Ratings:</b>	
Moody's:	Ba3 (stable)
S&P:	BB+ (neg)
Total Assets(as of November 30, 2014):	\$11.7 billion
Net income (as of November 30, 2014):	\$186.7 million

Source:AWAS

## TOP TEN LESSORS

## Aviation Capital Group

California-based Aviation Capital Group (ACG) is owned by Pacific Life, a 147-year old A+-rated insurance vendor. With more than 25 years in aviation, ACG is also one of the oldest leasing companies in the business.

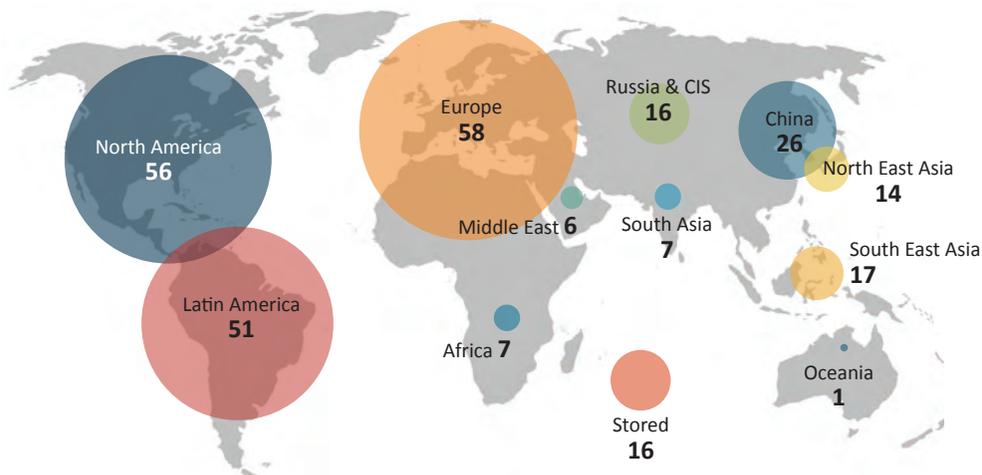
ACG's relationship with Pacific Life helps the lessor to access relatively cheap debt. ACG is also supported in this regard by its strong credit ratings (BBB- from both Fitch and Standard & Poor's). In July 2014, Fitch Ratings also upgraded ACG's unsecured debt to BBB-.

As a result, ACG finances most of its aircraft with corporate unsecured debt. The lessor continues to reduce the amount of secured debt on its balance sheet, with less than 30% of its debt secured against aircraft. Chief executive officer Denis Kalscheur says: "ACG continues to migrate to an unsecured-focused balance sheet, meaning the trend towards unsecured assets is likely to continue."

In terms of strategy, ACG plans to increase its Wide-body exposure in the coming years. Twin-aisle aircraft account for about 3% of the lessor's fleet, but the lessor is looking to acquire more next-generation aircraft such as the 787 and A350-900. It will acquire these either through sale/leaseback deals or through trading on the secondary market.

Kalscheur adds: "Our historical focus is to

## Aviation Capital Group Fleet by Region of Lessee



concentrate on the most popular and highly liquid assets. Forecasting future market trends can be subject to a variety of unplanned events and market forces, so it is our belief that flexibility and asset mobility are the best approach to protect asset value over time."

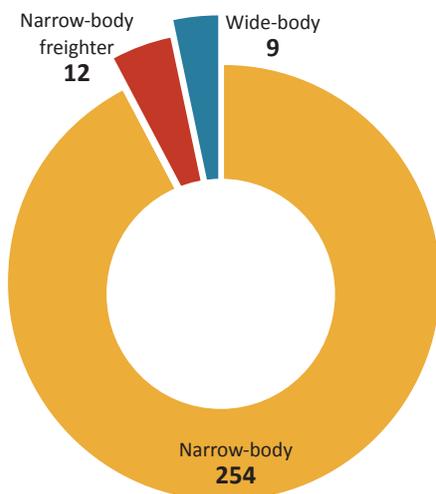
ACG also has substantial orders placed with Boeing and Airbus. The lessor is set to receive 70 737 Max and 30 A320neo aircraft and five 787s. ▲

## Aviation Capital Group Key Facts

Name:	Aviation Capital Group Corp.
Country:	USA
Founded:	1989
Ownership:	Pacific Life Insurance Company (founded 1868)
Head Office:	Newport Beach, CA, USA
Number of Employees:	99
Size of Fleet:	253
Average Age of Fleet:	5.9 yrs
Number of Lessees:	87
Order Book:	105
Delivery Commitments (as of 30 June 2015):	\$5,890 million
<b>Unsecured Credit Ratings:</b>	
Fitch:	BBB- (positive)
Moody's:	-
S&P:	BBB- (stable)
Total Assets (as of 30 June 2015):	\$8.6 billion
Net Income (as of 30 June 2015):	\$58.2 million (six months ended)

Source: Aviation Capital Group

## Aviation Capital Group Aircraft Categories



Source: AtlasData

## Aviation Capital Group Top Lessees by number of aircraft



Source: AtlasData

# TOP TEN LESSORS

## BOC Aviation

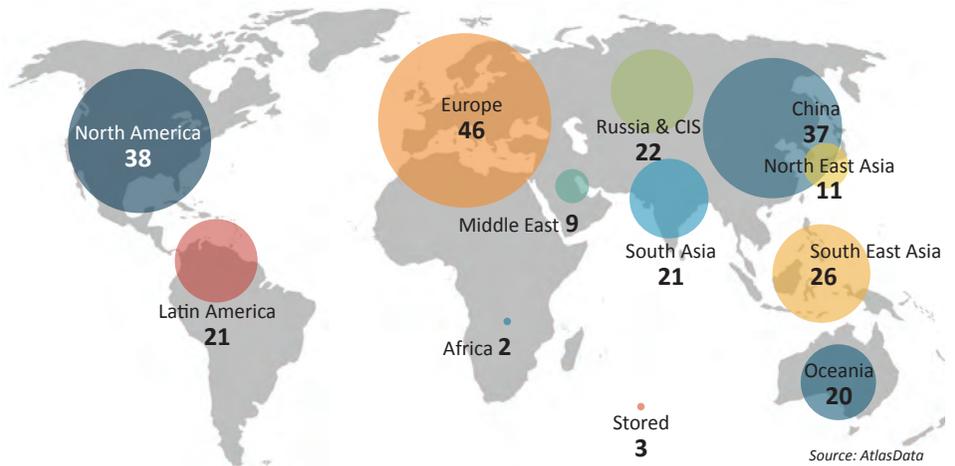
Singapore-based BOC Aviation benefits from its strategic headquarters being in Singapore, a country with an investment-grade rating, as well as rising affluence and trade and air traffic flows. Although the company acknowledges that some “pockets” within the region – particularly South-East Asia – will have overcapacity issues to deal with in the near term, it still intends to add about \$1 billion of assets to its balance sheet on a net basis each year, taking into account new acquisitions, aircraft sales and normal depreciation.

BOC Aviation has moved its focus to unsecured lending this year, taking advantage of its A- rating from both Standard & Poor’s and Fitch to ensure its funding costs remain among the lowest in the leasing industry. This year, the company raised \$1.8 billion in new funds, “almost all” of which was on an unsecured basis.

In the capital markets, BOC Aviation made its first Rule144A bond issuance in March. This unsecured issuance allowed the company to diversify its investor base into the US institutional investor market with a \$750 million, five-year bond, building on its work issuing bonds in the Asian markets since obtaining its credit rating in 2012.

“We expect to return to the 144A market,” says a company spokesman. “We have also been active in local currency markets in Asia and in particular returned to the Singapore dollar market this year with a 10-year private placement of S\$145 million [\$102 million] that we swapped into US dollars on closing.

### BOC Aviation Fleet by Region of Lessee



“Our ability to access local currency markets in Asia (such as Singapore dollars, Australian dollars and offshore renminbi) is quite unique among aircraft operating lessors and remains a significant point of difference between our approach to funding and that of our competitors,” adds the spokesman. “We are able to print local currency deals quickly off the format of our US\$5 billion Global Medium Term Note programme, and this allows us to take advantage of favourable pricing windows in these markets based on cross-currency swap levels back into US dollars.”

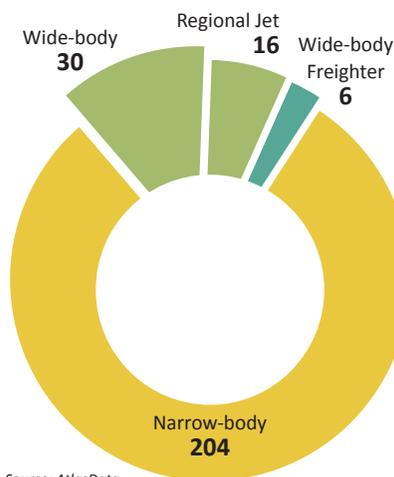
Regional Japanese banks have also been a target of BOC Aviation’s fundraising activities. One of the

“most important” bank transactions for the company this year was a \$300 million unsecured term loan in July with 18 Japanese financial institutions.

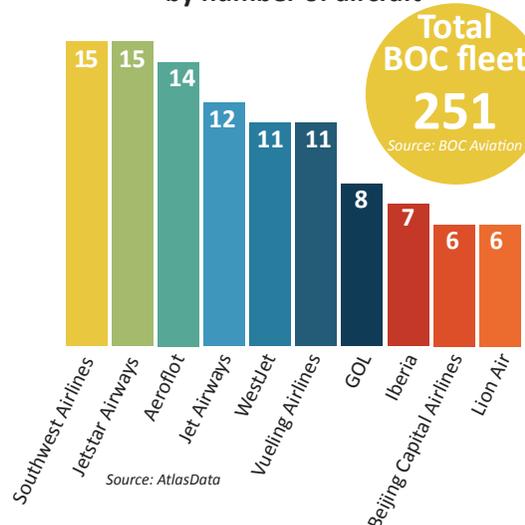
“We see the Japanese domestic financing market as an important new source of funding in the years ahead and we expect to return to this market as well,” says the spokesman.

BOC Aviation has also established a number of unsecured bilateral term loans in 2015 with “several” banks. ▲

### BOC Aviation Aircraft Categories



### BOC Aviation Top Lessees by number of aircraft



### BOC Aviation Key Facts

Name:	BOC Aviation
Country:	Singapore
Founded:	1993
Ownership:	100% owned by BOC since Dec 2006
Head office:	Singapore
Number of employees (as of Mar 31 2015):	129
Size of fleet (as of Mar 31 2015):	251 owned and managed
Average age of fleet (as of Mar 31 2015 weighted by net book value of owned fleet):	3.4
Number of lessees (as of Mar 31 2015):	60
Order book (as of Mar 31 2015):	196
Delivery commitments (as of Mar 31 2015):	Not available
<b>Unsecured Credit Ratings:</b>	
Fitch:	A-
Moody's:	N.R.
S&P:	A-
Total assets (as of Dec 31 2014):	\$11.4 billion
Net profit after tax (as of Dec 31 2014):	\$309 million

Source: BOC Aviation/Ratings Agencies

## TOP TEN LESSORS

## Air Lease Corporation

Air Lease Corporation (ALC) ranks ninth in this year's Leasing Top 50 by number of aircraft and seventh by value. The lessor owned and managed 251 aircraft, as of July 31.

The Californian lessor has enjoyed a remarkable rise in the five years since it was founded in 2010.

In the second quarter of 2015, the lessor boasted of a 39% pre-tax profit margin, its highest since inception. The lessor sold \$457 million-worth of aircraft in the quarter, citing continued strength in the secondary markets. ALC's chief operating officer, John Plueger, says that lease rate factor across the portfolio "remains healthy and consistent".

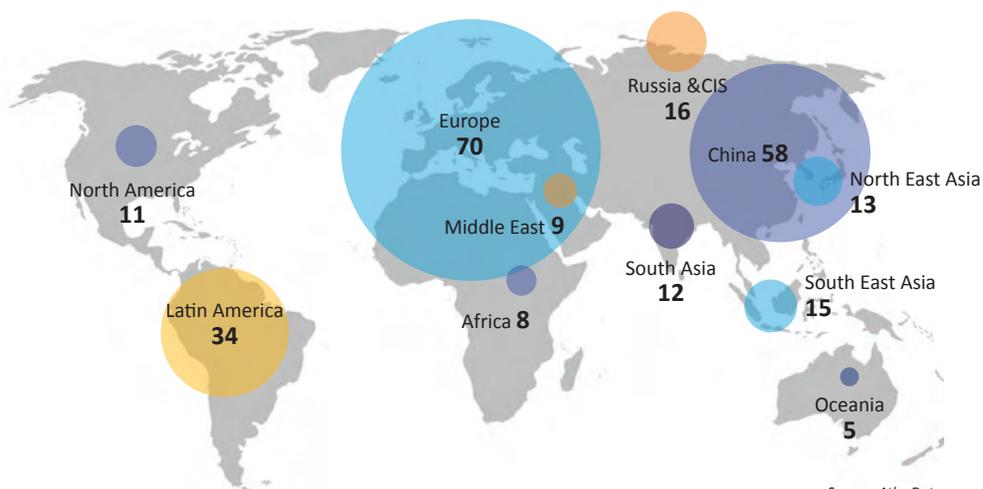
Plueger adds that low fuel prices have prompted inquiries from airlines for lease extensions on current-generation aircraft.

ALC has been a consistent user of the capital markets and has increased the amount of unsecured debt on its books. As of June 30, ALC had \$7.2 billion of debt, \$6.4 billion of which was unsecured – 87% of ALC's debt portfolio.

In August, the lessor priced a \$500 million three-year unsecured bond. The notes carried a coupon of 2.625% and priced at 99.5% of par. In the second quarter of 2015, the firm increased the amount of its unsecured revolving credit facility to \$2.7 billion and extended its availability to May 2019.

ALC made headlines at the Farnborough 2014 airshow when it became the launch customer for

## Air Lease Corporation Fleet by Region of Lessee



Source: AtlasData

the A330neo. Speaking with *Airfinance Journal*, ALC confirmed that demand for widebody aircraft remained "solid". Earlier this year the lessor firmed up the order for 25 A330-900neos and 30 A321LR models.

ALC was the first to commit to the A321LR, the newest variant of the A321neo, after signing a memorandum of understanding for 30 at the launch in January. It also increased its commitment made for 60 A321neos at Farnborough last year to 90 firm A321neo aircraft. ▲

## Air Lease Corporation Key Facts

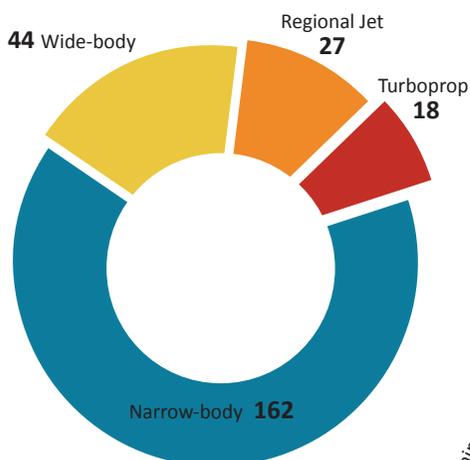
Name:	Air Lease Corporation
Country:	United States
Founded:	2010
Ownership:	Public (NYSE:AL)
Head Office:	Los Angeles, CA
Number of Employees:*	71
Size of Fleet:**	251
Average Age of Fleet:*	3.4 yrs
Number of Lessees:*	84
Order Book:*	399
Delivery Commitments (\$):*	\$31.8 billion
Unsecured Credit Ratings:	
Kroll:	A-
S&P:	BBB-
Total Assets (\$):*	11.7 billion
Adjusted Net Income (\$) (trailing 12 months as of 30 June 2015):*	274.5 million

\*Data as of Q2 2015 / June 30, 2015 – please refer to 10Q filings

\*\*Fleet size as of July 31, 2015

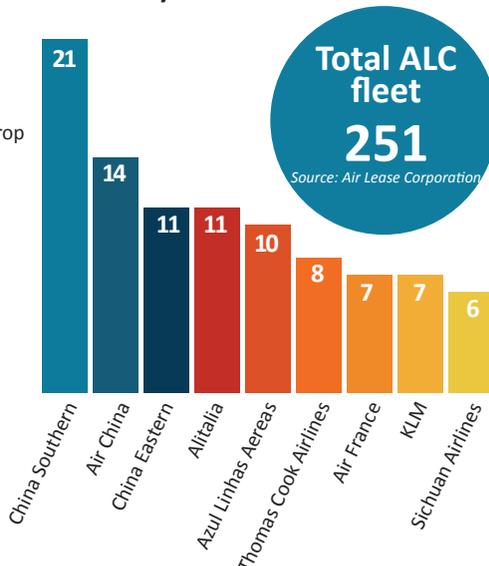
Source: Air Lease Corporation

## Air Lease Corporation Aircraft Categories



Source: AtlasData

## Air Lease Corporation Top Lessees by number of aircraft



Total ALC fleet  
251

Source: Air Lease Corporation



## TOP TEN LESSORS

# Nordic Aviation Capital

Nordic Aviation Capital (NAC) is the largest regional aircraft lessor of Bombardier Q400 and ATR aircraft in the world. Founded by Martin Møller Nielsen in 1990, the company's main office is located in Billund, Denmark. According to NAC's financial results for 2015, it has a net income of \$111 million.

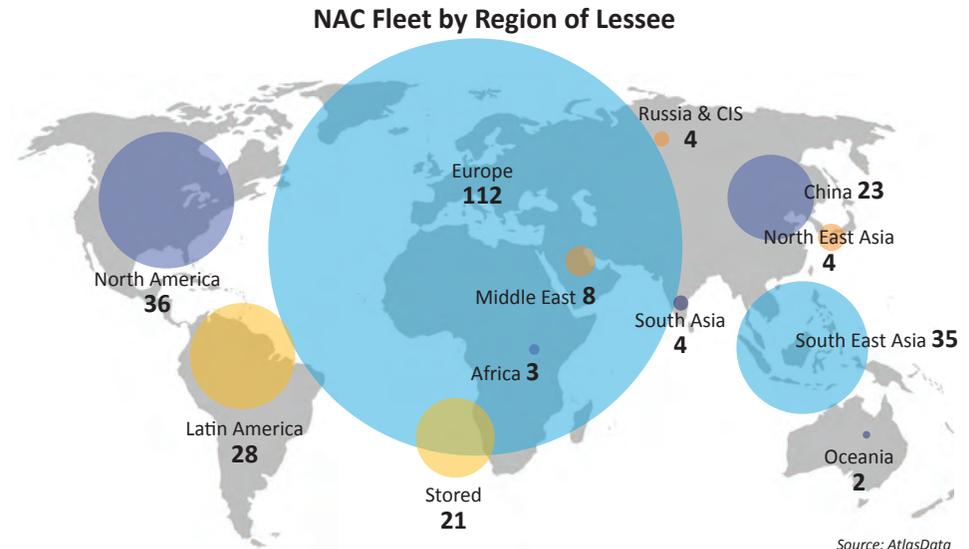
Much of NAC's success is because of its young and diverse fleet. It has 235 aircraft with an average age of 5.8 years on lease to more than 40 different lessees in 30 different countries.

NAC's fleet is made up mainly of ATR 72-500s and -600s, as well as Bombardier Q400s. Its entire portfolio consists of 87% turboprop aircraft, but it also has eight 737s and three A320s.

One of the recent deals that significantly added to the diversity of the lessor's fleet was a revolving warehouse facility signed earlier this year. The facility was upsized from \$300 million to \$400 million, and is being used to fund second-hand regional jets and turboprops.

The deal stood out because of its long tenor and flexibility. It included a two-year revolving period in which it could draw out up to \$400 million and a seven-year term out period when the debt is secured. Another attractive aspect of the facility was that it had a lot of flexibility on the aircraft involved – including both new and used aircraft.

More recently, EQT VI, a fund controlled by London-based private equity group EQT,



Source: AtlasData

agreed to acquire a majority stake of NAC, in a deal that values the Danish lessor at \$3.3 billion. After the deal goes through, Møller will provide about half of the capital and remain a significant shareholder.

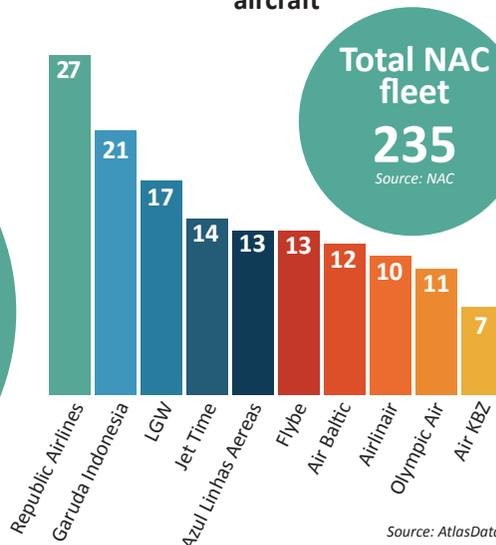
NAC was advised on the deal by Rothschild, Clifford Chance, PricewaterhouseCoopers (PwC) and Ernest & Young. EQT VI was advised by Goldman Sachs, Accura, Freshfields, Bain & Co, IBA and PwC. ▲

### NAC Key Facts

<b>Name:</b>	Nordic Aviation Capital
<b>Country:</b>	Denmark
<b>Founded:</b>	1990
<b>Ownership:</b>	100% private
<b>Head Office:</b>	Billund, Denmark
<b>Number of Employees:</b>	107
<b>Size of Fleet:</b>	235
<b>Average Age of Fleet:</b>	5.8 yrs
<b>Number of Lessees:</b>	40
<b>Order Book:</b>	181
<b>Delivery Commitments (as of 30 June 2015):</b>	\$3.5 billion over next 5 years
<b>Unsecured Credit Ratings:</b>	
<b>Fitch:</b>	n/a
<b>Moody's:</b>	n/a
<b>S&amp;P:</b>	n/a
<b>Total assets (June 30 2015):</b>	\$3.173 billion
<b>Net income (June 30 2015):</b>	\$111 million

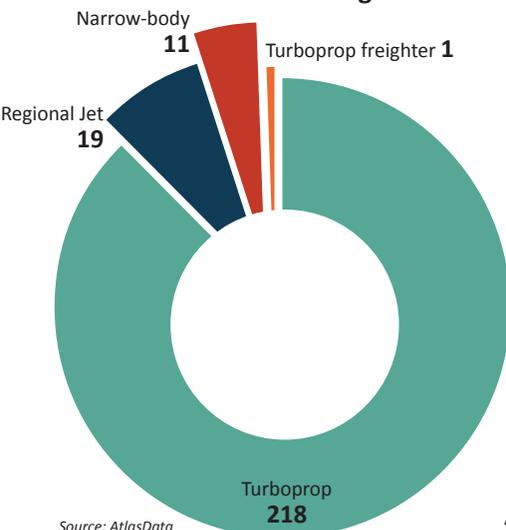
Source: NAC

### NAC Top Lessees by number of aircraft



Source: AtlasData

### NAC Aircraft Categories



Source: AtlasData



## CEO INTERVIEW

# Changes at the top

Norman Liu, chief executive officer, GE Capital Aviation Services (Gecas), answers *Airfinance Journal's* questions about the lessor's plans and the current business environment



***Airfinance Journal:* GE capital has changed a lot since we last spoke. There have been large parts of the business sold off. Can you explain how this relates to Gecas?**

**Norman Liu:** The parts that remain all have an industrial linkage with GE: aviation, in our case, energy projects and healthcare equipment. So things that have links to the industrial domain. Times have changed, and we are changing with them. I have been with GE Capital for nearly 30 years, so I am a bit sad to see the changes in totality. But from Gecas's perspective, things are pretty much the same. We plan to remain the market leader in aviation finance.

We want to offer a broad product set, a broad geographic reach and provide domain expertise to complement the GE industrial side. Our strategic objectives don't change. I think our financial targets and headset remain: to generate significant net income of \$1 billion-plus of net profit a year and a return of equity in the teens. Last year, it was 17%. We continue to have low cost of funds, which allows us to have a fairly conservative book depreciation policy. Anytime businesses focus, they tend to get bigger and better. That will play out.

**How does Gecas intend to get bigger?**

I see the need for other industrial linkages and will try to find other things that can fit that mould. Helicopters are a case in point. We [GE] make turbo shafts for three of the engine platforms powering heavy and medium helicopters – the helicopters in Milestone's portfolio.

GE makes a lot of power-conversion equipment and motors – for ships, business jets and other equipment. Our strategic and

**“I see the need for other industrial linkages and will try to find other things that can fit that mould.”**



“At Gecas, our financial targets are similar to previous years, about \$1 billion-plus in net profits.”

financial objectives remain. But I think there will be some fine-tuning and a close look at how Gecas financing can help our industrial parent.

### So what's the next stage then?

In term of ships, we have a small team as part as our PK lending business. We are not trying to get into ship ownership. We just want to focus on being a secured lender. I think there are some interesting senior lending opportunities without taking purchase/leaseback opportunities.

### How does your shipping portfolio look now?

Our loan portfolio is small, as we have completed just two deals. It's early days for us. We've hired a small team. For some perspective, we are approaching \$50 billion in aviation assets. Over time, we think shipping will be between \$1 billion and \$3 billion, but time will tell.

Financing business jets is also a separate area we have looked at and mentioned in Paris [at the air show]. It's still very much conceptual at this stage. The Milestone team founded NetJets, and when I talk about biz jets we have some people who understand that space very well. We have an historical domain in that space to build on. Our focus would be on aircraft powered by GE engines – larger-class business aircraft – Gulfstream and Bombardier products, for example, units that hold their value over time. If/when we launch this venture, our focus would be outside of North America.

### Have your targets remained the same given you are expanding into different areas?

At Gecas, our financial targets are similar to previous years, about \$1 billion-plus in net profits. And we are looking to do financings – whether they are new orders, sale/leasebacks, or operating leases – in the \$6 billion to \$7 billion range. And we will continue to sell assets as well.



**GE-powered helicopters and shipping are typical of the industrial linkages that Liu is seeking.**

### You have to sell about \$3 billion-worth of aircraft a year. How are you finding that?

We are ahead of that target and have nearly sold \$4 billion of aircraft assets. Right now I don't want to minimize the capital markets deals that we have done, but there is a lot of liquidity in the marketplace and a lot of sales potential. Whether it is individual transactions with buyers, or it is a more securitized pool approach, or mezzanine approaches, there is a lot of liquidity to facilitate deals.

### Are airlines putting pressure on leases for current-generation engine models because of the technology shift?

What drives the purchase and leasebacks for the current generation [Airbus ceos] and the NGs [Boeing next-generation 737s] is supply and demand. If there is a lot of supply – eg, investors wanting to do purchase/leasebacks – and there are only a certain number of deals, that drives margins down a bit.

There may be a focus on airlines recycling

some of the older technology as well. That affects supply. Right now I would say there is more investor supply, and interest from investors in purchase/leasebacks, which results in softening.

### What about lease length or lease rates?

It varies. For new technology, it is your standard eight-year-plus on leases for narrowbodies, 10-plus for widebodies. Some people are tempted to extend shorter six-year leases. You have to take it on a case-by-case basis. We are not seeing a lot of reduction on terms. It is more margins and lease rates rather than lease lengths. ▲

*Gecas headed our Top 50 lessors by number of aircraft table. The company profile appears on page 18.*





“We see demand from customers for a modern, narrowbody freighter for both growth (new air cargo capacity) and replacement of older models.”

## Specialty management

*Chris Damianos, executive vice-president, specialty markets, GE Capital Aviation Services (Gecas), talks to Airfinance Journal about the lessor's activities in the freighter and regional aircraft sectors.*

**Airfinance Journal: Gecas has undergone several management changes in the past year. Can you explain what your role is? What exactly does strategic and product marketing entail?**

**Chris Damianos:** The specialty markets team manages Gecas's freighter and regional aircraft activities, as well as our product marketing, strategic marketing and AviaSolutions consultancy business.

Our strategic marketing team supports Gecas senior management with analysis of our business, industry and trends developing in the marketplace. The team focuses on global macro issues that are pertinent to our business, as well as capturing customer feedback so that we can continuously improve service to our clients.

Our product marketing team has two primary responsibilities. First, they maintain relationships with all the aircraft OEMs [original equipment manufacturers] to stay abreast of new aircraft developments and analyze most of the new aircraft product offerings. Their work ensures that we are investing in aircraft programmes that will be successful. Second, they work with our clients to explain issues like aircraft performance, operating costs and fleet planning. We have a great team that brings value to our clients by explaining the pros and cons of different fleet and financial solutions. For example, we recently worked with a customer who was emphatic that it wanted to lease factory-new aircraft. We helped them see the cost and operational benefits of five-year-old aircraft for their particular mission.

**You are in charge of regional aircraft. Is this a growth area for Gecas? Gecas has more than 350 regionals jets in its fleet. Is**

**Gecas looking to keep this the same?**

At Gecas, regional aircraft include regional jets – 50-, 70- and 90-seaters – as well as turboprops. We will continue to grow in this sector. These aircraft play a vital role for many of our customers, and our leasing and financing activity in the sector is completely customer driven. For example, customer demand prompted us to order Bombardier Q400 turboprops last year, adding to our regional aircraft count. A portion of that order is already leased more than a year ahead of scheduled delivery.

We notice that you have more than 80 CRJ200s within your portfolio. What are your plans with these aircraft because they are a difficult aircraft to trade or lease?

Fifty-seat regional jets [RJs] continue to be an important aircraft type in many of our customers' fleets, especially among major US carriers, and all of our CRJ200s are leased. These aircraft remain vital to network airlines in retaining service in many smaller markets and offering point-to-point service.

There is no direct replacement for this type and it will take time for airlines to transition to other aircraft types, which may occur as current leases and agreements with contract carriers expire over time. We have anticipated the wind-down of the 50-seat RJ market segment, and we are positioned to manage through the gradual transition to what we expect will be larger regional jets and some increased use of turboprops. Lower fuel prices will improve the operating dynamics of the 50-seat RJ and may extend the wind-down of the type somewhat.

**The cargo market appears to be picking up. How is Gecas positioning itself to take advantage of that? Are you planning to make many cargo conversions? If so, how many? Is it likely you will place an order for specialist freighter aircraft?**

At the Paris Air Show we announced the industry's first Boeing 737-800 passenger-to-freighter conversion programme, with plans to convert up to 20 aircraft starting in 2016. We see demand from customers for a modern, narrowbody freighter for both growth (new air cargo capacity) and replacement of older models. This programme simply continues our leadership in the leased freighter market. The 737-800F is well positioned, especially as a replacement for older freighters. Replacement drivers include high operating costs of older narrowbody freighters,



as well as noise and other regulatory requirements. In addition, age regulations are an issue in some countries that do not permit aircraft older than 20 years to be imported.

How do cargo lease rates today compare to passenger aircraft rates? Has there been any change in cargo lease rates over the past 18 months?

Lease rates are based on a variety of factors, including aircraft type, length of the lease term, the customer's credit profile, etc. These are the same factors, whether we're leasing a freighter or a passenger aircraft. But overall, we are satisfied with the recent direction of lease rates. An improving global economy is generating greater air cargo traffic.

Has the change in fuel prices revived the appeal of older aircraft at all? What trends are we seeing for mature aircraft? Are any older aircraft becoming more popular for aircraft trading? Airlines are eager for the latest-technology aircraft coming out of the OEMs. I don't think that the drop in fuel prices has had a major impact on this. But the drop in fuel prices has been a positive for mid-life aircraft, which are seeing a benefit in lower operating costs provided by cheaper fuel. As fuel prices decreased, we have seen renewed interest in 747-400 freighters, for example. ▲



SPONSORED EDITORIAL

# End-of-life solutions – who’s really carrying the risk?

As more capital enters the mature aircraft market, Paul Smith, senior vice-president commercial bids, at TES, examines the risks involved in end-of-life aircraft programmes.



**PAUL SMITH**  
**SENIOR VICE-PRESIDENT**  
**COMMERCIAL BIDS**  
**TES**

The market is starting to witness an influx of programmes geared towards providing “end-of-life” solutions for mature aircraft – but what do these programmes really offer? Does the often-promised risk transfer really divest all risk from the owner of the asset, or will owners be faced with unforeseen and unexpected exposure during the term or at the point the aircraft reaches the end of its useful economic life?

Much like another familiar industry term – “power by the hour”, a phrase that, it is assumed, was termed many years ago to encapsulate a specific product or service – it is ironic that the true meaning could not be more inconsistent; having helped our

clients navigate through and interpret the minefield of inclusivity and exclusivity associated with power-by-the-hour agreements over the years, TES is very aware that products and/or services that are often categorized using broad-brush industry terms require a certain level of scrutiny to determine exactly what you will be getting for your money.

The same can be said for the recent emergence of so-called end-of-life solutions. Taking a cynical view, it could be said that end-of-life planning is nothing more than recycled marketing spin – airlines and lessors have been planning how to phase out aircraft for decades. TES built the origins of our business around helping them achieve this – this is nothing new.

However, what is new is the recent direction of the industry. With more and more new entrants to the marketplace, including start-up airlines and lessors, coupled with a growing trend towards maintaining young fleets and incorporating the latest technology, this is putting pressure on the back end of the market where retirements are expected to continue to increase (see *Boeing historical retirement trend chart below and aircraft replacement forecast chart overleaf*).



Western jets retired with less than 90 seats, excluding hull losses

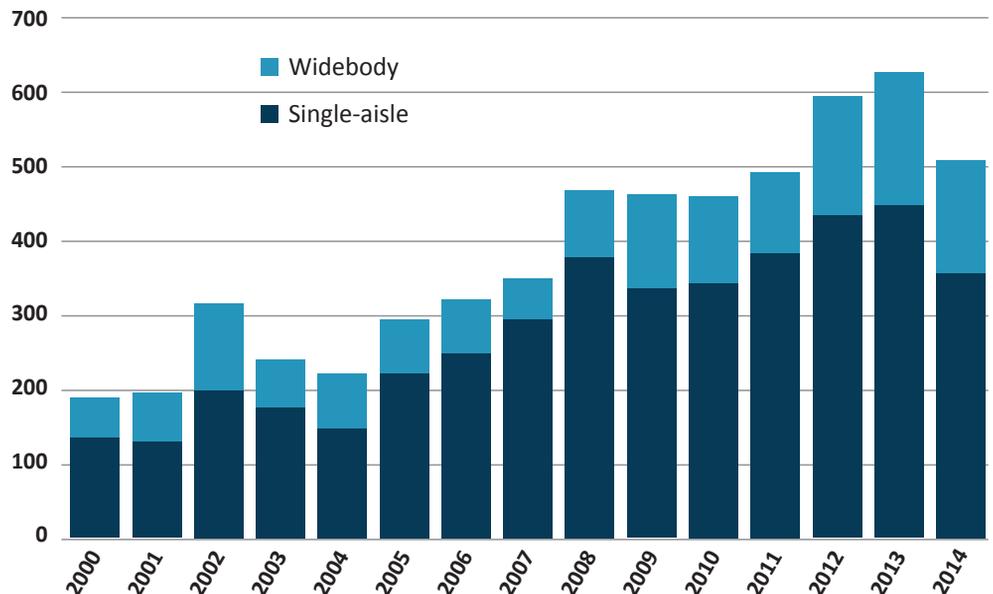


Chart Source: Boeing Current Market Outlook (June 2015)





ANALYSIS

# The world's leased fleet

The AtlasData database includes 10,026 (up from 9,365 last year) western- and non-western-built aircraft, leased by 254 commercial lessors to 772 airlines in 155 countries (data as of August 2015). This represents 36% of the fleet of these airlines. Aggregate orders by the commercial lessors total 3,147. Aircraft leased by captive lessors such as Synergy and Aircraft Purchase Fleet and by the original equipment manufacturers (OEMs) are excluded.

The average age of the existing fleet is 11.4 years and 877 (8.7%) are reported as being off-lease/in storage. This latter category of aircraft has an average age of 20.7 years.

The industry is heavily concentrated. The top 10 lessors account for 53% of the total fleet count and 59% by value. Nevertheless, the smaller lessors provide value to the marketplace in dealing with older or more specialized aircraft. They also may be prepared to do business with some of the more challenging regions of the world or have leading positions in their niche markets, such as Skyworks, Triangle (Falko) and Nordic Aviation Capital.

We have analyzed the fleet in two broad categories – geographic and hardware and then conclude with a section on lessors' order books for new aircraft.

### Nationality of ownership of leased aircraft

Figure 1 shows the ownership of the world's leased fleet by nationality of the lessor or the lessor's ultimate parent company. While this cannot reveal the nationality of the ultimate individual or corporate shareholders of the leasing companies, it does reveal the capital markets that have supported the growth of the industry over recent years. The continued

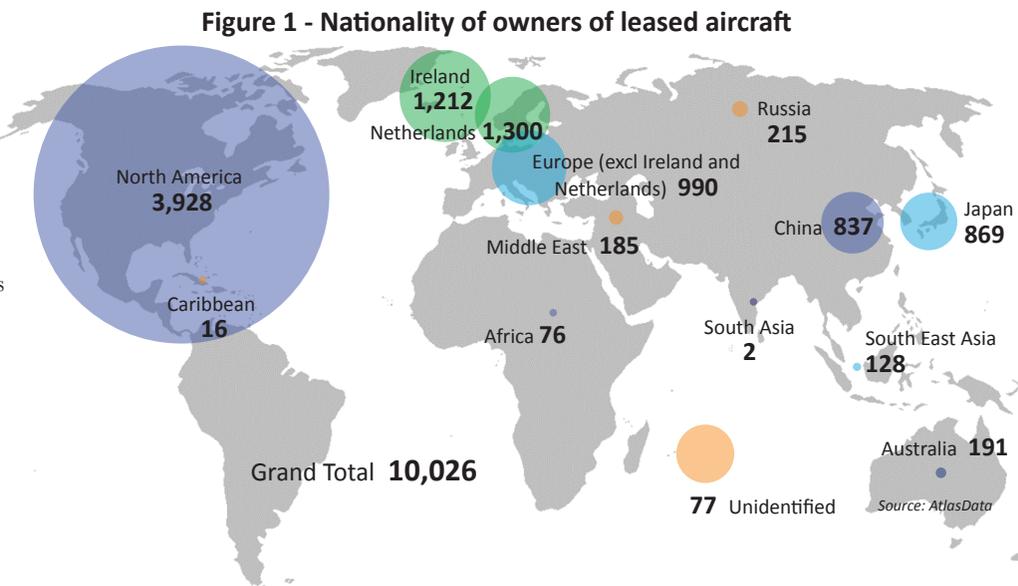
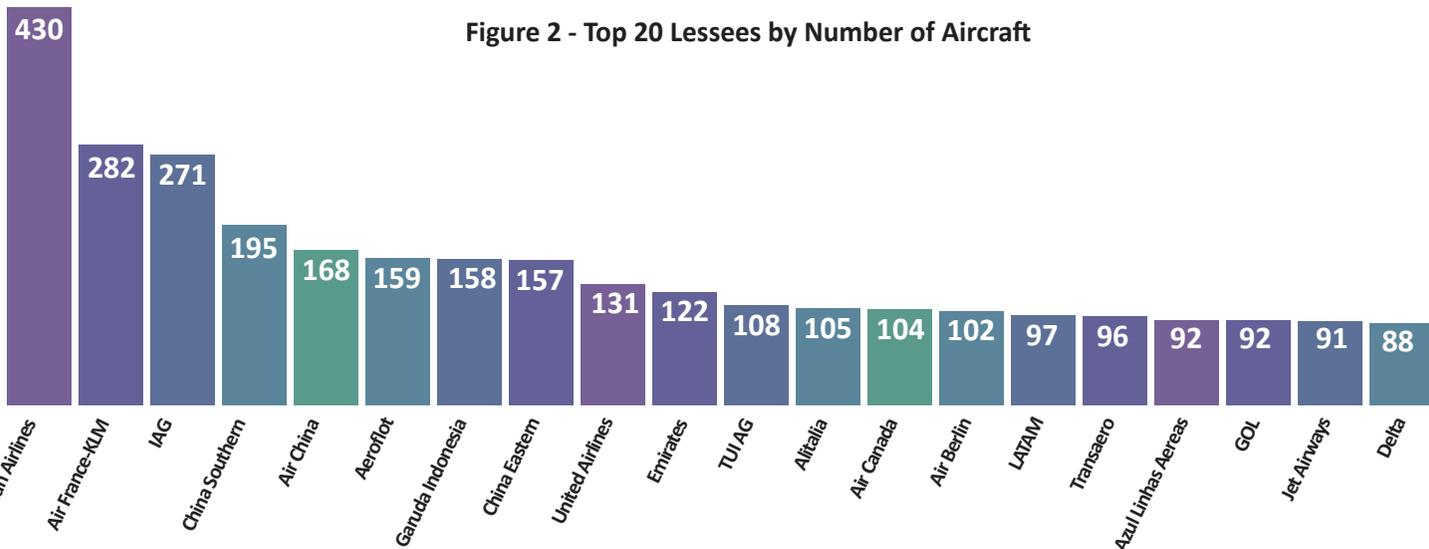


Figure 1 - Nationality of owners of leased aircraft

growth by the Japanese and Chinese lessors and emergence of new lessors such as Accipiter has materially altered the geographic distribution since last year.

Ireland comes third after the US and the Netherlands but much of that capital is originated from offshore capital markets. The growing ranks of Chinese-owned operating lessors (BOC Aviation, Hong Kong Aviation Capital, CDB, Calc, ICBC and Minsheng) are next in the ranking, followed by Russia, the Middle East and Australia, represented by Macquarie and Commonwealth Bank. If the Bohai Leasing acquisition of Avolon closes, we will see another increase for China next year.

### Airlines with the most leased aircraft

Figure 2 shows the top 20 lessee groups by number of aircraft. Just as the leasing industry is heavily concentrated in a relatively small number of players, the airlines to which they are leasing are forming increasingly concentrated groups. Such concentration could reduce the ability of the lessors to diversify their portfolio risks because the top 20 includes some very weak credits.

Restructurings could lead to reductions in fleet sizes, which can cause severe lessor pain. Examples include the downturn in Russia and the restructuring at Malaysia Airlines.



Figure 2 - Top 20 Lessees by Number of Aircraft



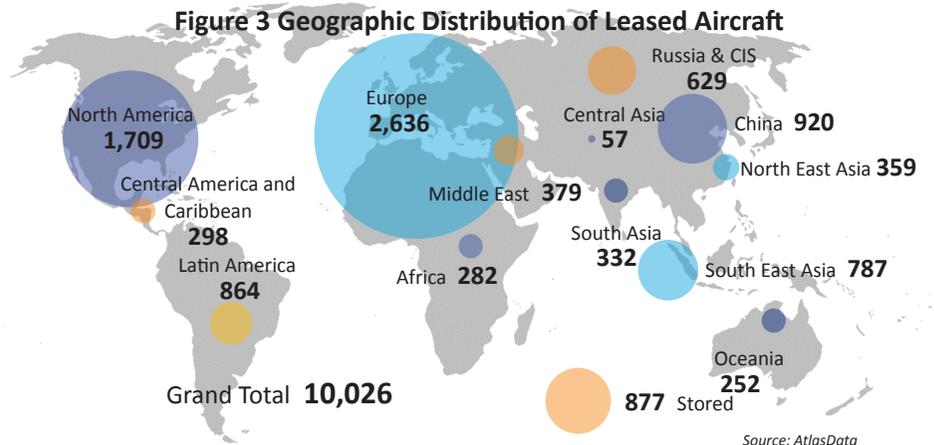
“The different lessors have their own regional strengths, weaknesses and preferences.”

**Geographic distribution of leased aircraft**

The geographic distribution of leased aircraft is shown in Figure 3. While the chart shows Europe in the lead, this is because we split Asia-Pacific into sub-regions given their varying dynamics. Hong Kong and Macao are included in the China segment. We also decided to show Russia as a segment separate from Europe.

**Regional penetration of lessors**

The different lessors have their own regional strengths, weaknesses and preferences. Figure 4 shows the relative market position of the top 10 in the regional groupings as shown.



Source: AtlasData



**Figure 4 - Regional ranking of lessors by number of aircraft**

Africa		China		Europe		Latin America		Middle East			
GECAS	38	AerCap	170	AerCap	399	GECAS	130	AerCap	59		
AerCap	28	GECAS	125	GECAS	264	AerCap	105	GECAS	57		
Macquarie AirFinance	14	ICBC Leasing	83	BBAM (incl Fly & NBB)	213	Aviation Capital Group	51	Pembroke	24		
ASL Aviation Group	14	Air Lease Corporation	63	SMBC Aviation Capital	136	SMBC Aviation Capital	49	Doric	21		
Avmax	12	CDB Leasing	61	Nordic Aviation Capital	112	AWAS	38	DAE Aerospace	19		
Air Lease Corporation	10	CALC	45	CIT Aerospace	80	Air Lease Corporation	36	BBAM (incl Fly & NBB)	19		
Acia Aero	10	BOCOM Leasing	44	Air Lease Corporation	66	CIT Aerospace	32	AWAS	17		
Pembroke	9	BBAM (incl Fly & NBB)	40	Macquarie AirFinance	62	Nordic Aviation Capital	28	ALAFCO	15		
Skytech-AIC	9	BOC Aviation	37	AWAS	62	Avolon	27	CIT Aerospace	13		
Aerocentury	7	SMBC Aviation Capital	31	Aviation Capital Group	57	Jackson Square Aviation	22	Avolon	9		
Aviation Capital Group	7					Macquarie AirFinance	22	MC Aviation Partners	9		
Elix Aviation Capital	7					BBAM (incl Fly & NBB)	22	BOC Aviation	9		
North America		North East Asia		Oceania		Russia & CIS		South Asia		South East Asia	
GECAS	573	GECAS	71	Avation	23	AerCap	142	GECAS	39	GECAS	100
AerCap	206	AerCap	39	SMBC Aviation Capital	22	GECAS	69	AerCap	23	AerCap	74
CIT Aerospace	78	SMBC Aviation Capital	32	BOC Aviation	20	VEB-Leasing	68	BOC Aviation	21	Pembroke	38
Aviation Capital Group	55	AWAS	25	AerCap	18	VTB Leasing	38	MC Aviation Partners	17	Avolon	37
Cargo Aircraft Management	53	CIT Aerospace	15	CIT Aerospace	17	SMBC Aviation Capital	27	Investec	15	BBAM (incl Fly & NBB)	37
AWAS	48	Aviation Capital Group	14	ORIX Aviation	13	BOC Aviation	22	Hong Kong Aviation Capital	15	Nordic Aviation Capital	35
Skyworks Leasing	47	Air Lease Corporation	13	Falko	12	AWAS	20	CDB Leasing	14	AWAS	35
Avmax	44	MC Aviation Partners	12	Avmax	12	Sberbank Leasing	19	Air Lease Corporation	13	SMBC Aviation Capital	33
SMBC Aviation Capital	38	BBAM (incl Fly & NBB)	12	AWAS	12	Ilyushin Finance Corporation	18	Avolon	13	BOC Aviation	26
BOC Aviation	38	Macquarie AirFinance	11	Hong Kong Aviation Capital	11	CIT Aerospace	17	Pembroke	12	Macquarie AirFinance	25
		BOC Aviation	11			AviaAm Leasing	17	BBAM (incl Fly & NBB)	12		

Source: AtlasData



## Global Fleet and Valuations Software

with AVITAS® BlueBook Values and Airfax® Aircraft Availability Data

The most powerful and easy to use online tool available to track the world's aircraft fleet, value and market availability.



One month free trial available – Contact us for more details

Innovative Software and Services for Aviation  
[www.aerdata.com](http://www.aerdata.com) [info@aerdata.com](mailto:info@aerdata.com)



### AIRFINANCE DEALS DATABASE

## A detailed insight into the aircraft deals market



Upgrade your subscription to access Airfinance Deals Database, a full market intelligence resource at your fingertips:

- View the latest industry RFPs in need of financing
- Access 10 years of historic aircraft financing transactions
- Download quarterly market status and special reports
- Benchmark deals against your competitors and against newly created deals
- Perform year on year comparisons
- Access full market intelligence covering deals, regions, borrowers, banks and more

Take a **FREE TRIAL** to see the **NEW** updates

W: [www.airfinancejournal.com/dealsdatabase](http://www.airfinancejournal.com/dealsdatabase)

T: +44 (0) 207 827 8015

E: [accountmanager@airfinancejournal.com](mailto:accountmanager@airfinancejournal.com)



“A full 64% of the leased fleet is in the narrowbody category split mostly between the A320 and 737 families.”

**Breakdown of leased fleet**

Figure 5 shows a breakdown of the leased fleet and orders by category of aircraft. A full 64% of the leased fleet is in the narrowbody category split mostly between the A320 and 737 families. Only 13% is widebody, though in value terms that share would be much more significant, especially with the A380 and 787 joining the lessors' portfolios.

**Stored fleet**

Only 224 of the 877 stored aircraft are owned or managed by the top 10 lessors (giving them a stored rate of only 4.2% compared with the overall figure of 9%), while 635 were owned or managed by the top 50 lessors.

Analysis of the 877 shows a strong skewing in favour of older aircraft as shown in Figure 6. As many as 517 are more than 20 years old

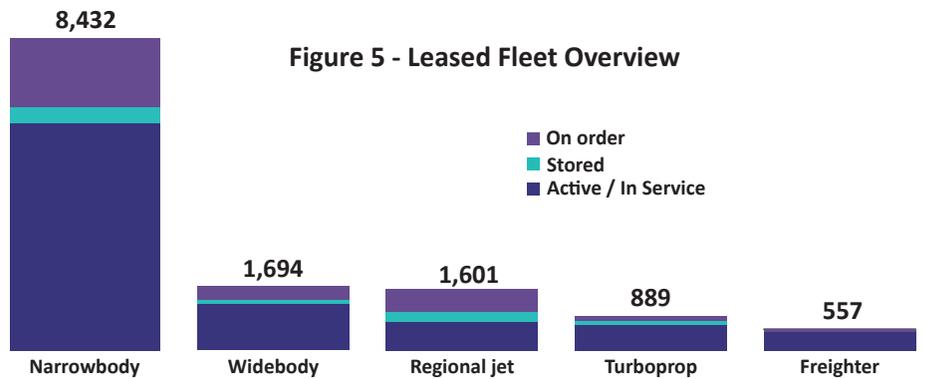


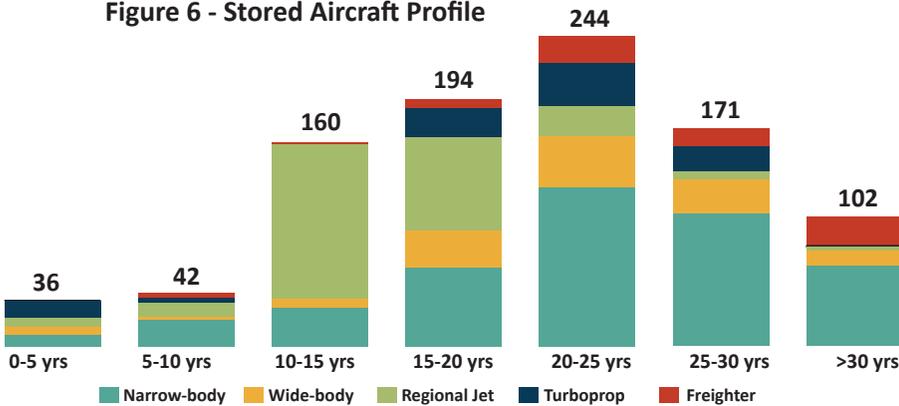
Figure 5 - Leased Fleet Overview

and represented heavily by 737 Classics, MDs, 737-200s and 757s.

Of the more recent aircraft types, the CRJ200 is the most noticeably represented, with 143 units, and there are also 12 777s

and nine A330s on the list. This compares with only one 777 showing as stored last year. Among narrowbodies there are only 24 737 NGs and 73 A320-family aircraft appearing, 39 of the latter are more than 15 years old. CRJs and ERJs are the most notable aircraft types in the 10- to 15-year-old category.

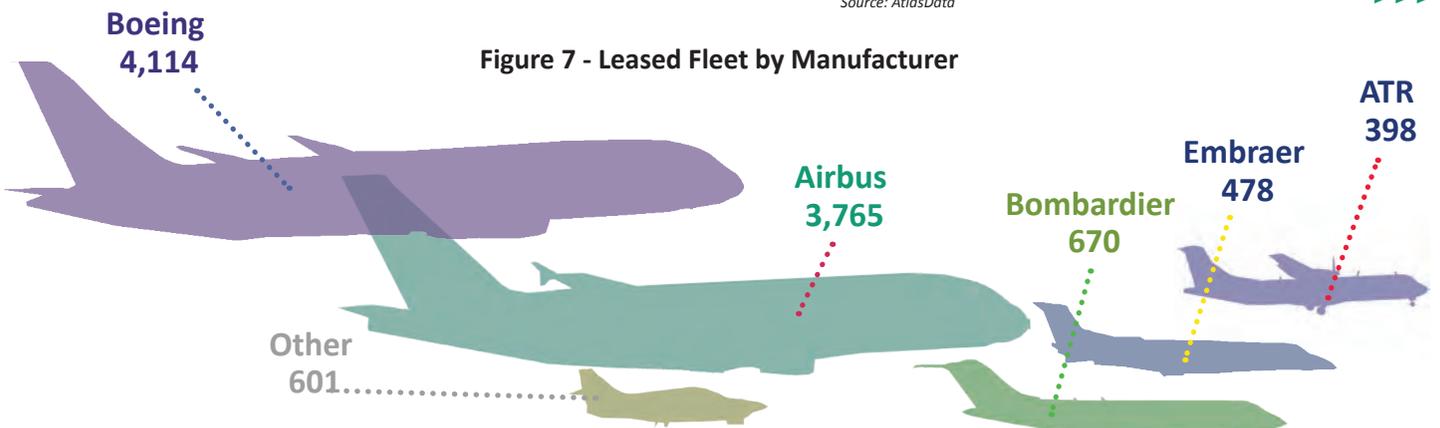
Figure 6 - Stored Aircraft Profile



**Breakdown by manufacturer**

Figure 6 shows the predictable near tie between Airbus and Boeing, followed distantly by Bombardier, Embraer and ATR. In a few years' time, this profile will look somewhat different, with the lessors' orders for the Bombardier CSeries, the Irkut MC-21 and the Comac C919.

Figure 7 - Leased Fleet by Manufacturer



Source: AtlasData

Source: AtlasData

# Welcome to the family.



Announcing the placement  
of our first two Boeing 777-300ERs  
with Philippine Airlines -  
just look where Genuine Agility gets you.

**Intrepid**  
A V I A T I O N Genuine Agility

**Stamford**

Phone: +1 203 905 4220

**Singapore**

Phone: +65 6408 0192

**Dublin**

Phone: +353 1 901 8400

See more at [IntrepidAviation.com](http://IntrepidAviation.com)

“The average age of the leased freighter fleet is 22 years.”

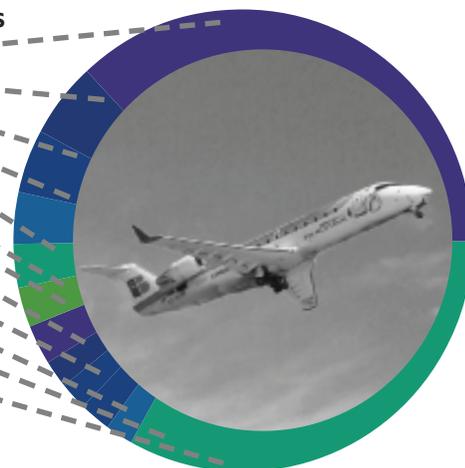
**Regional jets**

The regional jet segment is fast growing and has seen some of the major lessors enter in recent years, most notably Gecas and Air Lease Corporation. The segment has also attracted capital into the secondary market, with Triangle (Falko) acquiring BAE Systems’ fleet of leased RJ/Avroliners.

**Figure 8 - Top Lessors of Regional Jets**

GECAS	374
Falko	54
Avmax	47
Jetscape	36
CIT Aerospace	30
Air Lease Corporation	29
Aldus Aviation	27
Airfleet Credit Corp.	21
VEB-Leasing	20
CDB Leasing	20
Goiania Leasing	20
Others	334

Source: AtlasData



**Figure 9 - Top Lessors of Turboprops**

Nordic Aviation Capital	219
Avmax	89
Elix Aviation Capital	44
GECAS	31
Erik Thun	29
Aerocentury	27
ASL Aviation Group	26
Saab Aircraft Leasing	25
Jetstream Aviation Capital	24
European Turboprop Management	24
Rockton Aviation	20
Avation	20
Others	288

Source: AtlasData

**Turboprops**

Turboprops are a significant niche market, dominated by one lessor, Nordic Aviation Capital. However, other lessors have a presence, as shown in Figure 8. Elix Aviation Capital is now the third-largest lessor of turboprops with 44 aircraft, up from 11 last year.



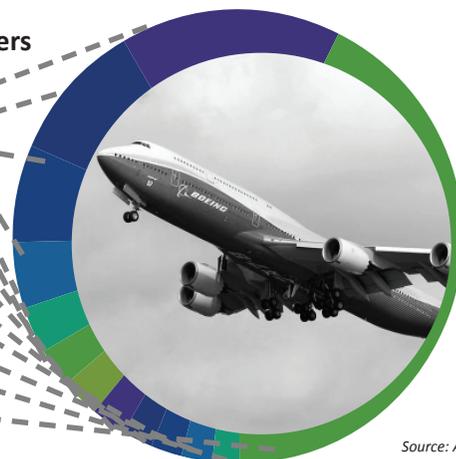
**Freighters**

Figure 9 shows Gecas taking up 16% of the freighter segment but joined by other major players. The average age of the leased freighter fleet is 22 years. The owners of the youngest freighters do not feature in the top 10 list but they include Doric, DAE Aerospace, Century Tokyo, Jackson Square, Avolon and BOC Aviation.

**Figure 10 - Top Lessors of Freighters**

GECAS	86
Cargo Aircraft Management	56
ASL Aviation Group	37
European Turboprop Management	27
Aircastle	18
Jetstream Aviation Capital	15
Skyworks Leasing	15
Neff Air	14
Largus Aviation	13
AWAS	12
Aviation Capital Group	12
DAE Aerospace	11
Others	234

Source: AtlasData



TAA Financial Rating Scores - LTM					Overall Rating Scores		
Avg. Fleet Age	EBITDAR Margin	FCC	Liquidity	Leverage	LTM-2	LTM-1	LTM
5	2	2	1	3	1.4		2.2
THE AIRLINE ANALYST FINANCIAL RATINGS					6	2.4	5.6
							6.2
							3.6
							2.0
							6.4
							3.7
							1.7
4	2	4	4	5	3.6	3.8	3.8
6	3	5	4	3	5.1	4.6	3.9
5	1	4	2	4	2.5	2.5	2.9
5	2	4	3	4	2.7	2.9	3.4



# Airlines' strengths and weaknesses revealed

The Airline Analyst Financial Ratings are now available online



Access powerful insight to the absolute and relative financial strength or weakness of over 175 airlines – now online.

TAA Financial Ratings are based on the Latest Twelve Month data and unlike public ratings they are founded on completely transparent methodology.

Use TAA Financial Ratings to:

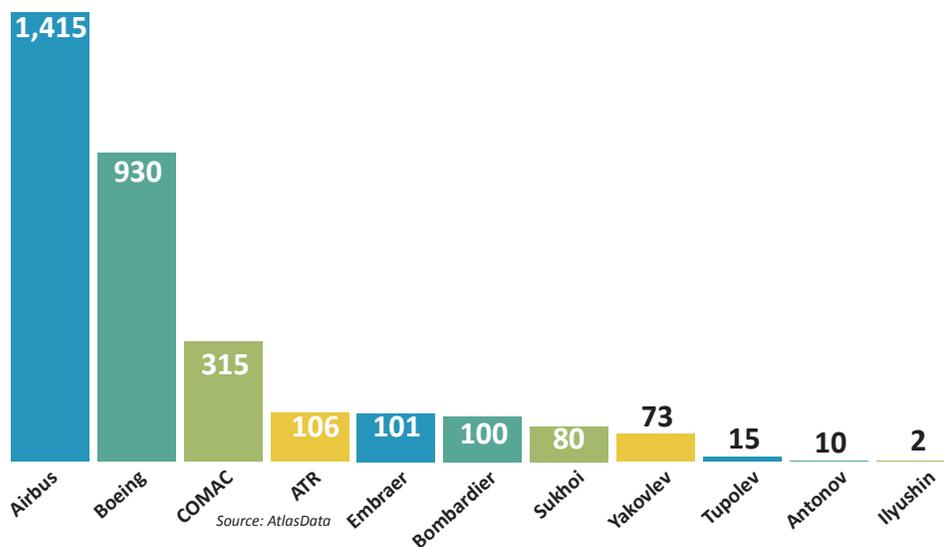
- Sense check your own internal airline ratings
- Ascertain 3-years' rating trend for individual airlines
- Instantly identify airlines' strengths and weaknesses
- Help predict baseline credit ratings

For more information on **Financial Ratings** or **The Airline Analyst** contact Harry Sakhrani [hsakhrani@theairlineanalyst.com](mailto:hsakhrani@theairlineanalyst.com)  
 +44 (0) 20 7779 8203



“The top lessors have a dominant position in the market.”

Figure 11 - Lessor Order Book by Manufacturer



### Order books

Forty lessors have a total of 3,147 aircraft on order from the OEMs. At list prices this backlog has a value in excess of \$350 billion. Applying an assumed average 40% discount to list price still results in a huge number of \$210 billion. The breakdown of these orders by manufacturer is shown in Figure 11.

The lessors with the 10-largest numbers of aircraft on order account for 2,209 or 70% of the total backlog. The top 10 with the approximate size of their backlogs is shown in Figure 11. Some national policy considerations may be seen in the Chinese and Russian lessors' orders for their respective new national aircraft types. The other lessors tend to grow their fleets through secondary market purchases or purchase/leasebacks with airlines.

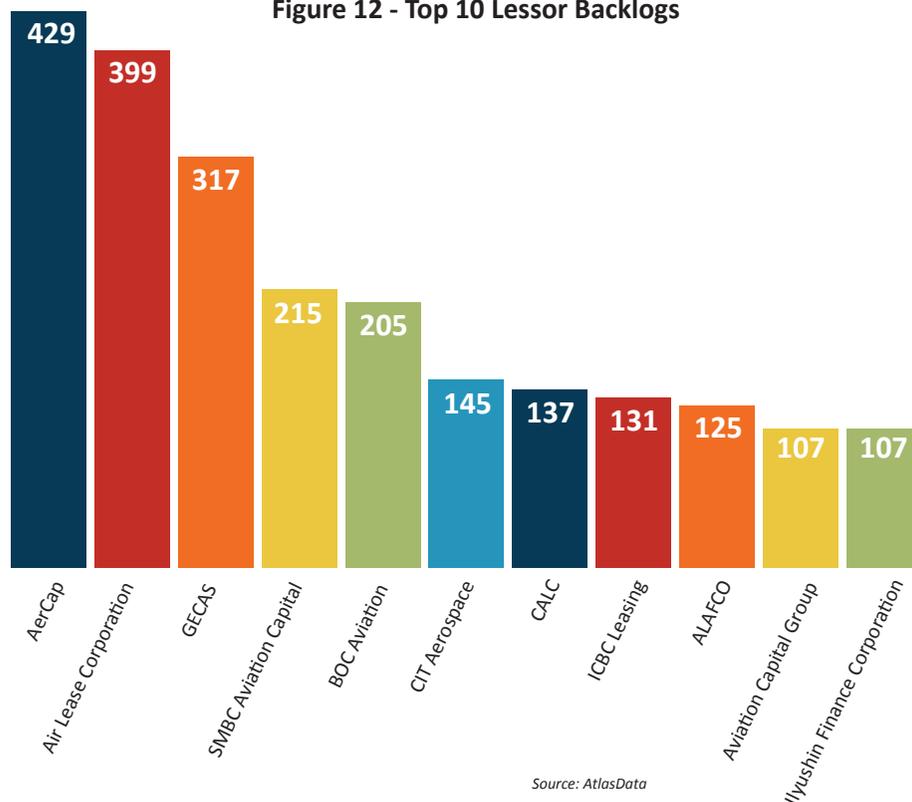
### Conclusion

Analysis of the global leased fleet reveals a huge diversity of portfolios of aircraft and lessees, and explains why the industry has attracted and will continue to attract new market entrants which believe they can deliver value and generate acceptable returns on capital with their chosen fleet strategies and business models.

The top lessors have a dominant position in the market with great strengths in access to capital, availability of aircraft and ability to offer customers overall fleet solutions rather than just aircraft.

Given their domination of the order books for new aircraft, we can expect to see a further concentration of the market in the future. This may increase even more if we see some consolidation of the second tier of lessors to create another lessor of size to compete with Gecas and AerCap. 

Figure 12 - Top 10 Lessor Backlogs





## REGIONAL PROFILE

# Russia

Russian lessors have spent much of the past 12 months helping their domestic airline clients to re-arrange their fleet plans in response to tough economic conditions.

Sanctions, currency devaluation and a drop in international demand have stung Russian airlines over the past year. Some of the country's largest carriers have been forced to adapt by delaying aircraft deliveries, scaling back their fleets and requesting state aid. Transaero recently announced it would sell a 75% stake to Aeroflot to stave off bankruptcy.

### Airlines react

Russian lessors are mostly focusing on domestic clients for the time being.

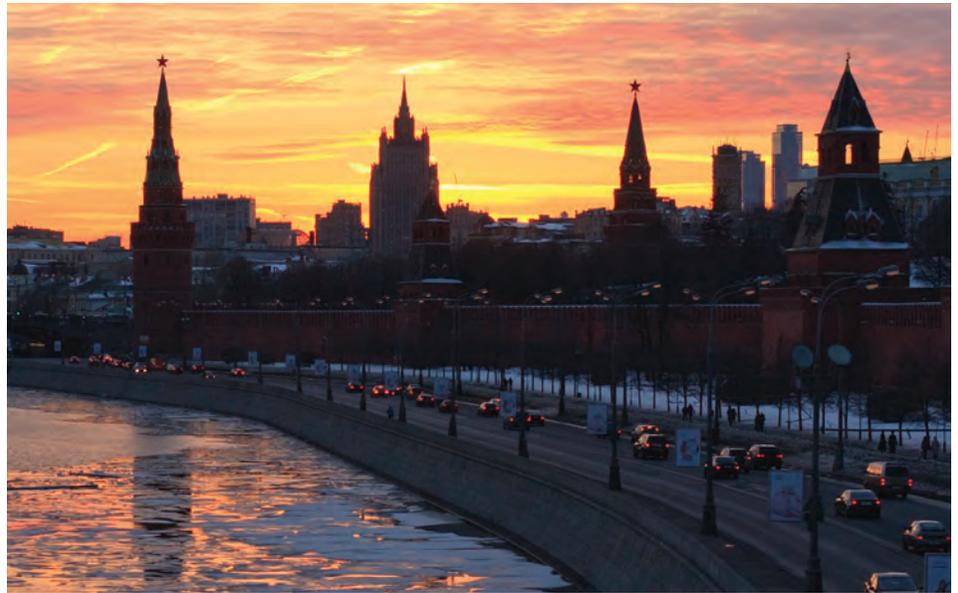
Philip Lamzin, legal director at DLA Piper, says: "The local leasing market continues to adapt to new economic conditions. The market is quite flat at the moment and we would expect some more visible changes in the coming months. The nature of the changes will obviously depend on the condition of the economy in general."

He adds: "Russian lessors are all mainly focusing on the local airline clients and have been building up their strategies and aircraft orders based on the expectation of continuing growth of the market."

Lamzin adds that the devaluation of the ruble, the collapse of the charter market, the impact of financial sanctions and an economic recession are all combining to hurt airlines. Many are facing serious liquidity issues and have had to rethink their fleet strategies, which is causing headaches for the leasing companies that own the aircraft.

Recently, for example, Transaero announced a takeover by Russia's largest carrier, Aeroflot. Meanwhile, another of Russia's leading carriers, UTair, continues to reduce its fleet drastically in an urgent attempt to cut costs. The carrier announced at the end of 2014 that the reduction would leave it with 71 aircraft from the previous total of 117.

As a result of market uncertainty and liquidity



restrictions, Russian carriers are also shying away from large new aircraft orders.

"There is certainly much less appetite for newer – and more expensive – aircraft. There will be substantially fewer new deliveries this year, especially compared to the record-breaking 2013 and 2014," explains Lamzin.

He adds: "So right now, local lessors are facing a tough challenge to restructure leases with defaulting lessees, place aircraft on other markets and reschedule deliveries of new aircraft."

### Lessors feel the pinch

Many of Russia's largest lessors are affiliated to state-backed financial institutions, which have been sanctioned by the EU and US after perceived Russian aggression in Ukraine. As a result, the aircraft leasing arms of these banks are prevented from

attracting finance on western markets. Lease rates have risen and the financing of new aircraft deliveries has become harder for Russian lessors.

Dmitry Karamyslov, partner at Debevoise Plimpton, says: "Because most of the key Russian leasing companies are essentially sanctioned they can't raise funds on the international market in order to finance new deliveries. Sometimes they also have difficulty financing existing orders – for example, with Ex-Im-supported financings."

He adds: "Sanctions make it much more difficult for Ex-Im and other foreign finance parties to participate in such kinds of deals."

To help boost its struggling aviation sector, the government is introducing a range of measures. In March, for example, the government approved fresh subsidies on interest payments for Russian lessors. The measures apply to payments from Russian lessors to Russian banks, but only on the condition that they are for the purchase of Russian-built aircraft. Similar subsidies already existed for aircraft on finance leases, but in March they were extended to include aircraft on operating leases.

While the move is a welcome development for Russian companies, key figures in the Russian aviation industry have raised doubts about how much help it is providing. Some note that the majority of aircraft flying in Russia are foreign-manufactured, so the overall impact of these subsidies on the leasing industry is likely to be minimal. ▲

### Fleet Size and Order Book of Russian Lessors

Lessor	Total	Active / In Service	Stored	On order
<b>VEB-Leasing</b>	<b>153</b>	<b>70</b>	<b>14</b>	<b>69</b>
<b>Ilyushin Finance Corporation</b>	<b>150</b>	<b>29</b>	<b>14</b>	<b>107</b>
<b>Avia Capital Leasing</b>	<b>50</b>	<b>16</b>		<b>34</b>
<b>VTB Leasing</b>	<b>40</b>	<b>38</b>	<b>2</b>	
<b>Sberbank Leasing</b>	<b>32</b>	<b>19</b>	<b>2</b>	<b>11</b>
<b>Grand Total</b>	<b>425</b>	<b>172</b>	<b>32</b>	<b>221</b>

Source: AtlasData

# REGIONAL LESSOR PROFILE

## VEB

With a fleet of more than 80 aircraft, VEB Leasing is the largest Russian aircraft leasing company by number of aircraft.

According to the company's 2014 financial statements, 44% of its leasing risk is focused on the airline industry. The second-largest exposure, at 34%, is to rail transportation. The remaining risk is dispersed across a variety of industries, including trade, construction, mining and power.

The lessor is largely focused on servicing Russian airlines. In October last year, the leasing company agreed to finance the delivery of 16 SSJ100s to three domestic carriers. The leasing subsidiary financed the deliveries with two loans totalling R18 billion (\$268 million) that were issued by its parent company Vnesheconombank.

At the 2015 Mavs air show in Moscow, the lessor also signed a memorandum of understanding with United Aircraft Corporation for a further 10 SSJ100s. These will be delivered to Mexican carrier Interjet.

VEB Leasing was the lead arranger for a previous deal with Interjet for SSJ100s that won Airfinance Journal's Export Credit Deal of the Year 2014. This deal, which was backed by the export credit agencies of France, Italy and Russia, increased the marketability of the aircraft by setting a precedent for a sophisticated structure that can finance new deliveries.

The group notes the negative impact of the Russian operating environment in its 2014 financial statement. It says that a drop in crude oil prices, a



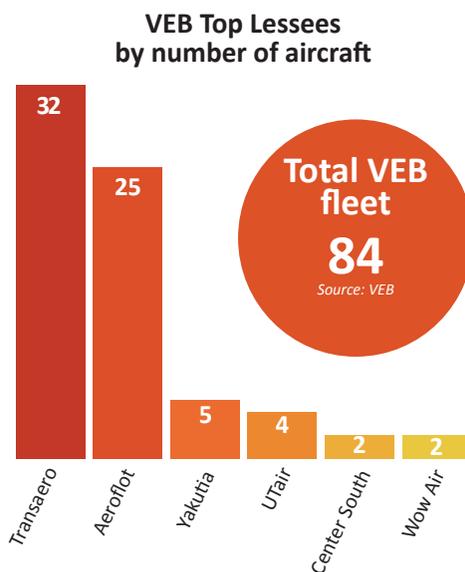
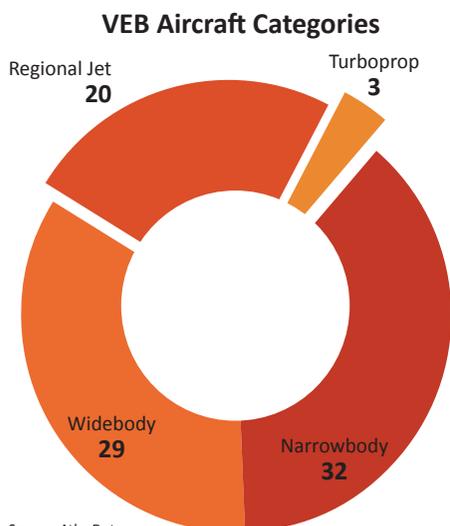
devaluation of the rouble and international sanctions have reduced access to capital and increased the cost of borrowing; VEB adds that the situation "could negatively affect the group's future financial position".

The group made a similar observation about the political situation in Ukraine, which it notes has "resulted in a deterioration of liquidity and much tighter credit conditions". ▲

### VEB Key Facts

<b>Name:</b>	VEB Leasing
<b>Country:</b>	Russia
<b>Founded:</b>	2003
<b>Ownership:</b>	Vnesheconombank
<b>Head Office:</b>	Moscow
<b>Number of Employees:</b>	n/a
<b>Size of Fleet:</b>	84
<b>Number of Lessees:</b>	6
<b>Order Book:</b>	24 SSJ100 and 45 MS21
<b>Delivery Commitments :</b>	n/a
<b>Unsecured Credit Ratings:</b>	
<b>Fitch:</b>	BBB-
<b>Moody's:</b>	n/a
<b>S&amp;P:</b>	BB+
<b>Total Assets (as of 31 December 2014):</b>	\$9bn
<b>Net Income (as of 31 December 2014):</b>	\$44.6m

Source: AtlasData and AFJ research



Source: AtlasData

# REGIONAL PROFILE

## China

The Chinese leasing market has been growing at an impressive rate in 2015, with new players entering the market and several significant orders being made. Five Chinese lessors made it into our Top 50 this year and, for the first time, a Chinese lessor (ICBC Financial Leasing) has made it into the Top 10.

As has been the case with Chinese money in other industries, Chinese leasing companies are looking at making overseas equity investments. Bohai Leasing announced in August that it is in exclusive talks to take over Irish lessor Avolon.

Other smaller landmark deals involving Chinese lessor investment are also being closed outside the country's borders. For example, this year ICBC Financial Leasing completed the first cross-border leasing transaction with Nepal, for an A320-200 to start-up Himalaya Airlines. Further afield, Bank of Communications Financial Leasing bought a portfolio of A320s from airberlin in August.

Allen Ng, a partner at Baker & McKenzie's Hong Kong office, says Chinese lessors are increasingly keen to do business with non-domestic airlines, but need to be aware of local culture and business practices.

"For example, if you do a deal in [South] Korea, the country has its own kind of, I would say, closed economy, so you have to really understand the market practice there," he says. "This is the same question posed to the foreign lessors when they first go into China: if you do not accept the culture or the legal system of that jurisdiction, you will find it very difficult to break into that market."

Ng adds that lessors are increasingly focusing on how to manage the residual value risk of their fleets.



"Some start selling, not just buying," he says. "To a lot of them, the focus is on how to grow their portfolio."

Because of this portfolio growth, Chinese lessors are increasingly focused on leasing out their new aircraft, says David Yu, adjunct professor of finance at New York University Shanghai.

"On the trading side, there less emphasis on buying packaged deals and more activity in selling packages," he adds.

A Hong Kong-based lawyer, who declined to be named, says: "For a number of years they've been purchasing aircraft second hand with leases attached. They're now moving into a phase where they are having to sell aircraft and moving into a phase where they're having to take delivery of their purchase orders."

China's free-trade zones (FTZs) – based in Tianjin, Shanghai, Fujian and Guangdong – are increasingly important to the country's leasing market.

"There are compelling reasons to have more leasing deals be based out of FTZs for domestic Chinese carriers, especially for Chinese domestic lessors," says Yu.

"Not only are there incentives for tax reductions, but also ease of certain restrictive regulations as well. The next logical step is more enhanced trading of existing assets in the space, which saw some more activity this year; in addition to the ownership of overseas assets over time to be a more global rather than regional domicile region."

Indeed, these FTZs have become so integral to the Chinese leasing market that the country's most powerful airlines are frequently demanding that their lessors do deals through them.

"All lessors basically have to have a domestic SPV [special purpose vehicle]," says Johnny Lau, the head of Hong Kong-based Astro Aircraft Leasing and the former chief executive officer of Minsheng Financial Leasing's aircraft division.

He adds: "Maybe smaller airlines do not have that kind of luxury, but it will affect a lot of international lessors in order to bring some business into China."

Moreover, the market is closely watching developments in Hong Kong, where recently announced withholding tax breaks in the Special Administrative Region will incentivize PRC-Hong Kong leasing transactions and help establish the city as an aircraft financing and leasing hub. ▲

### Fleet Size and Order Book of Chinese Lessors

Lessor	Total	Active / In Service	Stored	On order
<b>BOC Aviation</b>	<b>461</b>	<b>251</b>	<b>5</b>	<b>205</b>
<b>ICBC Leasing</b>	<b>304</b>	<b>171</b>	<b>2</b>	<b>131</b>
<b>CALC</b>	<b>184</b>	<b>47</b>		<b>137</b>
<b>Hong Kong Aviation Capital</b>	<b>146</b>	<b>75</b>	<b>1</b>	<b>70</b>
<b>CDB Leasing</b>	<b>130</b>	<b>120</b>		<b>10</b>
<b>BOCOM Leasing</b>	<b>79</b>	<b>49</b>		<b>30</b>
<b>Dragon Aviation Leasing</b>	<b>32</b>	<b>26</b>		<b>6</b>
<b>Shenzhen Financial Leasing</b>	<b>22</b>	<b>2</b>		<b>20</b>
<b>Hong Kong Int. Av. Leasing</b>	<b>18</b>	<b>12</b>		<b>6</b>
<b>Minsheng Financial Leasing</b>	<b>17</b>	<b>17</b>		
<b>Grand Total</b>	<b>1,393</b>	<b>770</b>	<b>8</b>	<b>615</b>

Source: AtlasData

## REGIONAL LESSOR PROFILE

## Hong Kong Aviation Capital

Hong Kong Aviation Capital (HKAC) has been securing support from mainland Chinese bilateral lenders since 2011 and is continuing to expand with European primarily bilateral lenders as it has done since 2013.

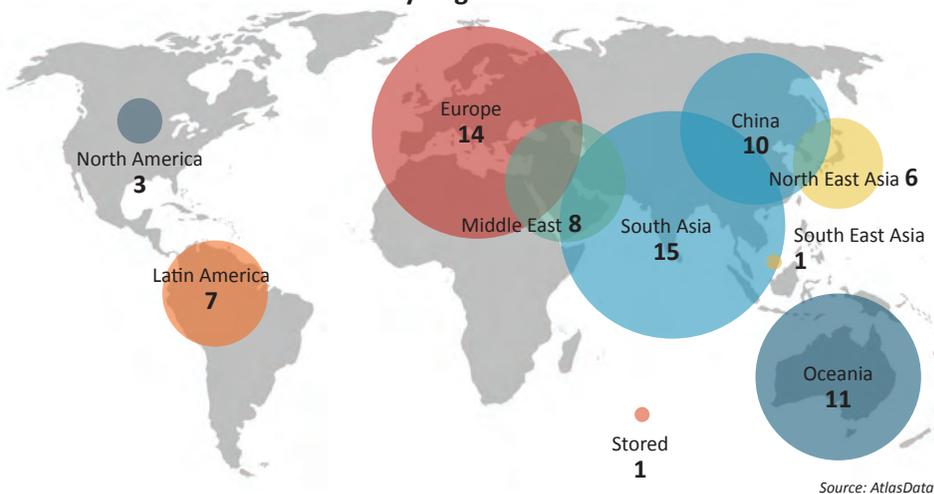
The lessor is concluding a \$700 million non-recourse warehouse facility for new business expansion with nine banks, including first time US and Middle Eastern institutions. This is part of its strategy of favouring increased diversity and sources of debt capital.

HKAC's chief executive officer Donal Boylan tells *Airfinance Journal* that over the next 12 months, HKAC is "adequately funded in terms of both equity and debt" to acquire "certainly not less than 30 aircraft" and is open to sale/leaseback, portfolio acquisition, stepping into surplus airline inventory for redeployment into HKAC secure leases – and even merger and acquisition to add "substantially more" aircraft.

HKAC has agreed its first A320neo sale/leaseback deals and will have a core portfolio of this aircraft type in service during 2016. In terms of legacy portfolio, HKAC has sold off its last two A340-300s and has secured an "excellent disposal outcome" for its remaining 717-200 assets.

It will then have a handful of 15-year-old A330-200s and a single lease managed 747-400F to address in 2016, which is "well within HKAC's scope and of limited economic exposure", according to Boylan.

## HKAC by Region of Lessee



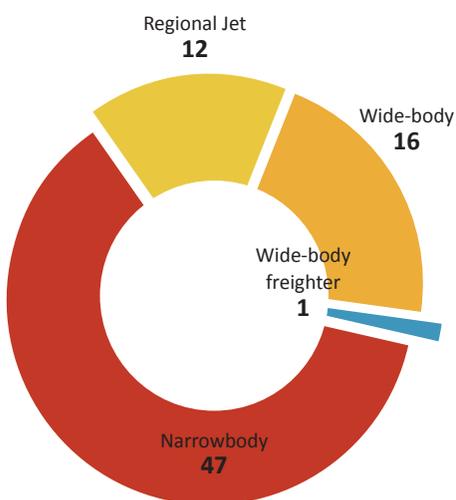
Source: AtlasData

## HKAC Key Facts

Name	Hong Kong Aviation Capital
Country	Hong Kong
Founded	2010
Ownership	Bohai Leasing (69%), HNA Group (31%)
Head office	Hong Kong
Number of employees	45
Size of fleet	71
Average age of fleet	4.4
Number of lessees	18
Order book	104 (70 OEM direct orders and 34 committed new leases)
Delivery commitments (as of June 30 2015)	\$5.283 billion
<b>Unsecured Credit Ratings:</b>	
Fitch	n/a
Moody's	n/a
S&P	n/a
Total assets (as of June 30 2015)	\$2.383 billion
Net income (as of June 30 2015)	\$20.11 million (six months of 2015)

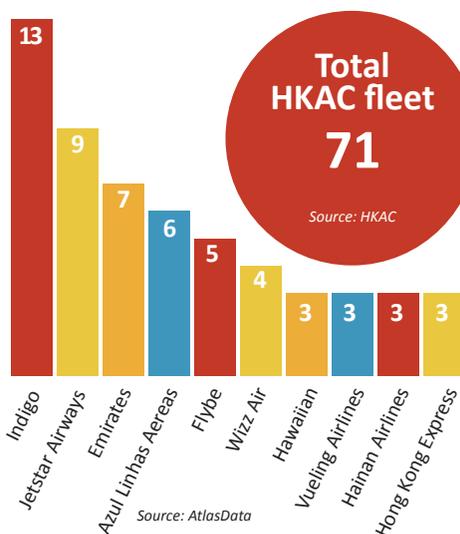
Source: HKAC/Ratings Agencies

## HKAC Aircraft Categories



Source: AtlasData

## HKAC Top 10 Lessees by number of aircraft



Source: HKAC

Source: AtlasData



## REGIONAL PROFILE

# Japan

The Japanese leasing market has improved on an already good performance in 2014. SMBC Aviation Capital, the result of Sumitomo Mitsui Banking Corporation's purchase of RBS Aviation Capital, comes an impressive fourth in our rankings, while other Japanese lessors in the top 50 include Jackson Square Aviation, Orix Aviation, MC Aviation Partners and Century Tokyo Leasing.

The bread-and-butter structure of Japan's leasing market, the Japanese operating lease with call option (Jolco), remains popular despite threats from the Japanese legislature that its attractive tax benefits could be curtailed by 2017.

A number of new names have entered the space – such as Panamanian carrier Copa Airlines and the Lufthansa/Turkish Airlines joint venture SunExpress, which have both closed Jolcos in recent months.

“Overall, there's a very bullish equity market for the tax leases, and I think there's more supply of equity and demand in terms of transactions,” says Takamasa Marito, joint general manager of Century Tokyo Leasing's aircraft division.

Money that was invested 10 years ago in Jolcos is being returned to investors with interest this year and investors are “recycling” this money into new Jolcos, he adds.

Marito says that, for tax sheltering, investors have typically favoured investment in renewable energies, but the Japanese government has changed its policy on this, making it more sensible to put money into aircraft.

Japanese lessors are also looking for opportunities with partners outside of Japan. MC Aviation Partners (MCAP) recently entered



into a joint venture, called Vermillion Aviation, with Cheung Kong (Holdings), owned by Hong Kong billionaire Li Ka-shing.

Vermillion Aviation consists of a portfolio of 20 aircraft, grown from a seed portfolio of 14 aircraft through the acquisition of six A320-200s from Avianca Brasil. The joint venture intends to make a direct order from the manufacturer, according to Keiichi Otani, MCAP's chief executive officer.

Mitch Umino, head of planning and portfolio management, MCAP, says: “As MCAP, we grew up to just over \$3 billion. Beyond that, we always thought that we would consider leveraging our industry expertise and inviting in an external financing investor to seek

further growth. I guess we wanted to come up with a structure where we can manage the new portfolio [Vermillion] in an efficient manner, considering the size of Mitsubishi Corp's own balance sheet.”

Other, smaller, lessors have high ambitions to grow their portfolios. Fuyo General Lease, for example, having recently acquired UK company ALM, has set itself a target of obtaining a portfolio of 100 aircraft by 2017, up from about 60.

Another notable trend is usually conservative regional banks entering the space because of excess liquidity and diminishing investment opportunities in their home prefectures.

“It's very important for the Japanese economy because the regional banks are suffering because there's not enough activity in their local areas,” says Chikage Miyoshi, a lecturer at the Centre for Air Transport Management at Cranfield University.

A record attendance is predicted at a regional bank seminar to be held by DBJ and BNP Paribas in Tokyo later this year.

“I think the return is better than other domestic investment,” adds a Japanese banking source.

“These banks tend to invest the funds they have, and I think they are probably looking at aircraft finance as one of the best for the returns they can expect.” ▲

### Fleet Size and Order Book of Japanese Lessors

Lessor	Total	Active / In Service	Stored	On order
SMBC Aviation Capital	608	390	3	215
ORIX Aviation	148	144	4	
Jackson Square Aviation	110	110		
MC Aviation Partners	92	91	1	
Century Tokyo Leasing Corporation	46	46		
Showa Leasing	30	30		
Mitsui Bussan Aerospace	21	21		
Others	29	25	4	-
<b>Total</b>	<b>1,084</b>	<b>857</b>	<b>12</b>	<b>215</b>

Source: AtlasData



## REGIONAL LESSOR PROFILE

# MC Aviation Partners

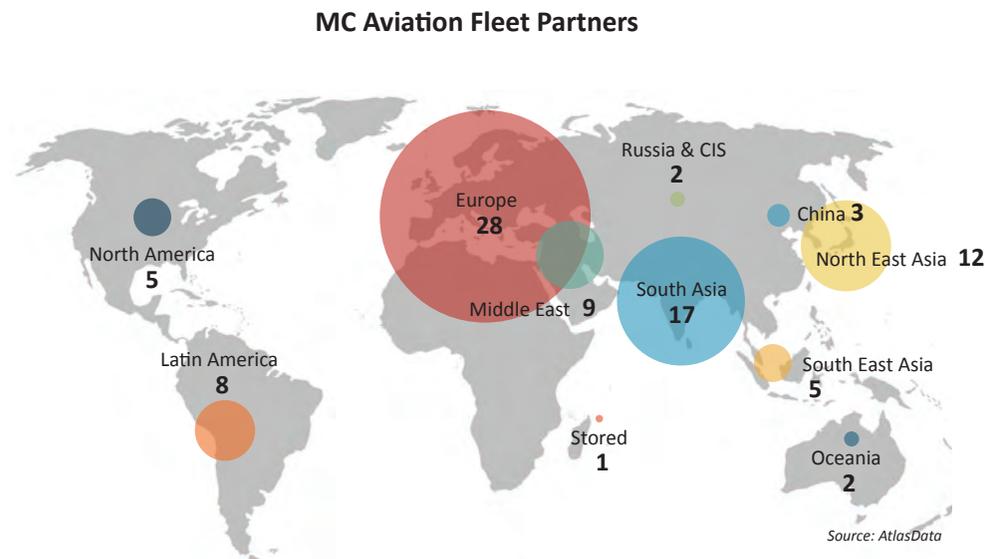
MC Aviation Partners (MCAP) is the aircraft leasing and trading arm of Mitsubishi Corporation, with 100 owned and managed aircraft in its portfolio. A fairly new player in the market, the group was established in 2008 as a wholly owned subsidiary of Mitsubishi Corporation.

Airfinance Journal understands that, although MCAP is 100% funded by Mitsubishi Corporation and it views aircraft operating leasing as a “capital-intensive business”, Mitsubishi Corporation is not a financial institution and so it considers non-Mitsubishi Corporation capital as an alternative means of increasing its “operational universe” and assets under management.

In March, MCAP set up a leasing joint venture, Vermilion Aviation, with Cheung Kong Holdings and Li Ka Shing Foundation. Cheung Kong took a 50% equity stake, MCAP took a 40% share and Li Ka Shing a 10% stake. The lessor began operations with a portfolio of 15 aircraft that it purchased from MCAP, consisting of A320s, 737s and 777s.

MCAP told Airfinance Journal last year that lease rents are generally on the rise because of “the resilient demand for aircraft and operating leases as a means of finance and asset procurement”. It added that the emphasis is on younger and more liquid assets, such as the A320 family, the 737NG, 777 and A330.

It stated: “Increasing capital in-flow has caused tightness in the sale/leaseback markets, especially for



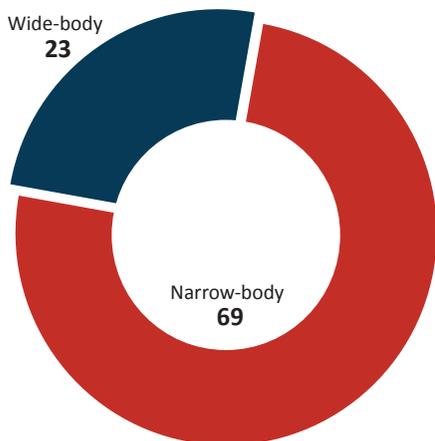
the blue-chip names, where the entry of new investors are visible through issuance of multiple ABS [asset-backed securities], newly established funds, targeting a range of assets, including mid-aged aircraft, where the attraction lies in the relative richness of lease rents against their depreciated asset values.”

The lessor said a combination of sales and acquisitions are “key success factor[s] in building a healthy and diversified portfolio”.

It added: “Our core principle will continue to apply in this current market, and there is no fixed target or budget limitation in our attempt to acquire new assets.” ▲

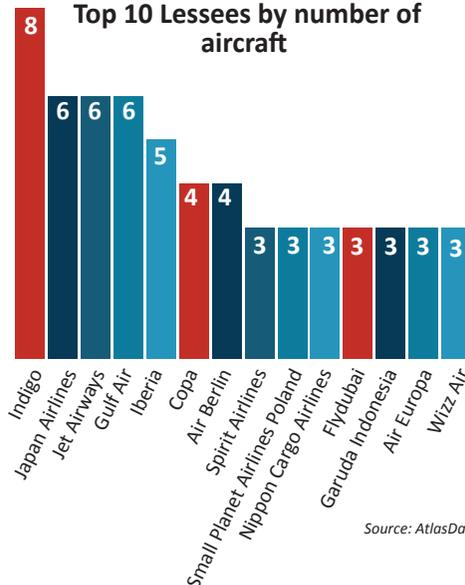


MC Aviation Partners Aircraft Categories



Source: AtlasData

MC Aviation Partners Top 10 Lessees by number of aircraft



### MC Aviation Partners Key Facts

Name:	MC Aviation Partners
Country:	Japan
Founded:	August 1 2008
Ownership:	Mitsubishi Corporation
Head Office:	Tokyo
Number of Employees:	66
Size of Fleet:	92
Total Assets (as of March 2014):	\$2 billion

Source: MC Aviation Partners /Ratings Agencies



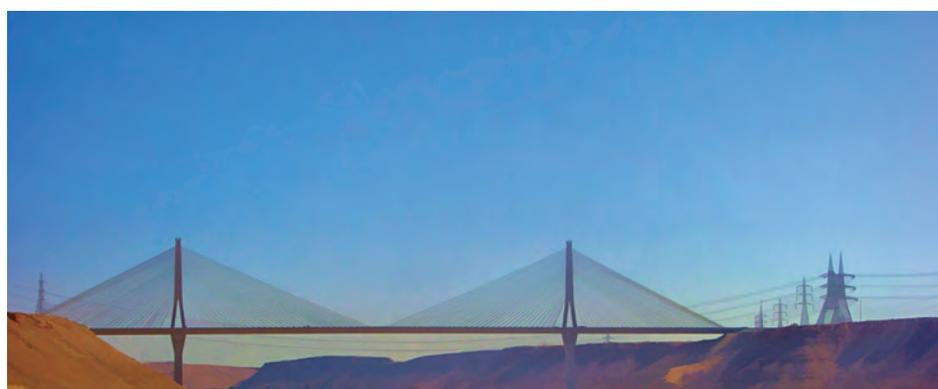
## REGIONAL PROFILE

## Middle east

The past year has been a strong one for leasing start-ups as well as the more-established lessors in the Middle East. Jack Dutton reports.

Over the past few years there have been many orders coming from the Middle Eastern carriers, but when it comes to financing the aircraft, most of the Gulf carriers prefer to own rather than lease them. But this is changing – the leasing market in the Middle East is growing: the airlines in the region have good credit ratings and there are tax advantages, making it an attractive region for lessors.

In March, Oman Brunei Aviation Leasing Company (Obalc), a new Middle Eastern lessor, joined the market. Obalc is a joint venture between The Sultanate of Oman's State General Reserve Fund and private equity firm Oman Brunei Investment Company. Simon McLean, the former chief operating officer of Waha Leasing, is



the leasing company's new chief executive officer.

Obalc has only closed deals with Oman Air. As part of Oman Air's fleet expansion, Obalc has been mandated as a lessor for three of the carrier's 737-900ER orders in a sale/leaseback transaction. The aircraft, which are on lease for 10 years, will help the Omani airline with its fleet expansion. Oman Air plans to double its fleet to 70 by 2020, adding 787-800s, as well as 737-900ERs.

In Kuwait, established lessor Alafco has 12 A350 XWBs on order; due to deliver between 2017 and 2019. It has already placed six of the A350s with Thai Airways and, although the others have not been placed yet, a company source says that Alafco will have the only A350s available to lease in 2018, meaning that the aircraft are likely

to be in demand. Along with this, Dubai-based lessor Novus Aviation Capital signed a long-term sale/leaseback agreement to place five 777-300ERs with Emirates in February and March this year.

Alafco favours narrow-body aircraft, having 85 A320neos and 20 737 Max 8s due to deliver by 2023. It has aircraft in Ethiopia, the Caribbean, India, Ukraine and Russia. In the Middle East, Saudia remains its biggest customer, with 13 A320s being leased.

Despite generally being a welcome addition to aviation in the Middle East, International Airfinance Corporation, a \$5 billion sharia-compliant leasing fund with Airbus and Islamic Development Bank, may pose a threat to Middle Eastern lessors' business. The fund will purchase new and second-hand Airbus aircraft and lease them to carriers in the Middle East. So far, it has helped secure leasing deals with Saudia and Kuwait Airways.

Smaller Middle Eastern lessors such as Palma Holdings have been collaborating with banks as well as manufacturers. The UAE lessor and investment firm has done some regional deals in a joint venture with Bahrain's Ibdar Bank. In the past year, the joint venture has closed export credit agency-guaranteed leasing deals with African airline RwandAir, as well as Falcon Aviation Services, a Middle Eastern ACMI specialist.

The Middle East is seeing more collaboration between local banks and lessors, stimulating growth of the leasing market in the region while simultaneously providing local airlines with more financing options.

With the reintegration of Iran and the arrival of newcomers such as Obalc, it looks like the leasing business in the Middle East will expand to its full potential in the coming years. ▲

## Fleet Size and Order Book of the Middle East's Lessors

Lessor	Total	Active / In Service	Stored	On order
ALAFCO	174	49		125
DAE Aerospace	81	61	1	19
IAFC	55	2		53
Novus Aviation	19	17	2	
Knafaim	14	13	1	
Aerovista	9	9		
Al Sahaab Aircraft Leasing	6	6		
Palm Aviation	5	5		
Palma Holdings Limited	5	5		
Aerospace Company FZE	5	3	2	
MG Aviation	4			4
Chabahar Air	3		3	
Skyone FZE	3	2	1	
Route Aviation FZC	3		3	
<b>Total</b>	<b>386</b>	<b>172</b>	<b>13</b>	<b>201</b>

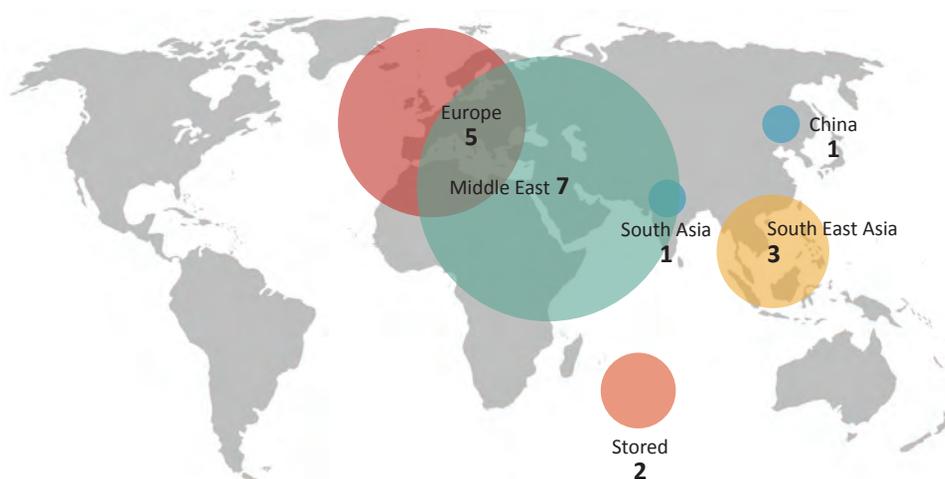
Source: AtlasData



## REGIONAL LESSOR PROFILE

# Novus

### Novus Fleet by Region of Lessee



Source: AtlasData

Novus remains one of the Middle East's prominent lessors. The company, which was founded in 1994, manages a fleet of 25 aircraft with an average age of four years. The lessor is based in Dubai, UAE.

Its fleet of 25 aircraft are on lease to six different lessees in Europe and Asia, including British Airways, Cathay Pacific and Emirates.

Novus has spent \$500 million in delivery commitments. Middle Eastern banks finance about 45% of Novus' fleet, while 41% is financed by European banks and about 14% by Asian banks.

One of Novus' bigger recent deals was a sale/leaseback transaction for five 777-300ERs with UAE carrier Emirates. The lessor specializes in widebody aircraft, with its fleet including 767s, 777s, A330s, A340s and A380s.

"Novus' financing strategy for 2015 builds on the successful introduction of the Tamweel finance leasing product [in partnership with Airbus, Development Bank of Japan and NordLB] to the market in 2013 which offers attractive, high LTV [loan-to-value] funding to airlines and has already passed the \$1 billion mark in aircraft assets financed," Leila Mourad, vice-president of Novus Aviation Capital, tells Airfinance Journal.

"This is in addition to Novus' long standing operating lease platform, which provides in-demand aircraft to airlines worldwide but with a particular focus on twin-aisle equipment," she adds.

Novus is considering an original equipment manufacturer order in the next year.

"For us to transact, we need to see value for our

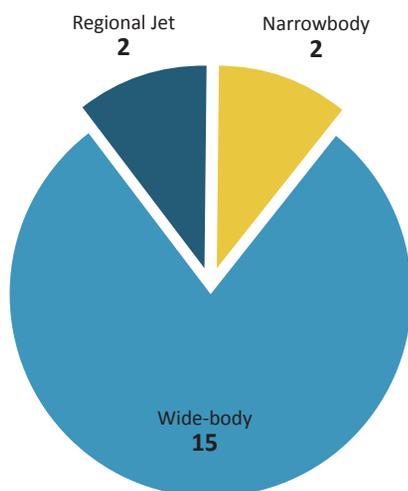
stakeholders and with most of the new programmes sold out for a few years, we currently see limited scope for a new technology order in the single-aisle segment," she says.

The lessor sees greater potential to make a direct order for twin-aisle aircraft, because the delivery lead times are shorter. It has not ruled out ordering single-aisle aircraft, but insists that instead of ordering straight from the manufacturer, they will order the aircraft that are last off the line. ▲

### Novus Key Facts

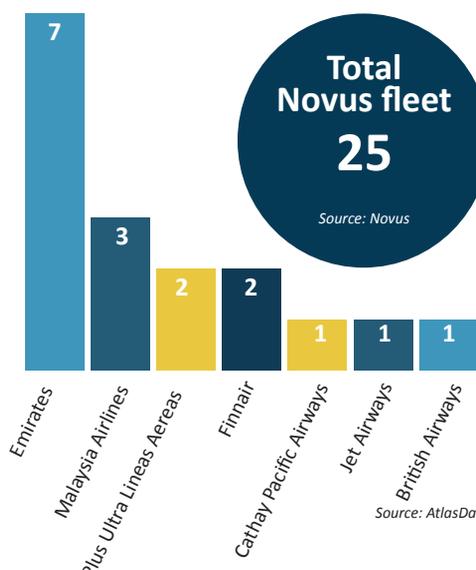
<b>Name:</b>	Novus Aviation Capital
<b>Country:</b>	Dubai, UAE
<b>Founded:</b>	1994
<b>Ownership:</b>	Private
<b>Head office:</b>	Dubai, UAE
<b>Number of employees:</b>	30
<b>Size of fleet:</b>	25 (including under management)
<b>Average age of fleet:</b>	4 years
<b>Number of lessees:</b>	6
<b>Order book:</b>	None
<b>Delivery commitments (as of June 30 2015):</b>	\$500 million
<b>Unsecured Credit Ratings:</b>	
<b>Fitch:</b>	n/a
<b>Moody's:</b>	n/a
<b>S&amp;P:</b>	n/a
<b>Total assets (as of June 30 2015):</b>	\$2.5 billion
<b>Net income (as of June 30 2015):</b>	n/a

### Novus Aircraft Categories



Source: AtlasData

### Novus Top 10 Lessees by number of aircraft



Source: AtlasData

Source: Novus/Ratings Agencies

# Which events will you attend?

---

## **35th Annual North America Airfinance Conference**

28th & 29th May 2015, Miami

---

## **North America Airfinance Awards Dinner**

28th May 2015, Miami

---

## **2015 China Aviation Finance and Taxation Masterclass**

3rd June 2015, China

---

## **13th Annual China Airfinance Conference**

4th & 5th June 2015, China

---

## **Summer School of Aviation Finance 2015**

29th June – 1st July 2015, University of Cambridge, United Kingdom

---

## **11th Annual Latin American Airfinance Conference**

17th & 18th September 2015, Rio de Janeiro

---

## **13th Annual Middle East & North Africa Airfinance Conference**

13th & 14th October 2015, Dubai

---

## **2015 Asia Pacific Aviation Finance and Operating Leasing School**

November 2015, Hong Kong

---

## **16th Annual Asia Pacific Airfinance Conference**

November 2015, Hong Kong

---

## **18th Annual Global Airfinance Conference Dublin**

18th – 20th January 2016, Dublin

**Visit [www.euromoneyseminars.com](http://www.euromoneyseminars.com)  
or call +44(0)20 7779 7222 for more info**

To mark our 30th year as a global lessor of commercial aircraft AWAS would like to thank our customers, business partners, investors and employees.

It is your continued support, partnership and trust in us that has allowed us to be Ascending for 30 years.

Thank you.



**Talk to us.  
Talk to AWAS.  
Ascending.**

[www.awas.com](http://www.awas.com)



**30** YEARS

**AWAS**  
ASCENDING

1985-2015