



AIRFINANCE JOURNAL

A SUPPLEMENT TO AIRFINANCE JOURNAL SEPTEMBER 2016

THE LEASING TOP 50

A SPECIAL SUPPLEMENT


The Leasing Top 50 2016





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EDITOR'S LETTER

From strength to strength

Global operating lessors continue to bask in the sun thanks to a favourable environment of low interest rates, resilient lease yields, attractive funding, strong air travel demand and a continuing improvement in airlines' financial results.

Clearly giving lift to operating lessors' outlooks is Asia's strong appetite for air travel.

No doubt lessors' business plans have continued to flourish as fears of a new aircraft surplus, in the face of falling oil prices, have largely been exaggerated.

The market, to date, has not seen a systematic cancellation of aircraft simply because of the change in fuel prices.

While the market is right to fret about the possibility of supply exceeding demand in the single-aisle aircraft market, observers anticipate this won't happen anytime soon.

Asian operating lessors are increasingly gaining market share. This growth stems from investors searching for yield and policy makers (especially in China) increasingly favouring the industry.

This year Ireland-based Avolon was acquired by Bohai Leasing, which is majority-owned by the Chinese conglomerate HNA Group. Chinese owned lessors in aggregate have a total of 1,124 aircraft, up from 645 last year. Rumours have it that a Chinese entity is the favoured bidder for CIT's portfolio of 324 aircraft.

Other big gainers include Goshawk, up almost 100% to 69, Merx Aviation with 74 and DVB/Deucalion with 102.

Nevertheless, Gecas retains the top spot by number of aircraft in this year's Leasing Top 50 with 1,450 units, despite selling \$3 billion worth of aircraft in 2015. AerCap remains second with 1,166 units but again has the top spot by aircraft value at \$31.9 billion. Overall, these two lessors have contracted by 271 units year-on-year, the study shows.

Their high level of secondary market sales has included reducing their footprint in the regional jet and turboprop market, confirming a trend to focus on the mainline sector.

Nordic Aviation Capital has on the other hand significantly increased its exposure to the sub-120 seat regional market over the past year. Through organic growth, purchase and lease-

backs and acquisitions of Jetscape and Aldus, its total fleet has increased from 249 to 351.

Other lessors with significant increases in fleet size include Macquarie AirFinance from 176 to 207 as they completed the purchase of around 90 aircraft from AWAS, Air Lease Corporation from 251 to 280 and Elix Aviation Capital from 44 to 73 (all turboprops).

The study shows the top 50 lessors represent \$260 billion-worth of assets, up from \$234 billion in 2015.

Their revenues, and net income are also up on aggregate. The lessors whose financials are in the public domain, plus Gecas, had \$20.5 billion combined revenues in 2015/16, up from \$19.6 billion last year. Net income has gone up to \$4.3 billion from \$3.9 billion over the past 12 months. Return on equity remains in the eye-catching Libor plus 400-800 basis points range.

The aircraft sector remains a capital intensive industry but once again the study shows that lessors' financial flexibility as measured by interest coverage (ebitda/financing costs) and leverage generally remains healthy.

This year's top 50 lessors ranking shows a fleet of approximately 8,675 aircraft under ownership and management. This compares with 8,185 units a year ago.

As long as potential returns remain at or near current levels, it seems likely that the operating lease sector will continue to attract both new investors and the necessary capital to expand.

One requirement for investors is high quality data. This year's fleet data is provided by *Airfinance Journal's* Fleets, which we will be launching later in the year.



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Top 50 lessors by number of aircraft

Rank	Lessor	Total	Turboprop	Regional jet	Narrowbody	Widebody
1	GECAS	1,450	36	344	904	166
2	AERCAP	1,166	-	-	883	283
3	SMBC AVIATION CAPITAL	445	-	4	416	25
4	BBAM	405	-	2	311	92
5	NORDIC AVIATION CAPITAL	351	241	99	11	-
6	CIT AEROSPACE	324	-	33	235	56
7	AIR LEASE CORPORATION	280	3	23	202	52
8	BOC AVIATION	267	-	13	214	40
9	AVIATION CAPITAL GROUP	264	-	-	257	7
10	AWAS	246	-	-	203	43
11	AVOLON	241	-	14	190	37
12	ICBC LEASING	218	-	5	188	25
13	MACQUARIE AIRFINANCE	207	-	4	192	11
14	AIRCASTLE	180	-	6	127	47
15	CASTLELAKE	156	28	14	84	30
16	ORIX AVIATION	154	-	2	136	16
17	CDB LEASING	148	-	20	97	31
18	JACKSON SQUARE AVIATION	141	-	-	122	19
19	AVMAX	116	57	59	-	-
20	STANDARD CHARTERED	113	-	-	95	18
21	DVB/DEUCALION	102	-	-	81	21
22	APOLLO AVIATION GROUP	101	-	-	84	17
23	CENTURY TOKYO / TC-CIT	99	-	8	70	21
24	BOCOM LEASING	81	-	-	64	17
25	MCAP/VERMILLION	80	-	-	65	15
25	SKYWORKS LEASING	80	4	22	32	22
27	VEB LEASING	79	3	19	29	28
28	DAE AEROSPACE	78	20	-	33	25
29	MERX AVIATION	74	-	6	65	3
30	ELIX AVIATION CAPITAL	73	73	-	-	-
30	CHINA AIRCRAFT LEASING COMPANY	73	-	-	69	4
32	GOSHAWK	69	-	2	65	2
33	ALAFCO	62	-	-	59	3
34	FALCO	61	3	54	4	-
35	ASL AVIATION GROUP	54	31	-	22	1
36	SBERBANK LEASING	51	3	21	19	8
37	GUGGENHEIM AVIATION PARTNERS	50	-	-	21	29
38	AMENTUM CAPITAL	48	-	4	32	12
39	WNG CAPITAL	47	-	2	42	3
40	GOAL	45	9	15	18	3
41	VTB LEASING	43	-	2	25	16
41	ACCIPITER	43	-	-	41	2
43	INVESTEC	42	10	6	18	8
44	AVATION	41	26	5	10	-
45	DORIC	40	6	-	5	29
46	MINSHENG FINANCIAL LEASING	39	-	14	24	1
47	SKY HOLDING	38	-	-	30	8
48	JETLAN LLC	35	-	3	26	6
49	DRAGON AVIATION LEASING	32	-	-	31	1
50	VX CAPITAL	31	-	-	30	1
50	BANC OF AMERICA LEASING	31	-	-	20	11
Total		8,694	553	825	6,001	1,315

Source: Airfinance Journal Fleets as of 31st August 2016

Includes owned and managed aircraft

Aircastle values updated 6th October, 2016

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

Rank	Lessor	Total	Turboprop	Regional jet	Narrowbody	Widebody
1	AERCAP	\$31,902	-	-	\$19,768	\$12,134
2	GECAS	\$30,969	\$473	\$2,288	\$19,934	\$8,273
3	BBAM	\$18,125	-	\$37	\$8,779	\$9,309
4	SMBC AVIATION CAPITAL	\$15,472	-	\$76	\$13,302	\$2,094
5	AIR LEASE CORPORATION	\$12,577	\$40	\$530	\$7,249	\$4,758
6	BOC AVIATION	\$11,447	-	\$352	\$7,743	\$3,353
7	CIT AEROSPACE	\$10,276	-	\$737	\$6,131	\$3,408
8	ICBC LEASING	\$10,239	-	\$140	\$7,390	\$2,709
9	AVOLON	\$9,732	-	\$318	\$6,898	\$2,516
10	AWAS	\$7,680	-	-	\$5,737	\$1,943
11	AVIATION CAPITAL GROUP	\$7,015	-	-	\$6,862	\$153
12	AIRCASTLE	\$6,183	-	\$150	\$3,099	\$2,935
13	MACQUARIE AIRFINANCE	\$6,115	-	\$60	\$5,275	\$780
14	CDB LEASING	\$6,047	-	\$475	\$3,372	\$2,201
15	JACKSON SQUARE AVIATION	\$5,827	-	-	\$4,507	\$1,320
16	NORDIC AVIATION CAPITAL	\$4,688	\$2,772	\$1,892	\$24	-
17	STANDARD CHARTERED	\$4,466	-	-	\$3,319	\$1,147
18	ORIX AVIATION	\$4,400	-	\$50	\$3,647	\$704
19	BOCOM LEASING	\$4,218	-	-	\$2,491	\$1,728
20	CENTURY TOKYO / TC-CIT	\$3,603	-	\$154	\$2,380	\$1,069
21	DAE AEROSPACE	\$3,259	\$359	-	\$867	\$2,032
22	DORIC	\$3,109	\$65	-	\$108	\$2,935
23	MCAP/VERMILLION	\$2,963	-	-	\$2,276	\$687
24	CHINA AIRCRAFT LEASING COMPANY	\$2,947	-	-	\$2,660	\$288
25	VEB LEASING	\$2,657	\$32	\$324	\$712	\$1,588
26	GUGGENHEIM AVIATION PARTNERS	\$2,581	-	-	\$373	\$2,208
27	INTREPID AVIATION	\$2,545	-	-	\$42	\$2,503
28	GOSHAWK	\$2,439	-	\$48	\$2,227	\$164
29	DVB/DEUCALION	\$2,311	-	-	\$1,397	\$913
30	ALAFCO	\$2,181	-	-	\$1,906	\$274
31	MERX AVIATION	\$1,995	-	\$117	\$1,640	\$238
32	CASTLELAKE	\$1,945	\$130	\$115	\$1,253	\$448
33	AMENTUM CAPITAL	\$1,860	-	\$73	\$913	\$874
34	INVESTEC	\$1,768	\$101	\$154	\$498	\$1,016
35	APOLLO AVIATION GROUP	\$1,664	-	-	\$1,296	\$368
36	NOVUS AVIATION	\$1,642	-	-	\$130	\$1,513
37	ACCIPITER	\$1,573	-	-	\$1,404	\$169
38	AVIA CAPITAL LEASING	\$1,226	-	-	\$1,150	\$76
39	DRAGON AVIATION LEASING	\$1,211	-	-	\$1,123	\$88
40	BANC OF AMERICA LEASING	\$1,042	-	-	\$444	\$599
41	MINSHENG FINANCIAL LEASING	\$853	-	-	\$787	\$66
42	DP AIRCRAFT	\$843	-	-	-	\$843
43	GOAL	\$824	\$105	\$285	\$391	\$42
44	SHOWA LEASING	\$716	\$101	\$81	\$242	\$292
45	TITAN AVIATION LEASING	\$715	-	-	\$31	\$685
46	AIRCRAFT LEASING & MANAGEMENT	\$714	\$8	-	\$457	\$249
47	AVATION	\$700	\$390	\$10	\$300	-
48	SKYWORKS LEASING	\$688	\$11	\$135	\$341	\$202
49	WNG CAPITAL	\$609	-	\$21	\$528	\$60
50	SBERBANK LEASING	\$593	-	\$408	\$127	\$58
		\$261,157	\$4,587	\$9,030	\$163,529	\$84,011

Source: Airfinance Journal Fleets as of 31st August 2016/Avitas Current Market Values as of August 2016
Includes owned and managed aircraft
Aircastle values updated 6th October 2016

KBRA CONTINUES TO LEAD THE AVIATION MARKET



ABS

CASTLELAKE AIRCRAFT SECURITIZATION TRUST	2014-1, 2015-1 & 2016-1
HARBOUR AIRCRAFT INVESTMENTS LIMITED	SERIES 2016
APOLLO AVIATION SECURITIZATION	2014-1 & 2016-1
DIAMOND HEAD AVIATION	2015 LIMITED
AIM AVIATION FINANCE	2014-1
ATLAS	SERIES 2014-1
EAGLE I	SERIES 2014-1
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ANALYSIS

Financial Review of the Operating Lease Industry 2015/16

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.

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 Kuwait.

Figure 1 identifies the entities included in the study. In total, we have been able to source the financials for 19 leasing companies. Financials are not available for Gecas, but some headline numbers are available in the GE Annual Report. In addition to the obvious major players, we include AviaAM from Lithuania (listed in Poland) and Aviation plc from Singapore (listed in the UK). Most of the lessors in the study are incorporated in the US or Ireland, though two of the largest, AerCap and BOC Aviation, are incorporated in the Netherlands and Singapore, respectively.

This year we include the pro-forma numbers for CIT's prospective spin-off, C2 Aviation Capital. 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 analysed in the World's Leased Fleet section of this supplement. The significant absences from our coverage include Avolon and Macquarie, which do not file financial information publicly other than a few headline numbers, and BBAM (though we do include FLY). Some lessors which have been included previously are not included this time because they had not filed their 2015 financial statements at the date of preparing this review. These are AerDragon, Lease Corporation International, Pembroke Capital and Triangle (Falko).

Figure 1 - Lessors Included in the Study

Lessor	Country	FYE	Abbreviation
AerCap Holdings NV	Netherlands	31-Dec-15	AerCap
Air Lease Corporation	USA	31-Dec-15	ALC
Aircastle Limited	USA	31-Dec-15	Aircastle
Alafco Aviation Lease & Finance Co KSC	Kuwait	30-Sep-15	Alafco
Avation PLC	UK	30-Jun-16	Avation
AviaAM Leasing AB	Lithuania	31-Dec-15	AviaAM
Aviation Capital Group Corp.	USA	31-Dec-15	ACG
Awac Aviation Capital Limited	Ireland	30-Nov-15	Awac
Banc of America Leasing Ireland	Ireland	31-Dec-15	BOA
BOC Aviation Ltd	Singapore	31-Dec-15	BOC Aviation
CIT (C2 Aviation Capital pro-forma)	USA	31-Dec-15	C2
China Aircraft Leasing Group Holdings Ltd	China	31-Dec-15	CALC
Elix Aviation Capital	Ireland	31-Dec-15	Elix
FLY Leasing Limited	Ireland	31-Dec-15	FLY
Gecas	USA	31-Dec-15	Gecas
MCAP Europe Limited	Ireland	31-Mar-15	MCAP
Nordic Aviation Capital	Denmark	30-Jun-15	NAC
SinoAero (CDB Leasing)	Ireland	31-Mar-16	SinoAero
SMBC Aviation Capital Limited	Ireland	31-Mar-15	SMBC AC

Source: company reports and The Airline Analyst

Note that for some lessors, the entities analysed 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 Aviation Capital, which have been heavily funded by shareholder loans, so please interpret their numbers accordingly.

Adjustments

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
Staff cost, including stock-based compensation	Included in SG&A expenses
Interest income	Included in Other revenue

Source: company reports and The Airline Analyst



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noun ~

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ANALYSIS

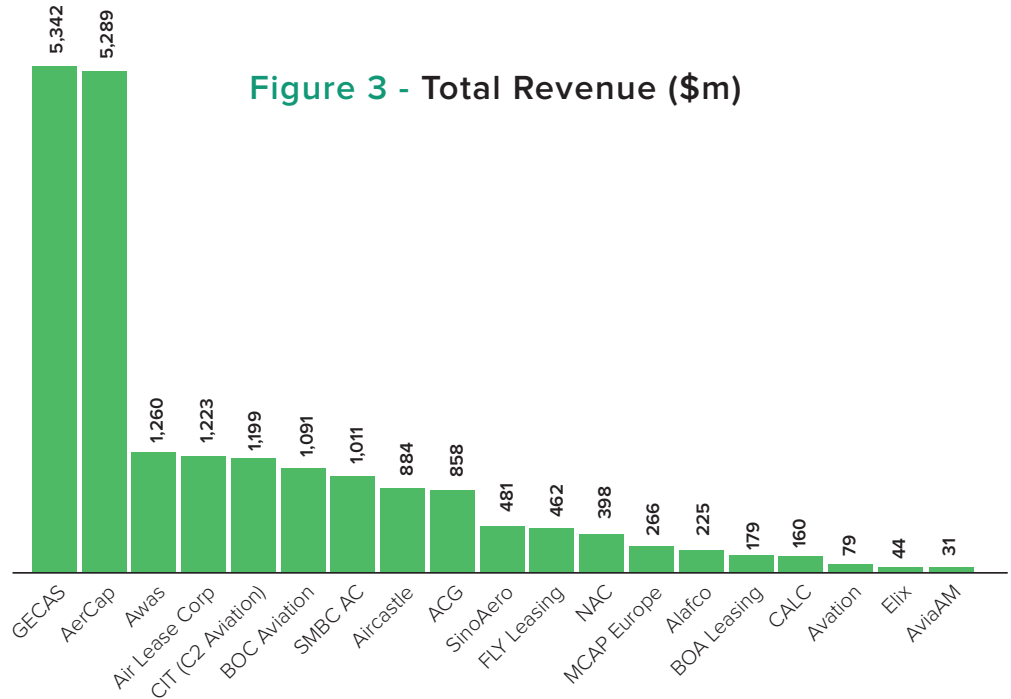
Profitability

Figures 3 and 4 show the lessors ranked by revenue and net income. The revenue range of the lessors in the study is from \$5.3 billion for Gecas and AerCap to \$44 million for Elix and \$31 million for AviaAM. The chart shows clearly how far the two leading players are ahead of the next tier of lessors, which includes Awas, ALC, C2 Aviation, BOC Aviation and SMBC AC.

Despite the increased liquidity in the marketplace and the entry of new investors, yields have been remarkably resilient.

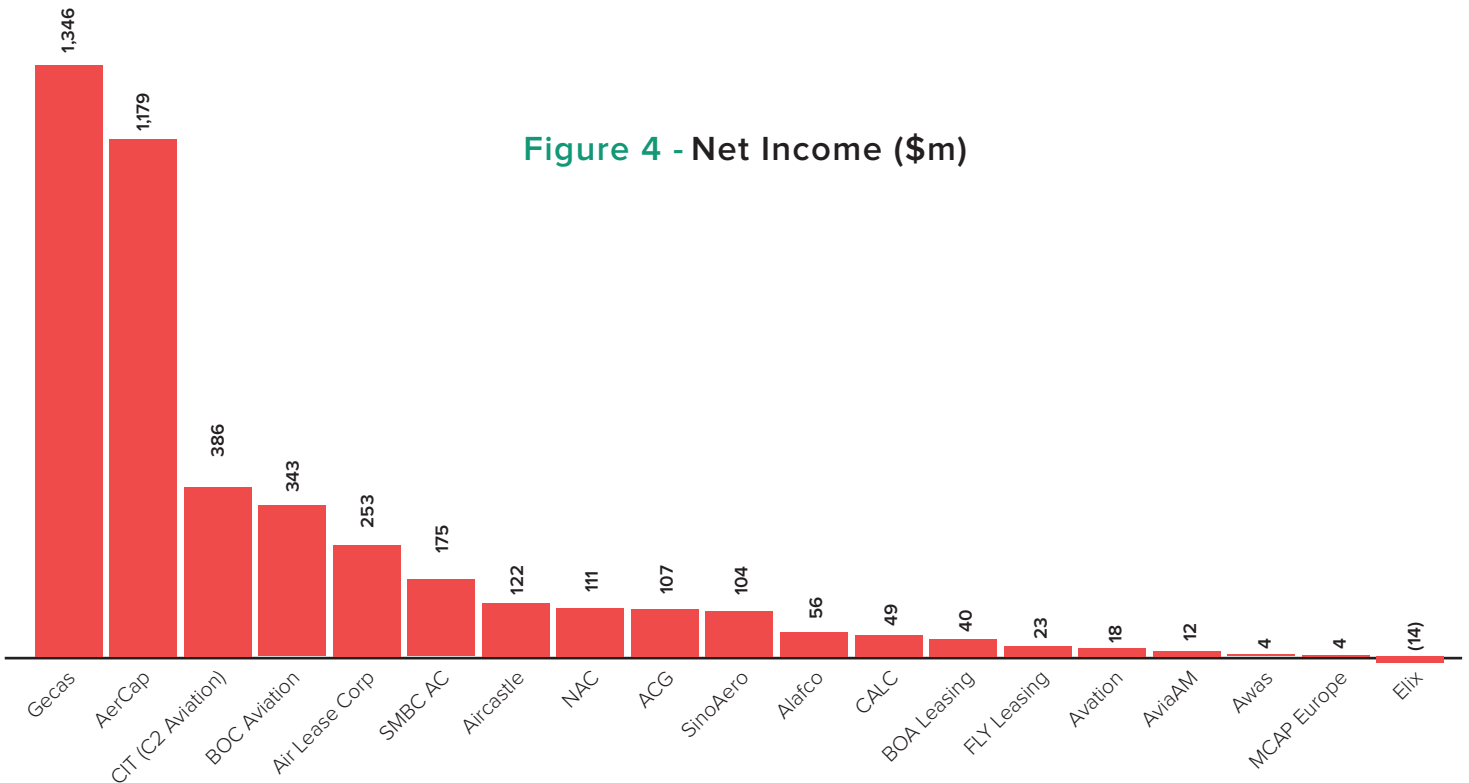
In aggregate, the profit generated by the lessor totalled \$4.3 billion, a \$1 billion increase on the previous year's \$3.3 billion. Gecas headed net income at \$1.3 billion (up from \$1.05 billion in 2014) followed by AerCap at \$1.2 billion, up from \$810 million. C2 Aviation Capital came third in profitability, followed by BOC Aviation and ALC.

Figure 3 - Total Revenue (\$m)



Source: company reports and The Airline Analyst

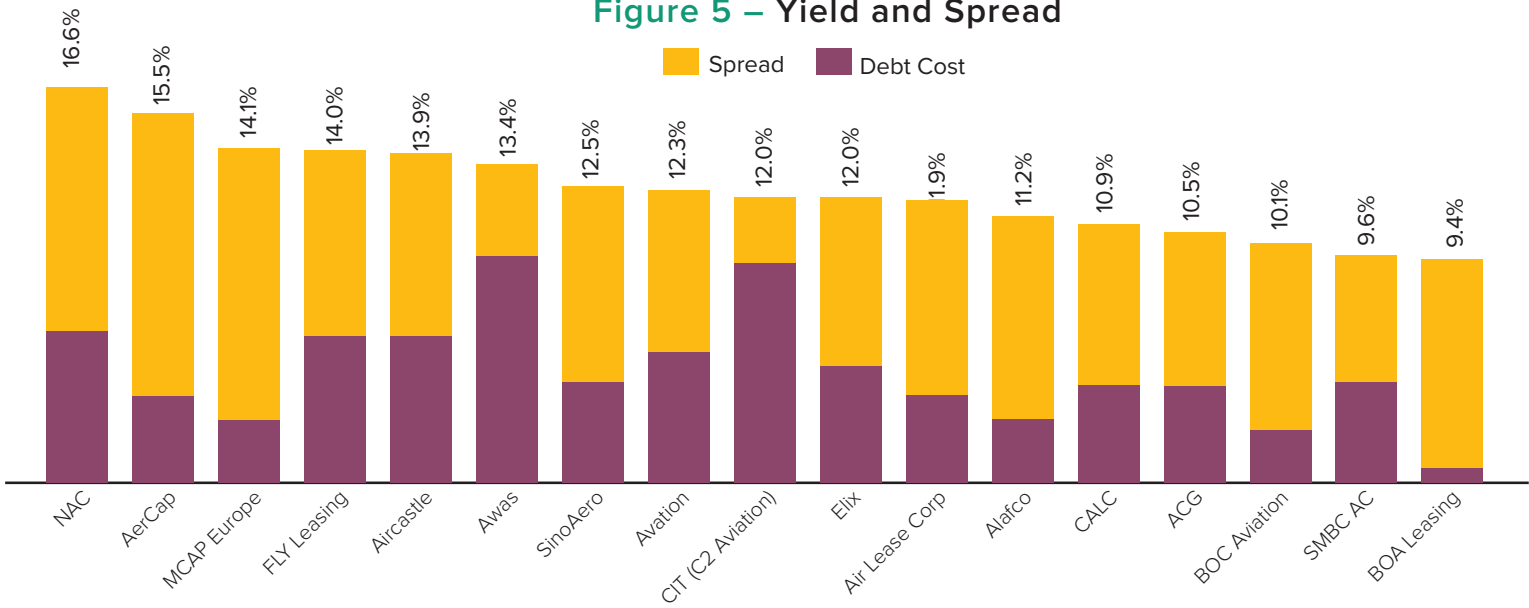
Figure 4 - Net Income (\$m)



Source: company reports and The Airline Analyst

Profitability

Figure 5 – Yield and Spread



Source: company reports and The Airline Analyst

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 with yield of 16.7%, followed by AerCap at 15.6%, MCAP Europe at 14%. FLY, Aircastle and Awias also generate attractive yields but their relatively high debt costs result in lower margins. Surprisingly, BOC Aviation comes third bottom of the lease yield ranking at 10% but makes it up

with the lowest debt finance cost of 2.2%, resulting in a spread of 7.8%.

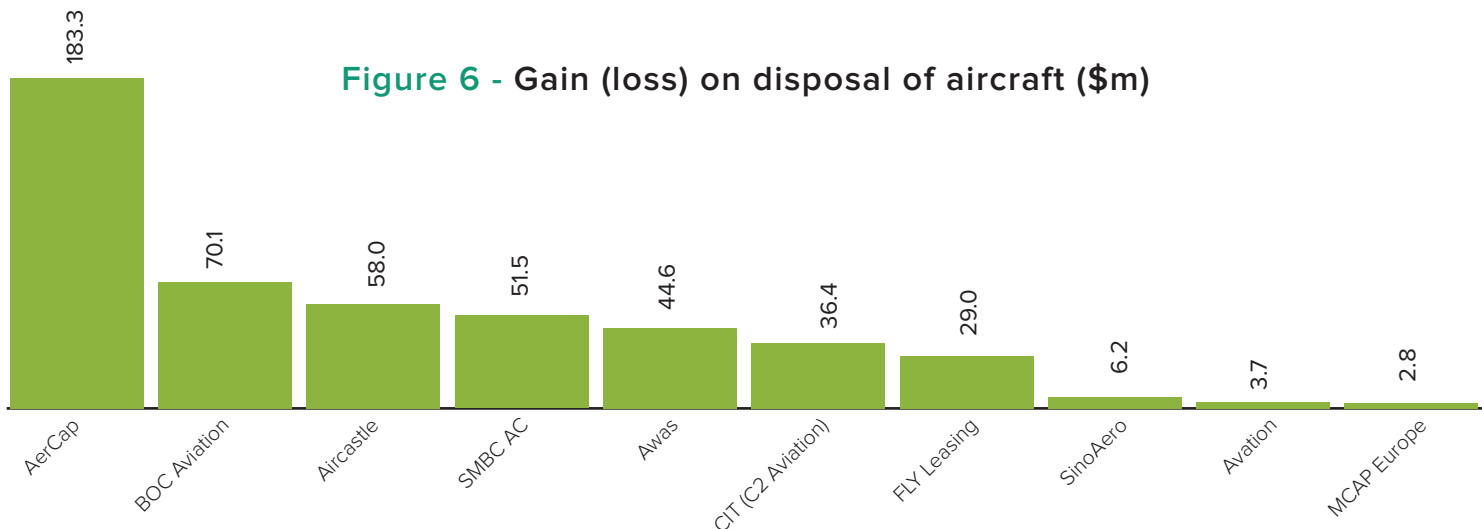
Finance costs range from BOC Aviation's low of 2.2% to AviaAM's 23.9%. Others at the low end of the scale include BOA Leasing, Alafco and AerCap. MCAP and SMBC AC have low debt costs but both have large amounts of shareholder provided debt. ALC shows a creditable 3.7% average cost of debt. At the higher end are C2 Aviation, Aircastle, Aviation, FLY, ACG and Awias. With its strategy to increase the proportion of unsecured debt, NAC is also showing a relatively high cost of borrowing.

Gains/losses on sales

Aggregate plant, property and equipment for the lessors in the study is \$144 billion. Gains booked amounted to \$478 million, double the previous year, and 16% 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 6.



Figure 6 - Gain (loss) on disposal of aircraft (\$m)

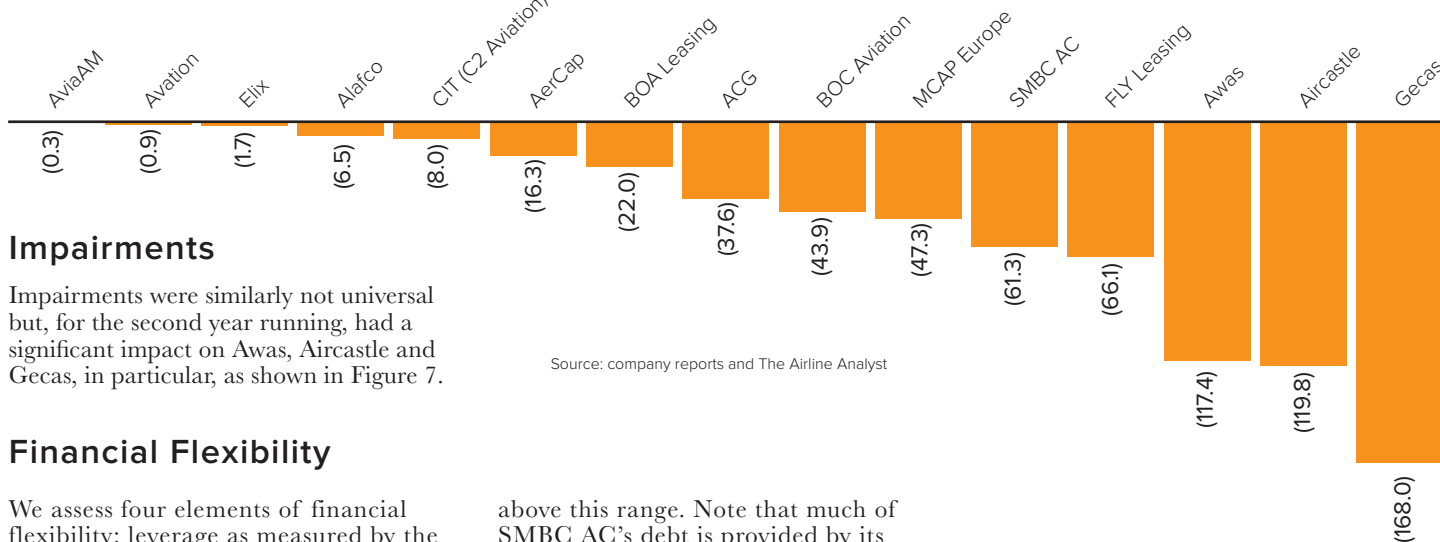


Source: company reports and The Airline Analyst

ANALYSIS

Financial flexibility

Figure 7 – Asset impairment (\$m)



Impairments

Impairments were similarly not universal but, for the second year running, had a significant impact on Awais, Aircastle and Gecas, in particular, as shown in Figure 7.

Source: company reports and The Airline Analyst

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; earnings before interest, tax, depreciation and amortization (Ebitda) interest coverage; and liquidity.

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. AviaAM, BOA Leasing and C2 Aviation are at the opposite end of the chart with very low leverage.

Leverage

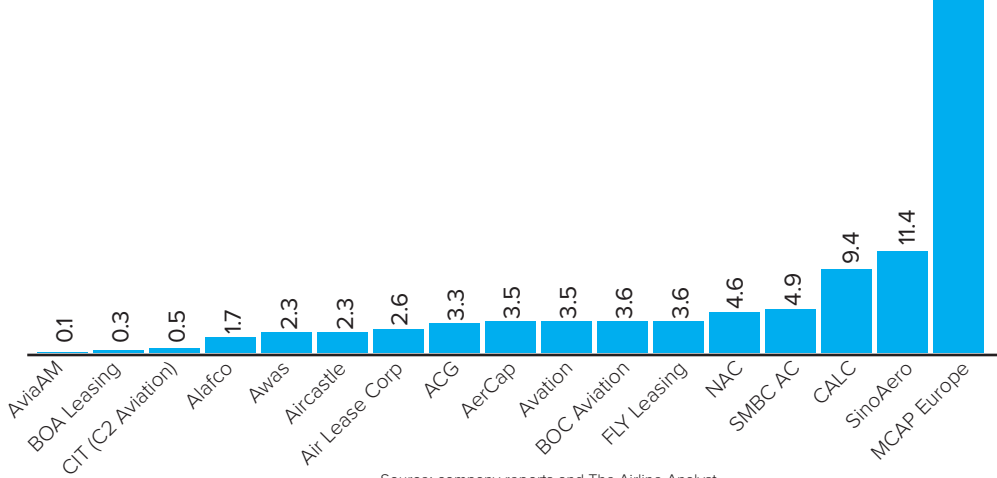
The debt/equity ratio is the simplest measure of capital structure and is universally understood. The chart in Figure 8 shows the majority of lessors in a range of 2x-4x on this measure with NAC, SMBC AC, CALC and SinoAero

Debt Structure

Borrowing unsecured 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. The ratings agencies generally cite low levels of secured debt



Figure 8 – Debt/Equity Ratio – Times



Source: company reports and The Airline Analyst

Figure 9 – Lessor credit ratings

Lessor	Fitch	Moody's	S&P
AerCap	BBB- (stable)	Ba1 (pos)	BBB- (pos)
Air Lease Corp	-	-	BBB- (stable)
Aircastle	-	Ba1 (pos)	BB+ (stable)
Avation PLC	B+ (stable)	-	B (stable)
Aviation Capital Group	BBB (pos)	-	A- (stable)
Awais Aviation Capital Limited	-	Ba3 (stable)	BB+ (neg)
BOC Aviation	A- (stable)	-	A- (stable)
CIT Group Inc	BB+ (stable)	Ba3 (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

ANALYSIS

Financial flexibility

as being a key consideration in granting investment grade-ratings to lessors.

The lessors with investment-grade ratings are ALC, ACG, which benefits from its ownership by Pacific Life, and BOC Aviation, which benefits from its Bank of China ownership. AerCap lost its investment-grade ratings as a result of its acquisition of ILFC, which increased leverage significantly. Since then, the lessor has sold assets and reduced leverage,

and regained its investment-grade ratings in late 2015. S&P cites a ceiling of a BB+ unsecured rating for private equity-owned lessors such as Awas because of financial policy concerns.

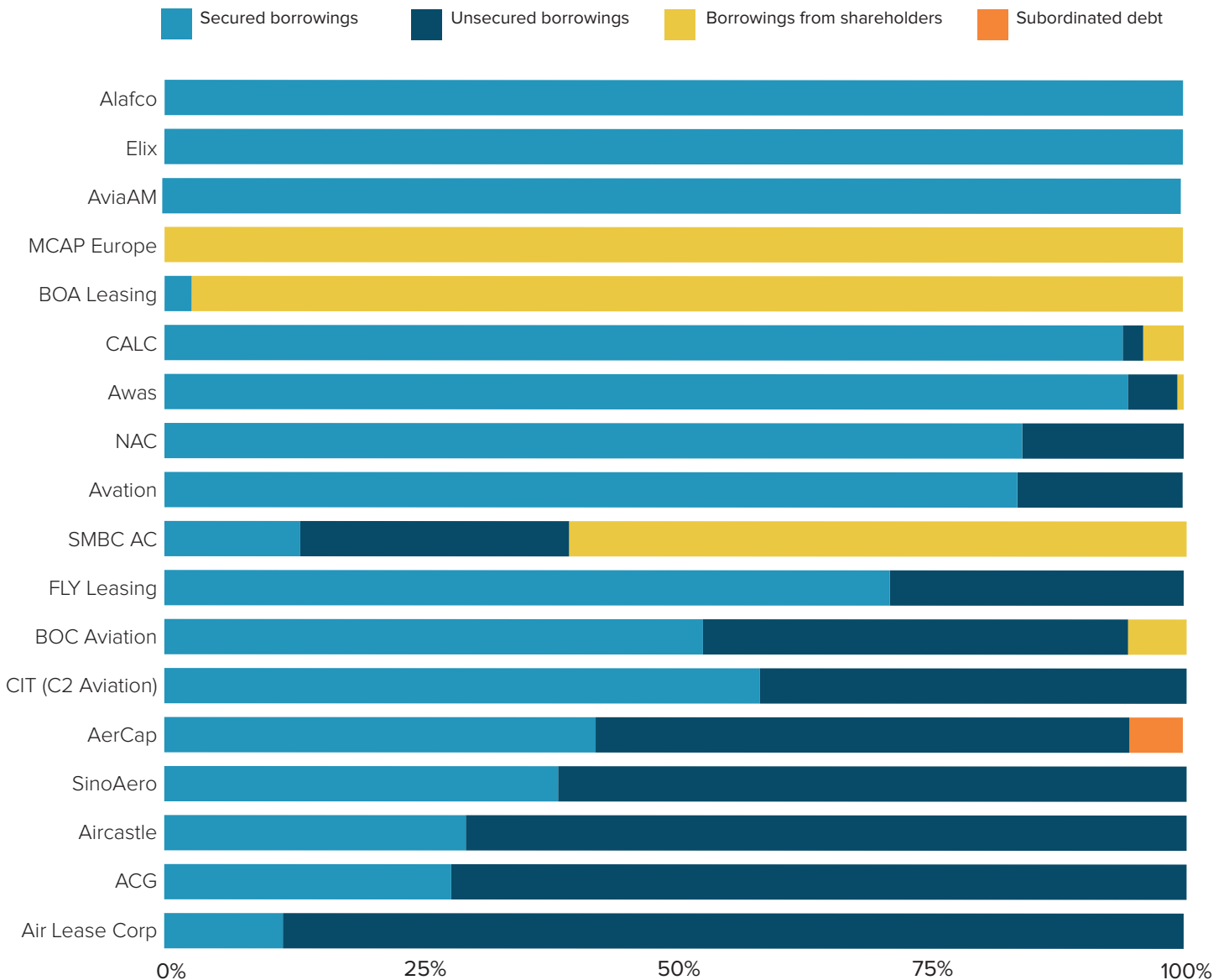
Figure 10 shows the debt structures on a proportional basis for the lessors ranked in order of the highest proportion of unsecured debt at the top to least at the bottom. The chart also shows shareholder

loans and other loans that could not be classified because of lack of information.

ALC comes top of the list, with its 88/12 unsecured/secured debt structure, which supports its BBB- investment-grade rating. Then come ACG, Aircastle, SinoAero, AerCap, C2 Aviation and BOC Aviation, which all have significant portions of unsecured debt in their debt structures. AerCap had \$15.6 billion-worth of unsecured financing



Figure 10– Debt Structure



Source: company reports and The Airline Analyst

Financial flexibility

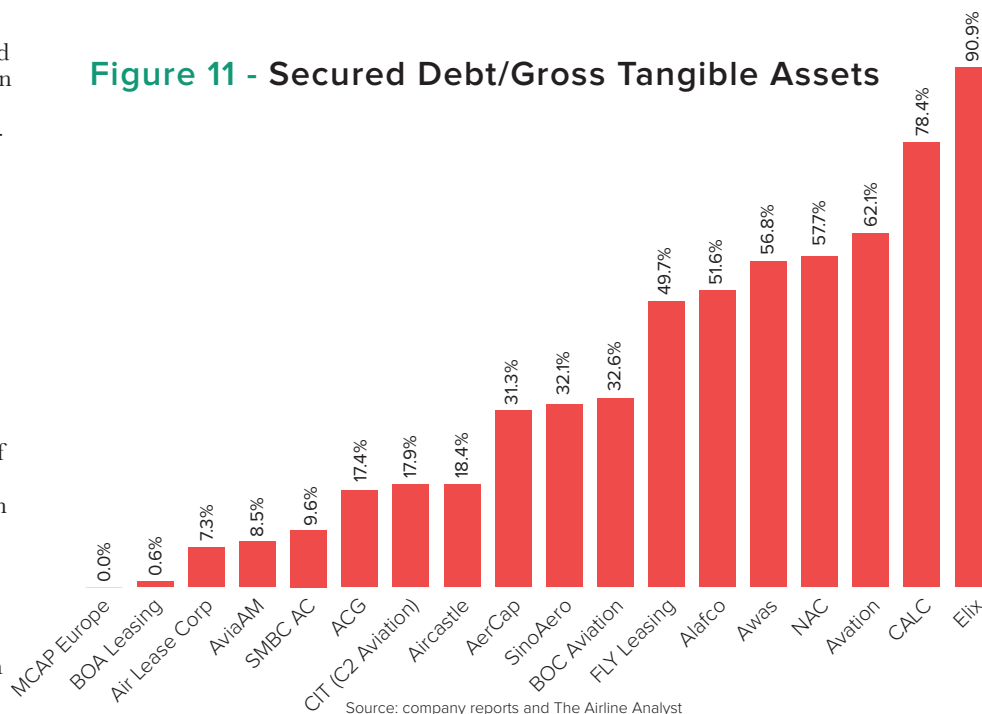
outstanding at balance date, most of it acquired with ILFC, but this represented only 52% of its total debt. BOC Aviation has been a regular visitor to the unsecured capital markets in several jurisdictions. FLY increased its unsecured debt from \$292 million to \$690 million in 2014 and maintained this level in 2015. NAC raised a \$230 million unsecured five-year term loan facility in 2012/13 and had \$345 million unsecured debt outstanding at its 30 June 2015 balance date.

Ranking with the least secured debt is MCAP, which is 100% funded by shareholder loans. SMBC AC's debt structure also features a large element of shareholder funding of \$4.3 billion and \$2.5 billion of loans (all unsecured) from third parties, the source of which is not disclosed in the financial statements.

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

Figure 11 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. The next five-best ranked lessors reflect significant amounts of unsecured funding.

Figure 11 - Secured Debt/Gross Tangible Assets

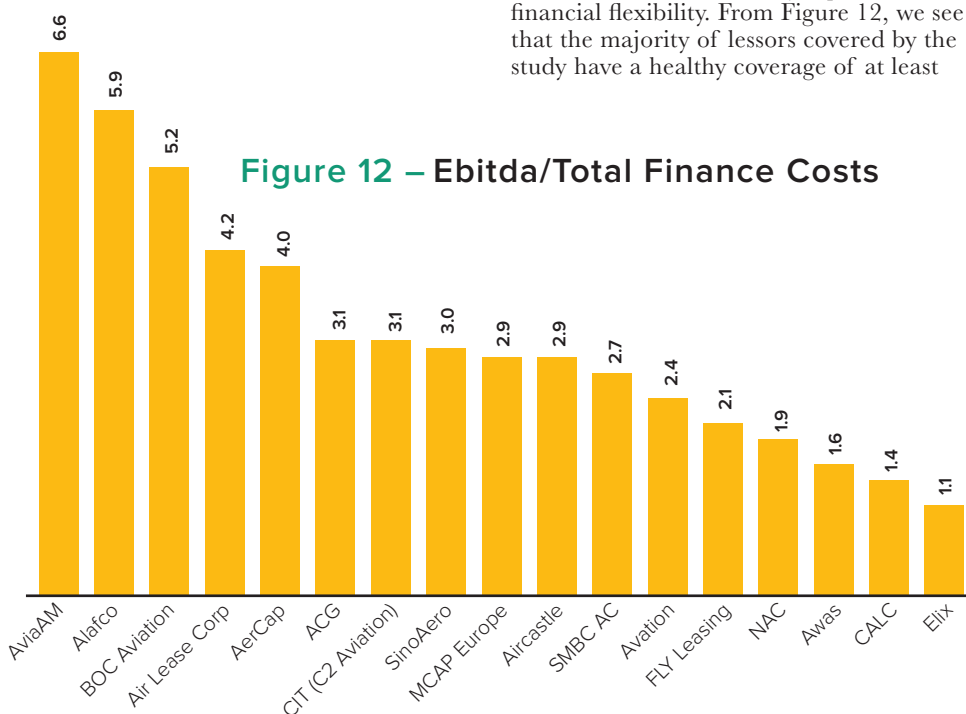


Interest Coverage

Interest coverage measured as Ebitda/finance costs is another key aspect of financial flexibility. From Figure 12, 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, Alafo, BOC Aviation and ALC. A sharp contrast can be seen with those further down the chart.

Figure 12 – Ebitda/Total Finance Costs



Liquidity

Figure 13 shows unrestricted cash liquidity as a percentage of total borrowings. AviaAM has been removed from this chart because its value of 238% is much higher than the others. For the remainder, this measure ranges from a low of 1% for ACG and BOA Leasing, 2% for ALC and SMBC AC (which has access to parent funding), to a high of 18% for Alafo.

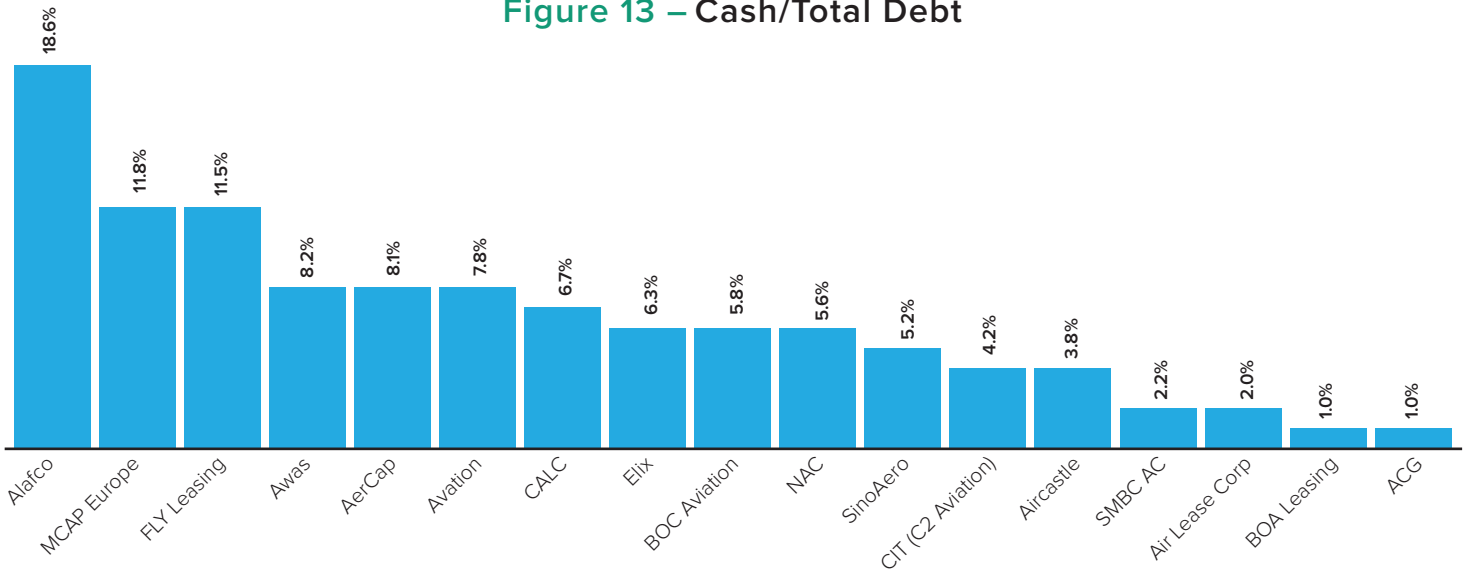
Some of the lessors additionally have committed bank facilities, such as BOC Aviation, which had \$2.5 billion of such undrawn lines as of 31 December 2015, Aircastle, which put in place an increased \$600 million unsecured revolving credit in January 2015 (expiring 2019) and ALC, which has a \$2.8 billion unsecured revolving bank facility, with maturity in May 2019.



ANALYSIS

Financial flexibility

Figure 13 – Cash/Total Debt



Source: company reports and The Airline Analyst

As of 31 December 2015, ACG had \$1.2 billion available under its unsecured revolving credit facilities and AerCap had \$6.7 billion undrawn lines of credit under its credit and term loan facilities.

Returns

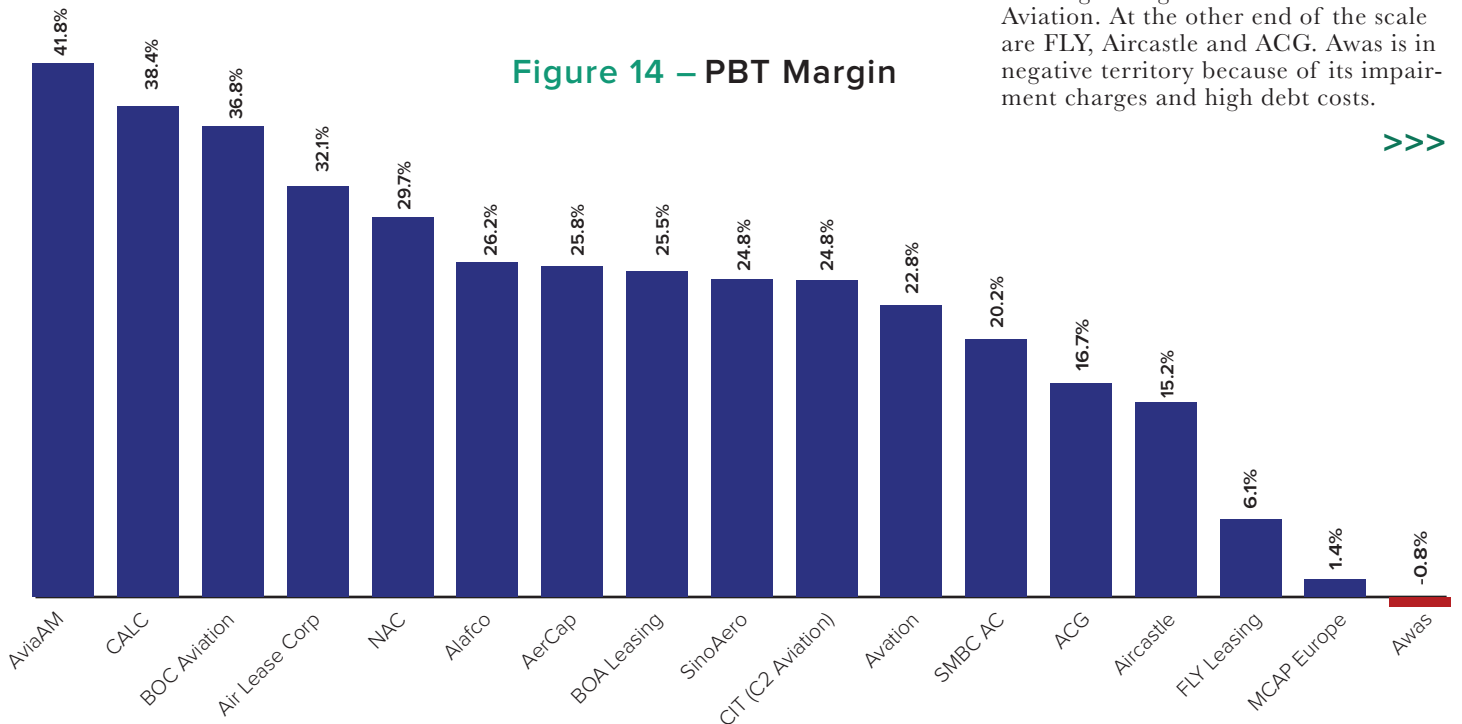
Profit before Tax

As an overall measure of profitability, we have assessed profit before tax as a percentage of total revenue as shown in Figure 14. 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 utilisation and maintenance/transition costs. The larger lessors with high margins were ALC and BOC Aviation. At the other end of the scale are FLY, Aircastle and ACG. Awacs is in negative territory because of its impairment charges and high debt costs.



Figure 14 – PBT Margin



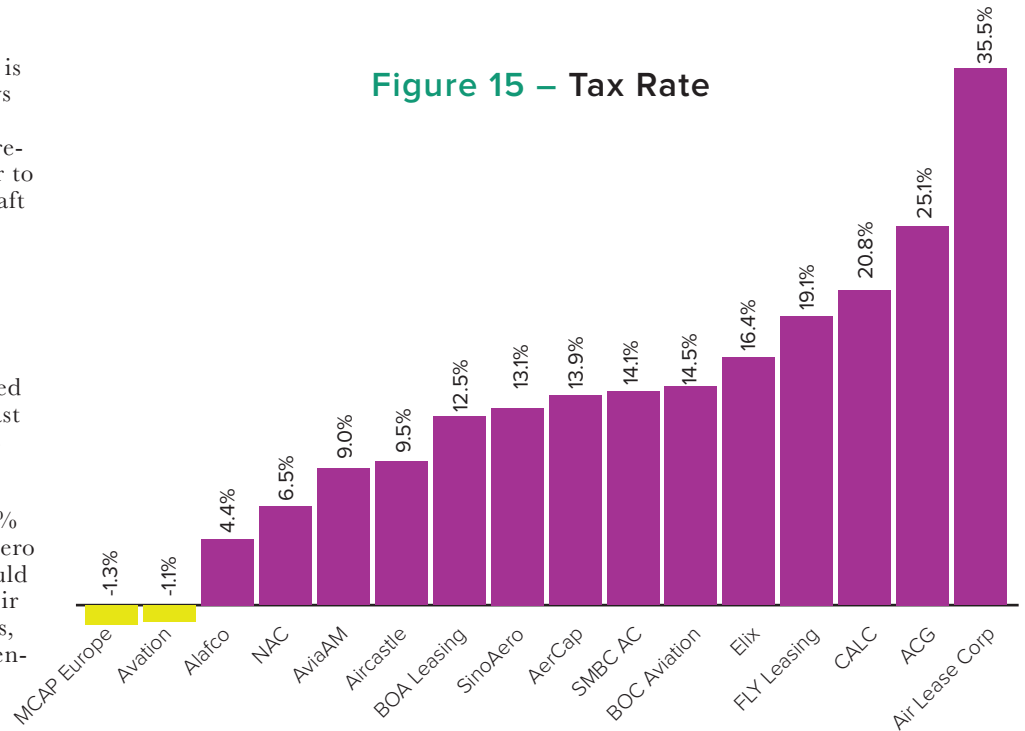
Source: company reports and The Airline Analyst

Financial flexibility

Tax Charge

One of the drivers of net profitability is the tax rate on profits. Figure 15 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.

Figure 15 – Tax Rate

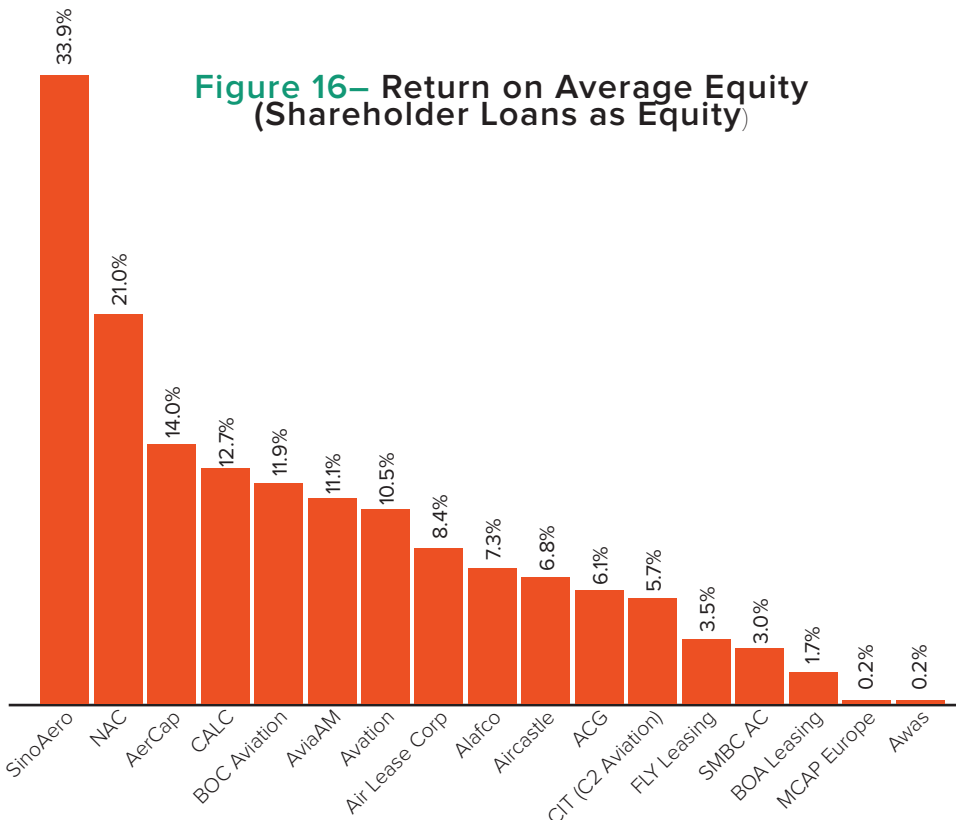


Source: company reports and The Airline Analyst

Return on Equity

Return on average equity is shown in Figure 16. 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 SinoAero's 41% and NAC's 23.5% topping the list. The returns of SinoAero and CALC are commendable but should be interpreted in conjunction with their high leverage. More established lessors, such as BOC Aviation and AerCap, generated solid middle teens returns.

Figure 16– Return on Average Equity (Shareholder Loans as Equity)



Source: company reports and The Airline Analyst

Conclusion

This review has shown some of the key dynamics affecting aircraft lessors' business models, which are more varied than would appear the case at first inspection. Lease yield, debt cost, asset selection, asset utilisation 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

Analysis of the Global Leased Fleet

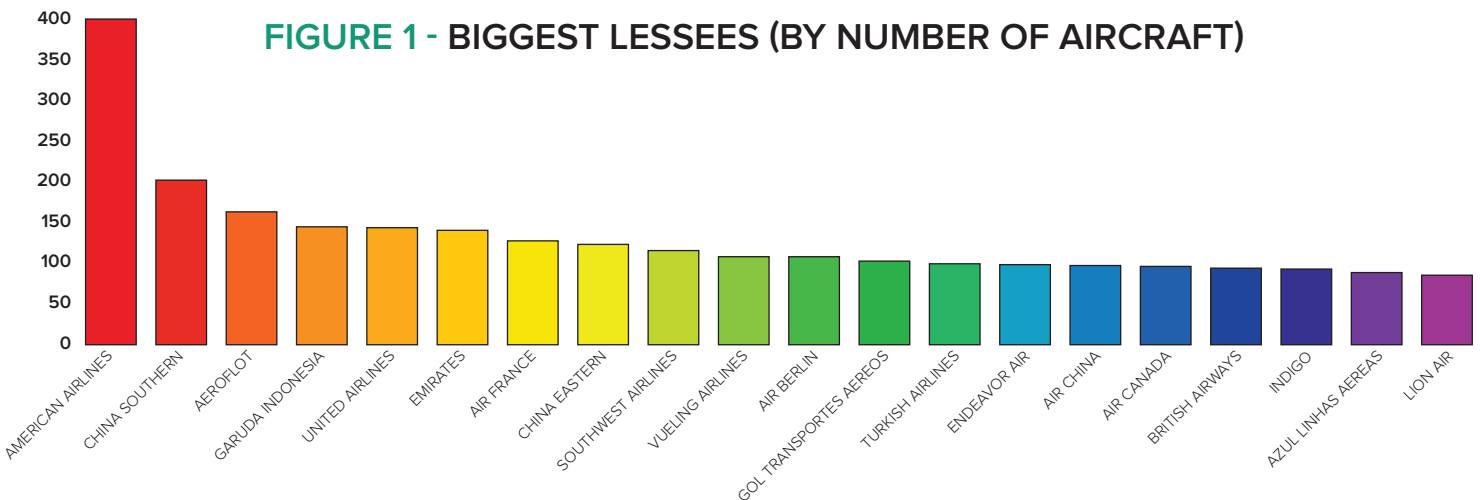
The *Airfinance Journal Fleets* database includes 9,589 aircraft, leased by 108 commercial lessors with at least 10 aircraft to 772 airlines in 143 countries (data as of end August 2016). Aircraft leased by “captive” lessors such as Synergy and Aircraft Purchase Fleet and by the OEMs are excluded. Aggregate orders by the

commercial lessors total 2,738 aircraft. The average age of the existing leased fleet is 11.4 years and 547 aircraft (5.7%) are reported as being in storage.

The industry is heavily concentrated. The top 10 lessors account for 54% of the total fleet count and 59% by value. Nevertheless, the smaller lessors provide

value to the market place in dealing with older or more specialised 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, like Skyworks, Triangle (Falko) and Nordic Aviation Capital.

FIGURE 1 - BIGGEST LESSEES (BY NUMBER OF AIRCRAFT)



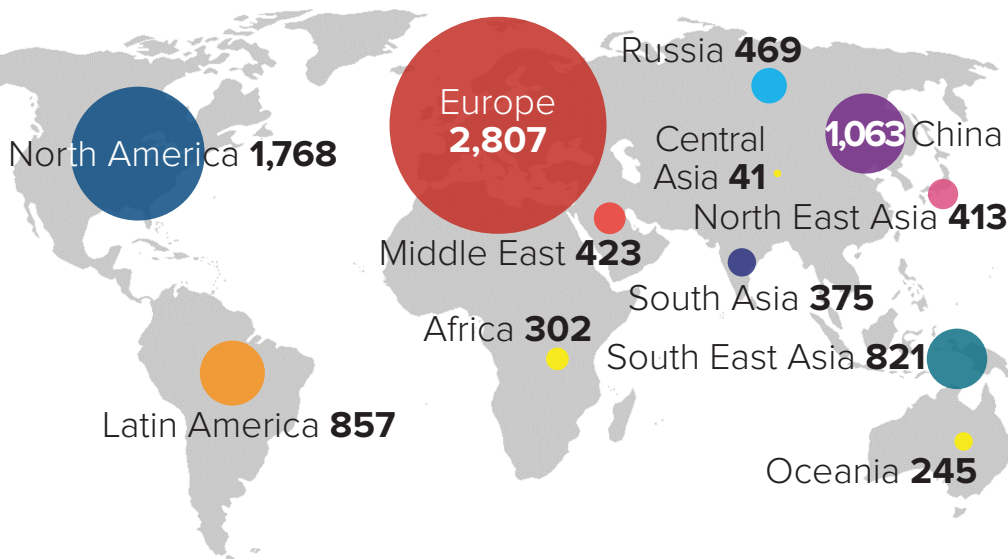
Airlines with the most leased aircraft

Figure 1 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 whom they are leasing are forming increasingly concentrated groups. Such concentration could reduce the ability of the lessors to diversify their portfolio risks as the top 20 includes some weak credits

such as Air Berlin and Gol. 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 - BY REGION

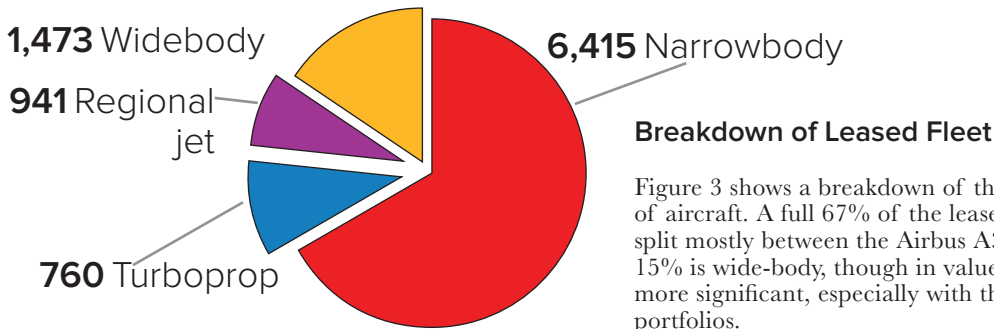


Geographic distribution of leased aircraft

The geographic distribution of leased aircraft is shown in Figure 2. 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.



FIGURE 3 - LEASED AIRCRAFT BODY TYPE



Breakdown of Leased Fleet

Figure 3 shows a breakdown of the leased fleet and orders by body-type of aircraft. A full 67% of the leased fleet is in the narrow-body category split mostly between the Airbus A320 and Boeing 737 families. Only 15% is wide-body, though in value terms their share would be much more significant, especially with the A380 and 787 joining the lessors' portfolios.

Regional Jets

The most significant development over the last year has been the increased investment in regional jets by Nordic Aviation Capital with its acquisitions of Jetscape and Aldus. The segment has also attracted capital into the secondary market with Triangle (Falko) acquiring BAE Systems' fleet of leased RJ/Avroliners. As can be seen, however, GECAS remains by far the most dominant player.

FIGURE 4 - TOP 10 LESSORS OF REGIONAL JETS

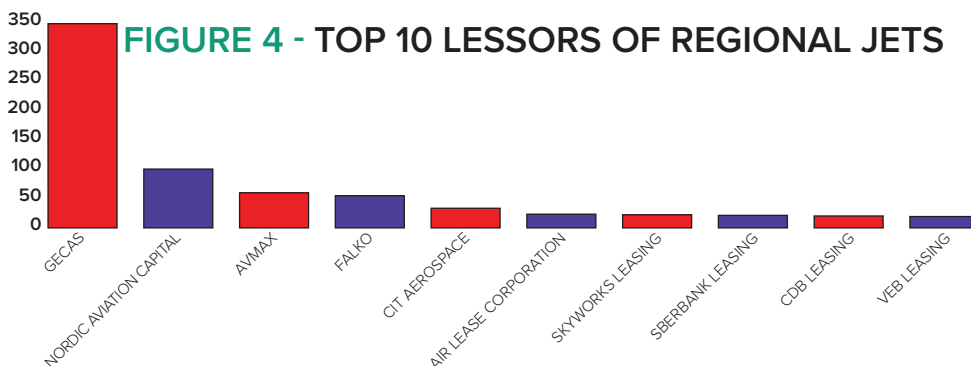
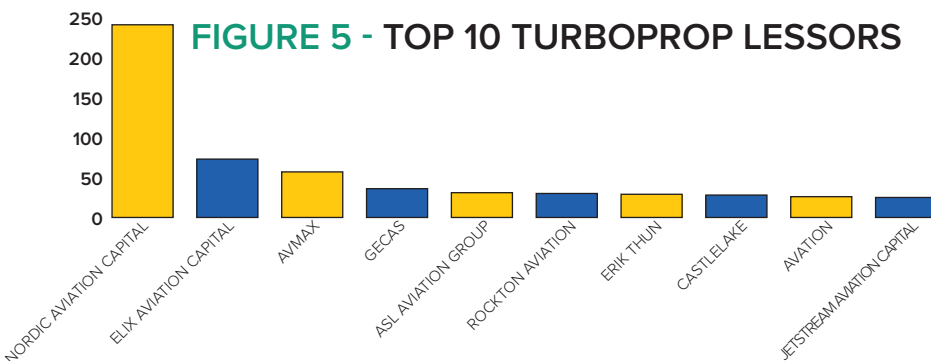


FIGURE 5 - TOP 10 TURBOPROP LESSORS



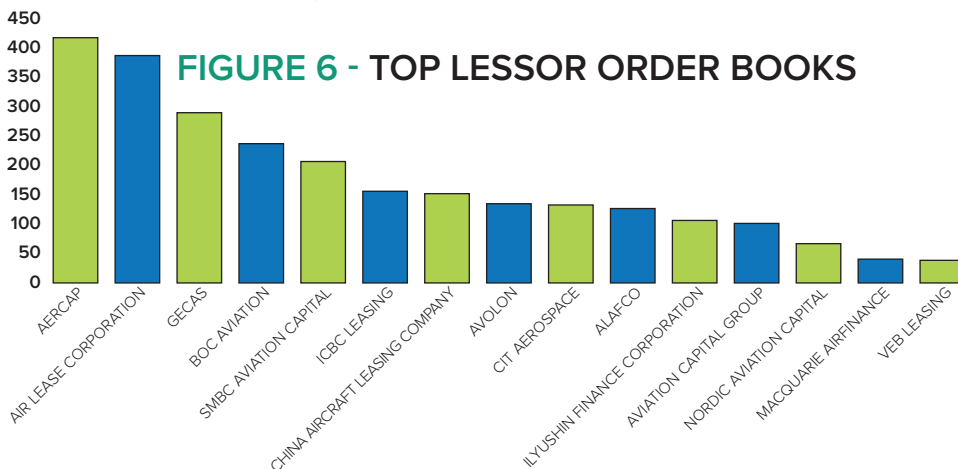
Turboprops

Turboprops are a significant niche market, dominated by one lessor, Nordic Aviation Capital. However, other lessors have a presence, as shown in Figure 5. Elix Aviation Capital is now the second largest lessor of turboprops with 73 aircraft, up from 44 last year and 11 the year before.

Order Books

Twenty eight lessors have a total of 2,738 aircraft on order from the OEMs. The top 15 are shown in Figure 6. 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.

FIGURE 6 - TOP LESSOR ORDER BOOKS



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 who 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 today with great strengths in access to capital, availability of aircraft and ability to offer customers overall fleet solutions rather than just single aircraft. Given their domination

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

TOP 10 LESSORS

1 GECAS

Gecas, the leasing arm of General Electric, was founded in 1993, and is the world's biggest leasing company by fleet size, with a total of 1,450 aircraft. The lessor has 318 aircraft on order – including the Airbus A320neo, Boeing 737 Max 8, A321neo and 787-10 models.

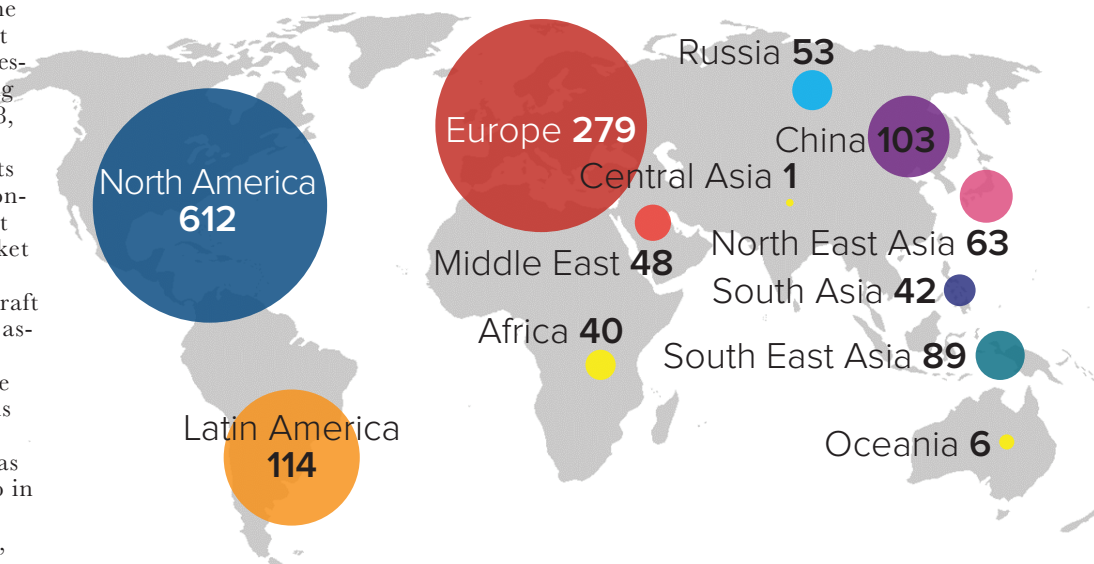
Gecas' main source of funding is its parent company, giving it access to considerably cheaper financing than most of its peers, and less exposure to market volatility. In addition, Gecas provides loans collateralised on about 400 aircraft and has about \$45.5 billion-worth of assets on its books.

Speaking with *Airfinance Journal*, the lessor confirms that aircraft demand is strong, with rent levels for all in-production types remaining "solid". Gecas began taking delivery of the A320neo in September.

Commenting on the firm's new fleet, the lessor says: "We continue to see strong demand for our narrowbody aircraft that offer airlines more fuel efficiency with lower operating costs, and our orders placed for the Neo and Max aircraft ensures we have supply to meet this demand."

Gecas says it continues to take advantage of market conditions and strong investor appetite for aircraft as a seller of assets, selling \$3 billion of assets in 2015.

GECAS FLEET BY REGION OF LESSEE

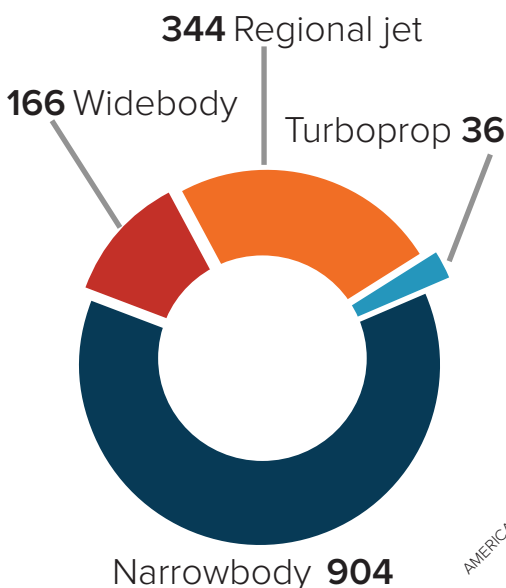


There has been plenty of speculation as to whether or not aviation is reaching the top of its cycle. Gecas states: "A downturn depends on GDP, fuel prices and other macroeconomic factors. Things seem to be in balance, but nothing goes up forever."

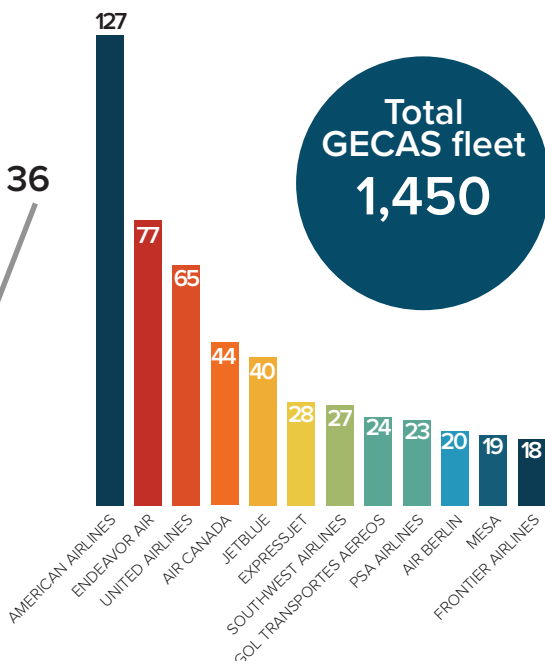
Gecas may be the world's largest lessor, but its competitors are consolidating. AerCap's acquisition of ILFC has created a

second mega-lessor. Does Gecas anticipate that more leasing consolidation will occur in future? "Consolidation in aircraft leasing is inevitable," replies the lessor. "Gecas' 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' position."

GECAS FLEET BY AIRCRAFT TYPE



GECAS TOP LESSEES



GECAS KEY FACTS

- Name:** GE Capital Aviation Services (Gecas)
- Country:** USA and Ireland
- Founded:** 1993
- Ownership:** General Electric Company
- Head office:** Shannon, Ireland, and Norwalk, Conn, USA
- Number of employees:** about 600
- Size of fleet:** 1,450 fixed wing (owned and serviced), 200 rotary wing
- Average age of fleet:** N/A
- Number of lessees:** about 270
- Orderbook:** 318 aircraft
- Unsecured credit ratings:** No standalone credit rating for Gecas (is part of GE Capital, which has a AA+ rating)
- Total assets (as of 30 June 2016):** \$45.5 billion
- Net income:** part of GE company (Gecas \$1.3 billion in 2015)

Source: *Airfinance Journal Fleets*

TOP 10 LESSORS

2 AerCap

AerCap was established in 1995 and has its headquarters in Dublin. The lessor listed on the New York Stock Exchange in 2006 and became the second-largest lessor by fleet size after it acquired rival company ILFC from International Airlines Group in May 2014. AerCap operates a fleet of 1,166 aircraft. It also has about 435 aircraft on order, including Airbus A320neos, Boeing 737 Max 8s, A321neos, 787-9s and Embraer E190-E2 aircraft.

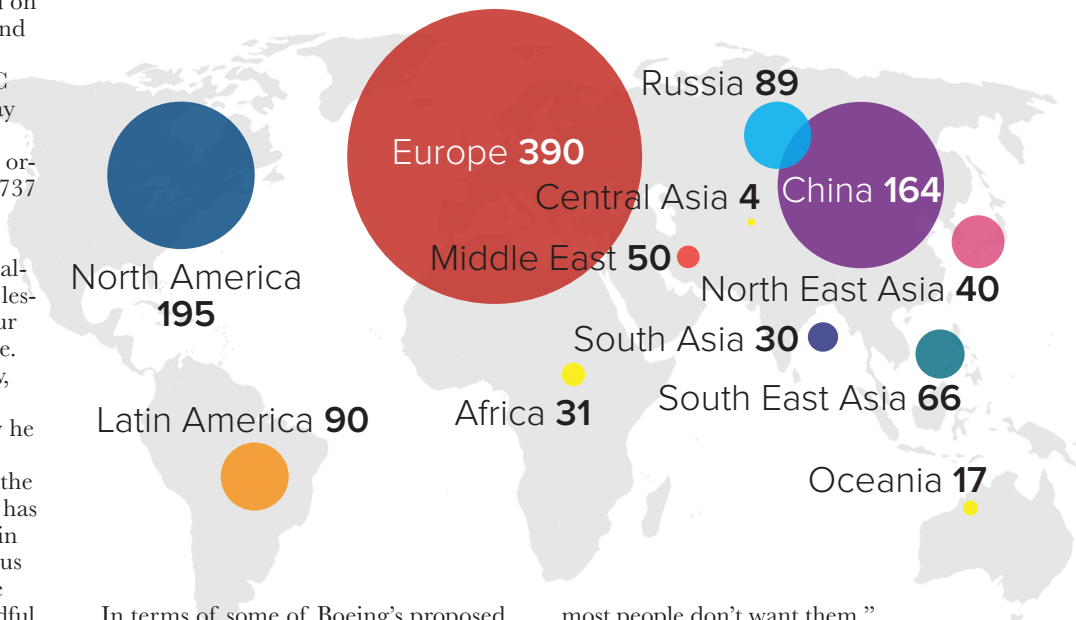
AerCap trades a lot of aircraft, too – almost 100 a year on average. In May, the lessor exited the regional market, selling four Bombardier CRJs to US lessor Castlelake. In July, at the 2016 Farnborough airshow, Aengus Kelly, AerCap’s chief executive officer, explained to *Airfinance Journal* why he chose to leave this market.

“We just felt there was a good bid on the asset,” he said. “The regional jet market has a lot of successful niche players, experts in the market. It’s a very small business for us and wasn’t something that was worth the effort it was taking up to just have a handful of airplanes in it.”

The lessor intends to return to the regional market in the future, taking delivery of 25 E190-E2s and 25 E195-E2s from 2018.

Kelly adds that he wants the AerCap portfolio to be focused around the 737, the A320, A330 and 777, and transitioning into the Neo, the Max, the A350 and the 787.

AERCAP FLEET BY REGION OF LESSEE



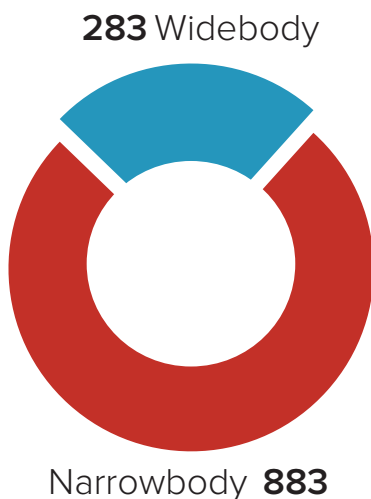
In terms of some of Boeing’s proposed programmes, Kelly adds that he would be interested in investing in a stretch version of the 737 Max but not a 757 replacement.

“We would invest in a Max stretch; I think that airplane has a future,” he says. “The middle-of-the-market airplane they are proposing is more challenging. If it’s supposed to replace a 757 – 37% of the 757s in the world are aircraft on ground (AOG) – so

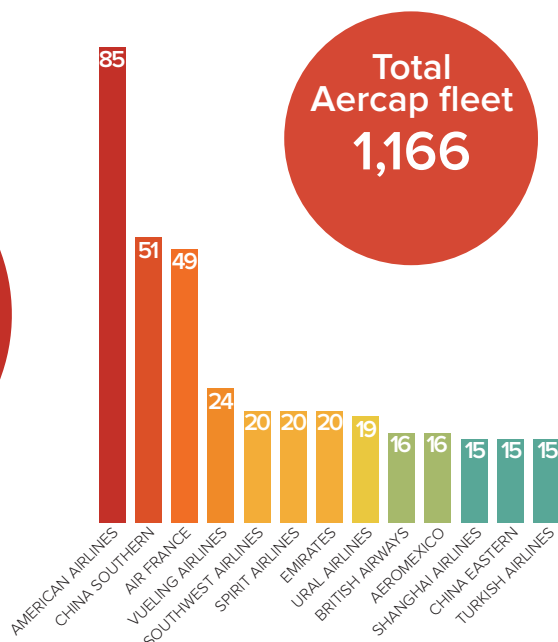
most people don’t want them.”

AerCap has all of its liquidity lined up for the next 18 months, carrying more than \$9 billion of liquidity at any given time. The lessor’s financing is a mixture of secured and unsecured debt – about one-third of it is in the secured market and about two-thirds is in the unsecured markets, predominately from the US capital markets.

AERCAP FLEET BY AIRCRAFT TYPE



AERCAP TOP LESSEES



AERCAP KEY FACTS

- Name: AerCap
- Country: Ireland
- Founded: 1995
- Ownership: Public company listed on the New York Stock Exchange
- Head office: Dublin, Ireland
- Number of employees: 400 *
- Size of fleet: 1,166 owned and managed
- Average age of fleet: 7.7 years
- Number of lessees: 200 *
- Order book: 435
- Delivery commitments: \$25 billion
- Total assets (as of June 30 2016): \$43 billion
- Net income: \$1.2 billion FY 2015

Source: *Airfinance Journal Fleets*

*approximate figures provided by the lessor

TOP 10 LESSORS

3 SMBC Aviation Capital

SMBC Aviation Capital (SMBC AC) was founded 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.

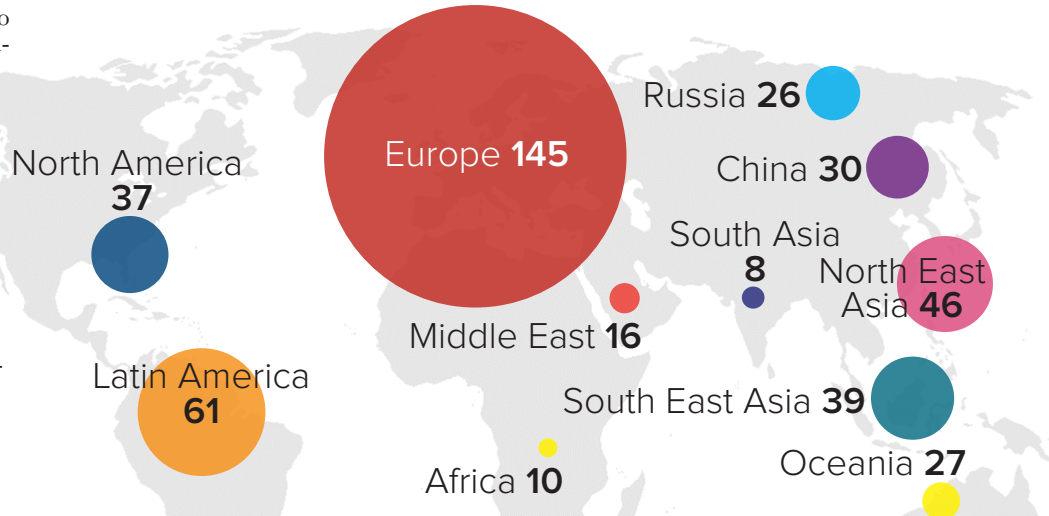
The lessor's revenues grew 15% from last year to \$1.05 billion, surpassing the \$1 billion mark for the first time in the company's history.

In an interview with *Airfinance Journal* published in August, the company's chief executive officer, Peter Barrett, attributed this to the stability of operating lease margins and the trading market being "quite good".

Barrett added that while the company's owner, SMBC Nikko, has in the past been SMBC AC's primary source of funding, he and the parent company want to diversify the lessor's funding in the future.

"We've obviously got a strong orderbook and we believe that's going to be good for growth," he said. "We also see a lot of sale and leaseback opportunities with the productions of the Neo, the Max, the A350 and 787 beginning to ramp up. But I'm not going to commit to growth for growth's sake; we'll have to see the right opportunities and the right returns."

SMBC AC FLEET BY REGION OF LESSEE



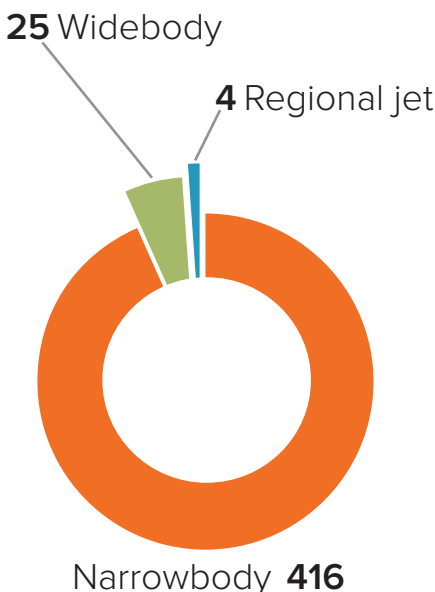
Last year, the lessor placed an order for 10 Boeing 737 Max 8s, bringing the orderbook to 205 aircraft, comprising 110 Airbus A320neos, 90 737 Max 8s and five A321 aircraft.

SMBC AC completed 57 aircraft deliveries during the 12 months to 31 March, including its first 787-8. It also concluded 45 new lease agreements, sold 27 owned and managed aircraft and added 12 new customers.

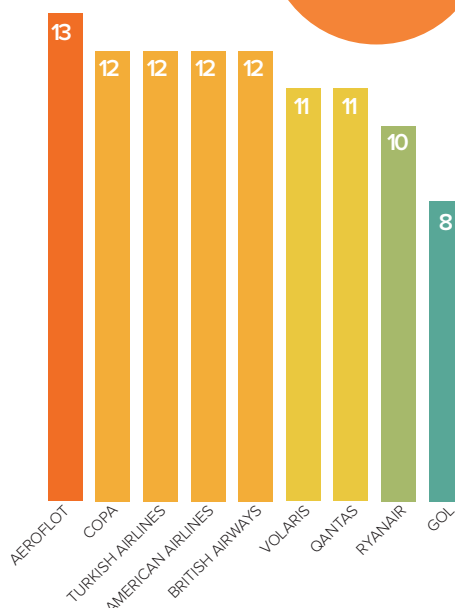
As of 31 March 2015 to 31 March 2016, the lessor had aircraft assets in excess of \$9.9 billion, comprising 297 owned and 145 managed aircraft. As of September 2016 its fleet totalled 445 units.

At the same time as the results were released, Fitch Ratings and Standard & Poor's affirmed the lessor's long-term issuer default rating at BBB+.

SMBC AC FLEET BY AIRCRAFT TYPE



SMBC AC TOP LESSEES



SMBC AC KEY FACTS

- Name: SMBC Aviation Capital
- Country: Ireland
- Founded: 2001
- Ownership: Sumitomo Mitsui Banking Corporation, (SMBC) Sumitomo Mitsui Finance and Leasing Company (SMFL) and Sumitomo Corporation.
- Head office: Dublin, Ireland
- Number of employees: 160
- Size of fleet: 445 owned and managed
- Average age of fleet: 4.6 years
- Number of lessees: 100
- Order book: 204
- Delivery Commitments (as of 30 June 2016): 16
- Unsecured Credit Ratings: Fitch, BBB+; S&P, BBB+
- Total assets (as of June 30 2016): \$9.9 billion

Information provided as at June 30th 2016 unless otherwise stated

TOP 10 LESSORS

4 BBAM (including FLY Leasing and Nomura Babcock & Brown)

BBAM is the largest independent aircraft manager, with about 405 aircraft under 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.

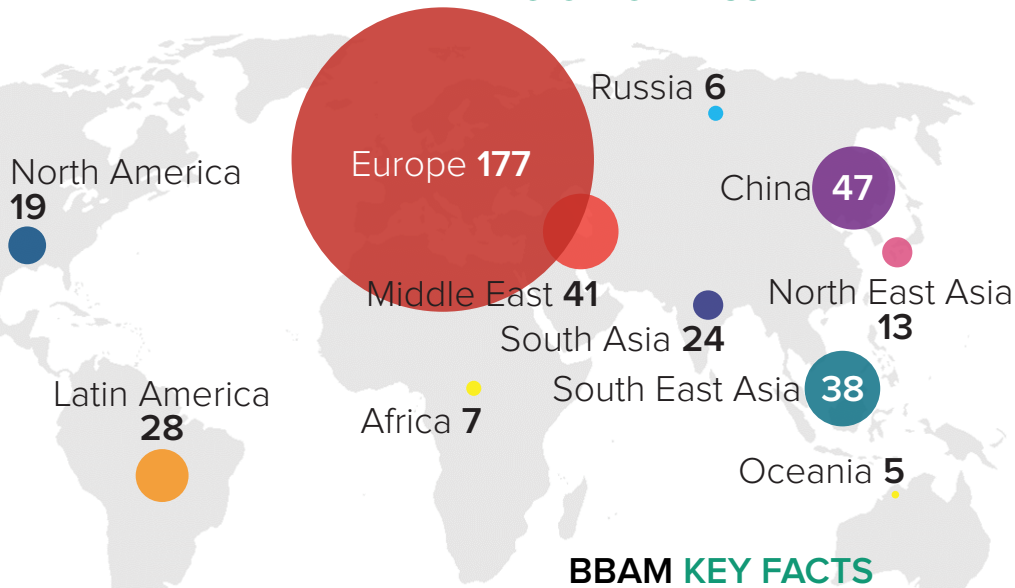
BBAM strengthened its ties with FLY Leasing in the first quarter of 2016, when it increased its share of the lessor's stock to 13%.

BBAM is trading out the older aircraft in FLY Leasing's portfolio and using unrestricted cash to chase sale and leaseback deals for new aircraft. During the past 12 months, FLY Leasing has sold 57 aircraft valued at \$1.3 billion, with an average age of 14 years.

FLY Leasing ended the first quarter with \$318 million of unrestricted cash and more than \$530 million of unencumbered aircraft, which it will use to rejuvenate its fleet. Its aircraft acquisition target for 2016 is \$750 million, of which \$510 million had been allocated at the end of the second quarter.

Its most significant recent purchase is a sale and leaseback deal with Air India for three Boeing 787s, guaranteed by the Indian government, which closed in July.

BBAM FLEET BY REGION OF LESSEE

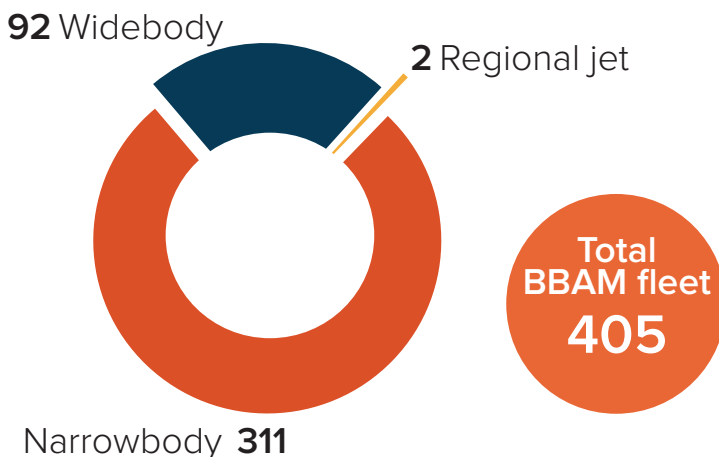


BBAM KEY FACTS

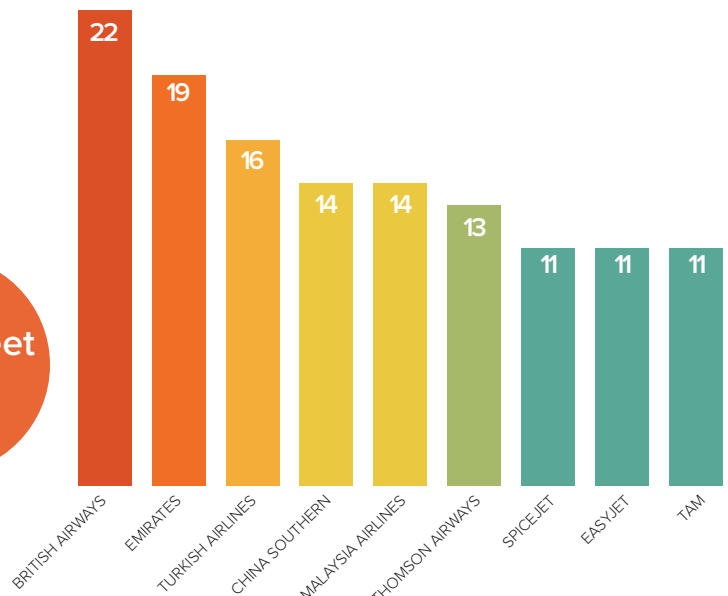
- Name: BBAM
- Country: USA
- Founded: 1991
- Ownership: Onex 50%, BBAM 50%
- Size of fleet: 405 (managed)
- Number of lessees: over 200
- Orderbook: 0

BBAM's three largest lessees by value of aircraft are: Emirates (with an estimated \$3.03 billion of aircraft on lease), British Airways (\$1.29 billion) and Cathay Pacific Airways (\$1.14 billion).

BBAM FLEET BY AIRCRAFT TYPE



BBAM TOP LESSEES



TOP 10 LESSORS

5 NAC

Nordic Aviation Capital (NAC) was founded in Skive, Denmark, in 1990 by Danish entrepreneur Martin Møller, beginning with just one aircraft. It leased aircraft for humanitarian aid and supplies to remote areas before focusing on regional commercial airlines in Europe and North America then later throughout Asia and South America.

During the past year, NAC has not just expanded organically, but also inorganically.

The Danish leasing company acquired regional rivals Aldus Aviation and Jetscape in spring this year, taking on an extra 69 aircraft and 45 employees. In June, NAC announced it would purchase Air Lease's 25 Embraer aircraft portfolio as the US lessor switched its focus on to mainline aircraft. NAC has a fleet of 351 aircraft and a further 74 on order, comprising 20 E-Jets and 54 ATRs.

Møller's business has steadily grown since 1990. During the past five years, its profits after tax have grown twofold from \$54 million in full-year 2010/11 to \$111 million in 2014/15. The company's investment in aircraft has grown three times bigger in that same period, from \$350 million to \$1.11 billion.

But even with about 170 employees, Møller is still looking to hire more people.

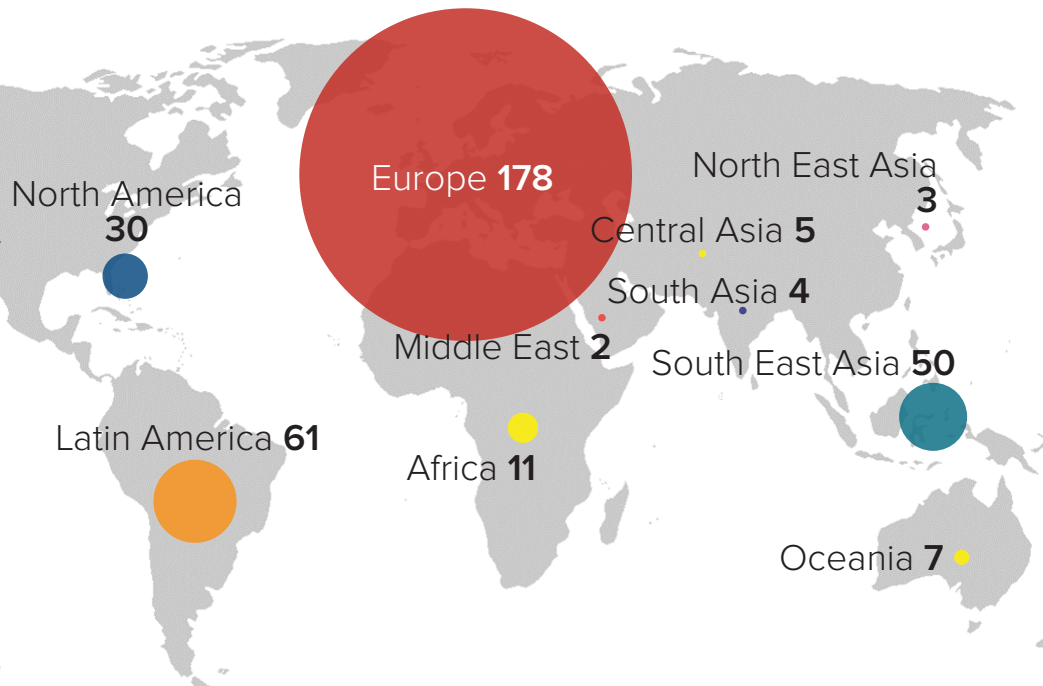
"With the anticipated linear growth, we certainly expect to need more hands," he told *Airfinance Journal* in April. "In my view, there's one way of looking after an asset right. You've got to travel to the lo-

cation of the asset, you've got to be there, you've got to follow up on it and stay in touch with the client and the more assets you have, the more hands you need. It needs to be completely interconnected."

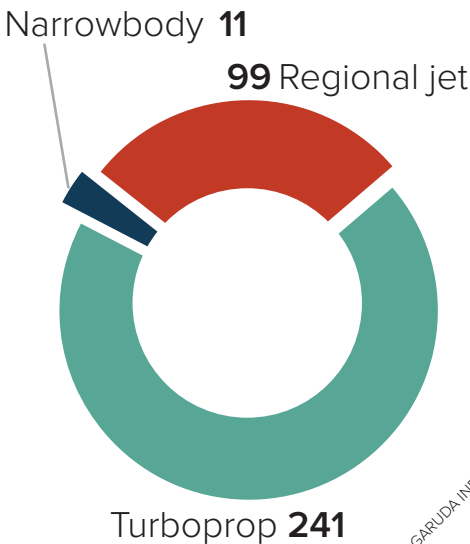
Earlier this year, the lessor diversified its

funding strategy and tapped the Japanese operating lease with call option market for the first time with Financial Products Group Asset and Investment Management for an ATR72-600 aircraft. DVB Bank and Korea Development Bank were the lenders.

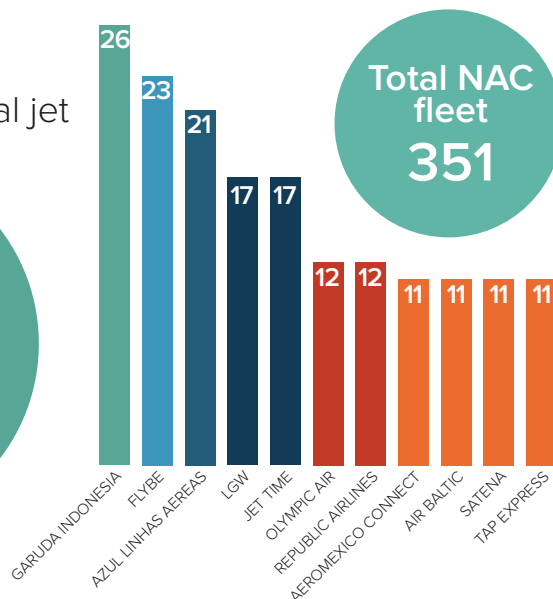
NAC FLEET BY REGION OF LESSEE



NAC FLEET BY AIRCRAFT TYPE



NAC TOP LESSEES



NAC KEY FACTS

- Name: Nordic Aviation Capital
- Country: Denmark
- Founded: 1990
- Ownership: Martin Møller, EQT
- Head office: Billund, Denmark
- Number of employees: 173
- Size of fleet: 351
- Average age of fleet: 5.5 years
- Number of lessees: 72
- Orderbook: 74
- Delivery commitments: 53
- Unsecured credit ratings: N/A
- Total assets (as of 30 June 2016): \$4.9 billion
- Net profit: \$142 million

TOP 10 LESSORS

6 CIT Aerospace

CIT Aerospace is close to being sold to another leasing company, according to market rumours, with Dublin-based Avolon reportedly in pole position to close the deal, at the time of writing.

Its parent bank, CIT Group, decided to divest from aircraft leasing in November 2015, when it announced that the capital charges related to its orderbook were restricting its ability to grow the platform. It also said the platform was undervalued and that spinning it off would improve the value of both companies.

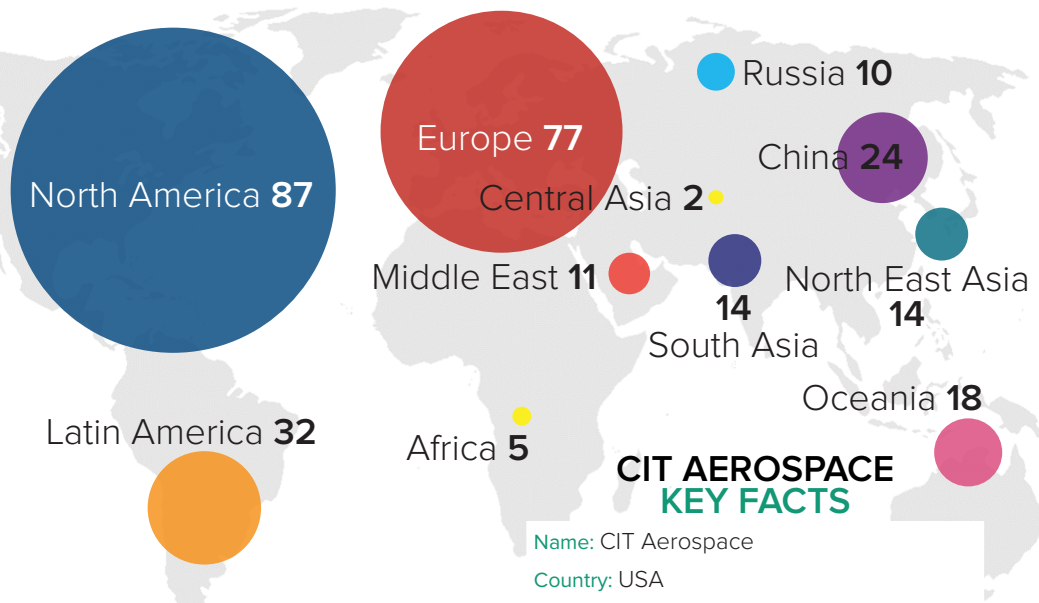
The lessor's owned and managed portfolio totals approximately 324 aircraft, with a net book value of \$10.1 billion, as of 30 June. Total revenues for the first half of 2016 reached \$641 million, resulting in net income of \$139 million for the first six months.

CIT is more heavily invested in widebodies than most other lessors, from a fleet value perspective. Twin-aisle aircraft account for 34% of the value of its fleet, with 40 Airbus A330s, two A350s, eight Boeing 757s, six 767s and four 787s on its balance sheet.

The lessor's orderbook also features widebodies. CIT was one of the first companies to place an order for the A330neo, when, in December 2014, it firmed up an order for 15 A330-900neos, as well as five A321s.

CIT also has orders for 12 A350-900s and 16 787-9s, as well as 50 A321-family Neos and 37 737 Max on order.

CIT AEROSPACE FLEET BY REGION OF LESSEE



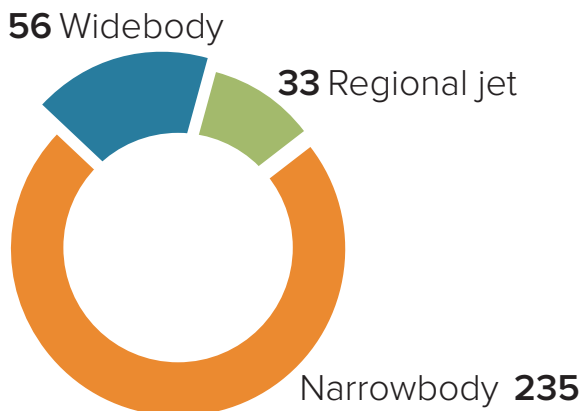
CIT AEROSPACE KEY FACTS

- Name: CIT Aerospace
- Country: USA
- Founded: 1908 (CIT Group)
- Ownership: CIT Group (parent company) – public
- Head office: New York
- Size of fleet (owned and managed): 324
- Average age of fleet: 5.9 years
- Number of lessees: 121
- Orderbook: 132
- Delivery commitments: \$9.2 billion through 2020
- Net income (first-half 2016): \$139.5 million

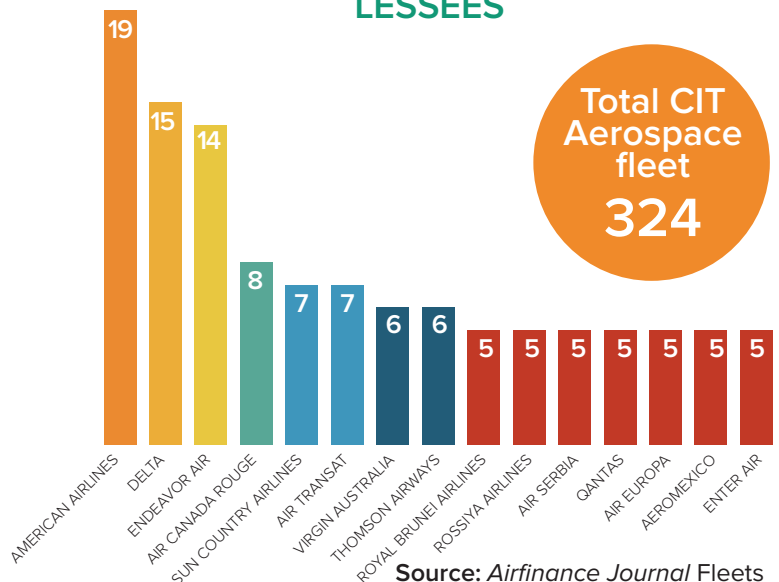
For 2017, the lessor is scheduled to receive 13 A320neos and three 787-9s. In 2018, it will receive 25 Airbus narrowbodies, five 787-9s, as well as its first five A330-900neos.

Historically, CIT Aerospace has financed its deliveries with cash from unsecured debt raised by its parent company, as well as export credit agency-backed debt and other bank facilities. Its average cost of borrowing for secured debt is 3.13%.

CIT AEROSPACE FLEET BY AIRCRAFT TYPE



CIT AEROSPACE TOP LESSEES



Total CIT Aerospace fleet
324

TOP 10 LESSORS

7 Air Lease Corporation

Founded only in 2010, Air Lease Corporation (ALC) has enjoyed remarkably quick progress to its present position as an investment-grade, publicly listed operating lessor with a young, unencumbered fleet.

John Plueger, the former chief operating officer and president of ALC, was appointed chief executive officer in July.

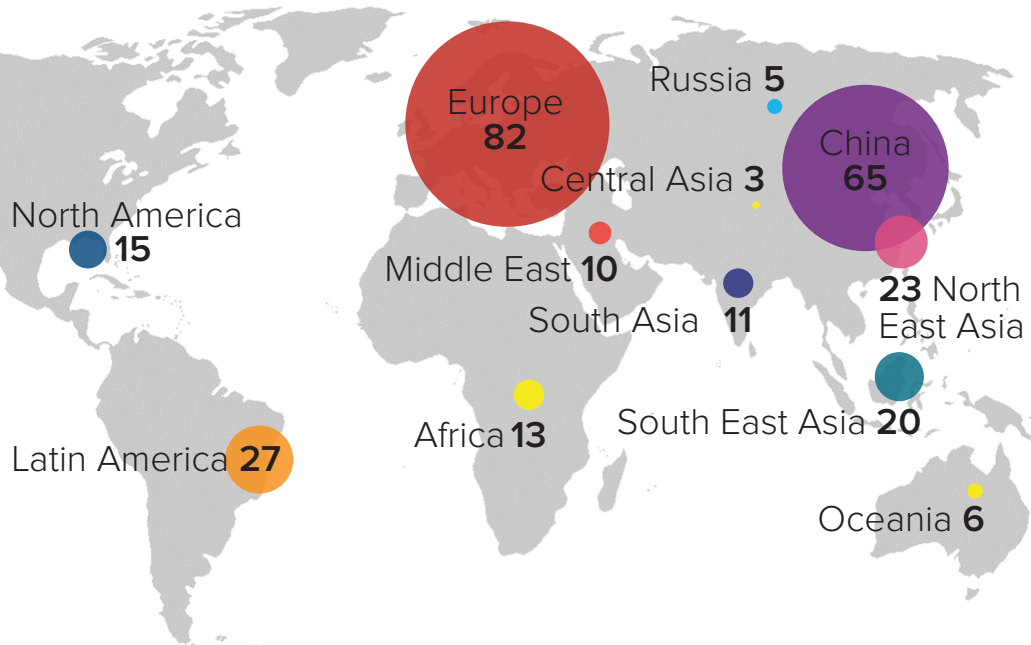
The founder and former CEO of the company, Steven Udvar-Házy, has become executive chairman of the board of ALC.

Plueger took the reins just before ALC posted a strong set of quarterly results. In June, the company's second-quarter revenues jumped 15% to \$350.1 million compared with the prior year period.

The lessor reported quarterly net income of \$91.8 million with a pre-tax margin of 40.6% for the three months ending 30 June, compared with net income of \$76.1 million with a pre-tax margin of 38.8% in 2015. This growth in revenues was primarily driven by the increase in ALC's fleet.

ALC has \$7.7 billion of unsecured debt on its balance sheet, comprising 91.2% of its debt portfolio as of the end of the quarter. Its composite cost of funds had decreased from 3.59% to 3.33% from the end of 2015 to the end of the second quarter.

ALC FLEET BY REGION OF LESSEE

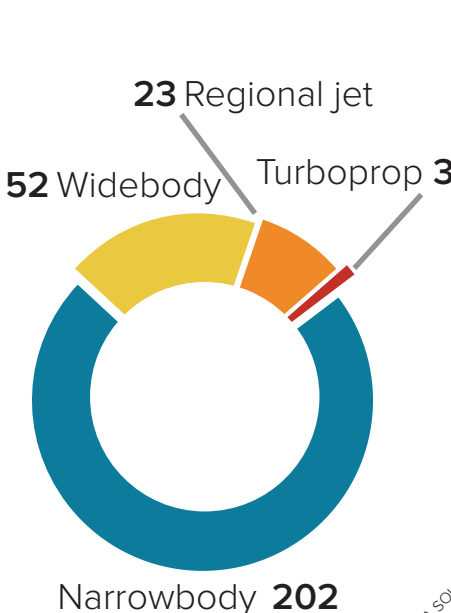


As of 30 June, ALC's fleet included 245 owned aircraft, with a weighted average age of 3.7 years and remaining lease term of seven years. The lessor also had 33 aircraft under management. As of 31 August, ALC's owned and managed fleet

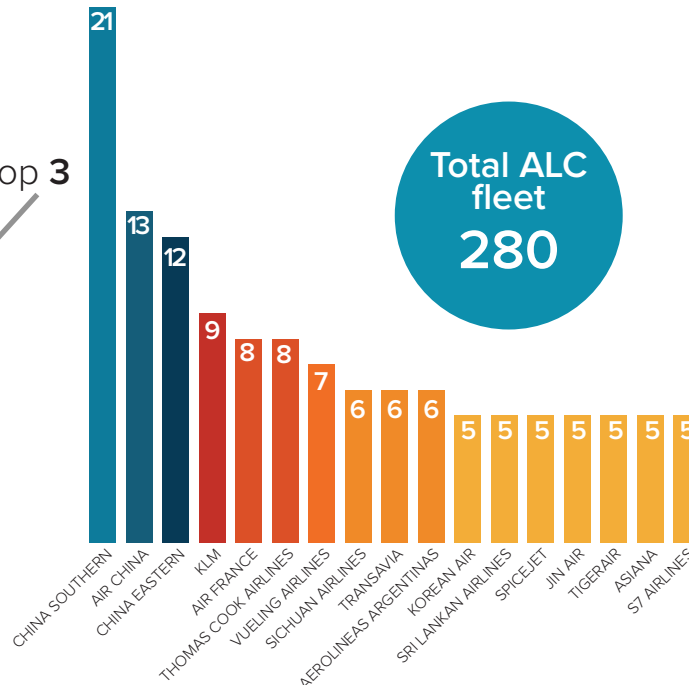
totalled 280 units. Its customer base consists of 91 airlines in 53 countries.

Also in June, ALC announced a deal to sell 25 Embraer aircraft to Nordic Aviation Capital. The sale is part of the lessor's strategy to focus on its mainline fleet.

ALC FLEET BY AIRCRAFT TYPE



ALC TOP LESSEES



ALC KEY FACTS

- Name: Air Lease Corporation
- Country: USA
- Founded: 2010
- Ownership: Public (listed on NYSE)
- Head office: Los Angeles, California, USA
- Number of employees: 77
- Size of fleet: 280
- Average age of fleet: 3.7 years
- Number of lessees: 91
- Orderbook: 377
- Delivery commitments: \$29.2 billion
- Unsecured credit ratings: S&P BBB-; Kroll A-
- Net income (as of 30 June 2016): \$91.8 million

Source: Airfinance Journal Fleets

TOP 10 LESSORS

8 BOC Aviation

Singapore-based BOC Aviation was the talk of the Asian leasing market this year with its \$1.1 billion initial public offering (IPO) in Hong Kong.

The lessor says the net proceeds from its IPO will pay for predelivery payments for future aircraft deliveries.

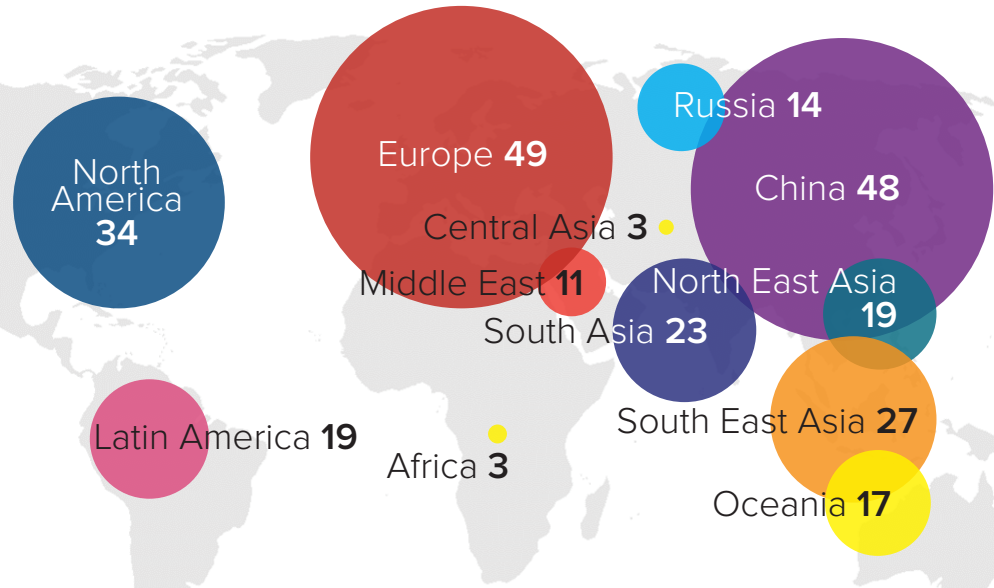
The company has now joined the ranks of other publicly listed companies such as AerCap, Air Lease, Aircastle and Fly Leasing.

BOC Aviation remains as a subsidiary of Bank of China. The bank will retain about 65.5% of BOC Aviation's shares, if the overallotment option is exercised in full, and about 70% of the shares in issue, if the overallotment option is not exercised.

Before the IPO, BOC Aviation had been engaging in other ambitious funding exercises. In October 2015, the lessor launched the first aircraft-backed securitisation (ABS) in Asia. The company signed an agreement to sell 24 aircraft to Shenton Aircraft Investment I (SAIL) and affiliates (SHNTN 2015-1) in October 2015, taking advantage of an untapped market in Asia.

Steven Townend, chief commercial officer (Europe, Americas, Africa) of BOC Aviation said at the time of the ABS. "It is a way for us to manage our balance

BOC AVIATION FLEET BY REGION OF LESSEE

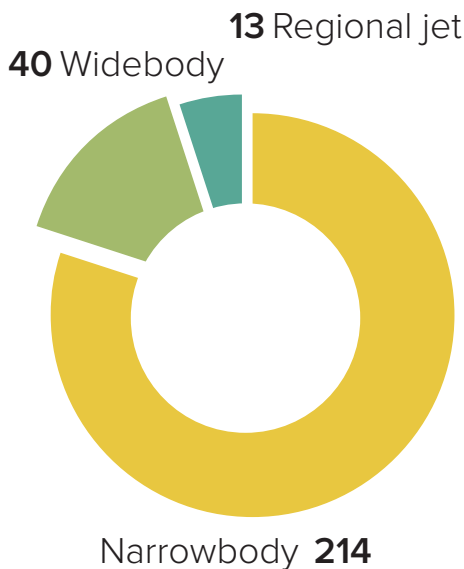


sheet. We're typically taking delivery of 50 to 60 new aircraft each year and we're now selling 30 to 40 each year."

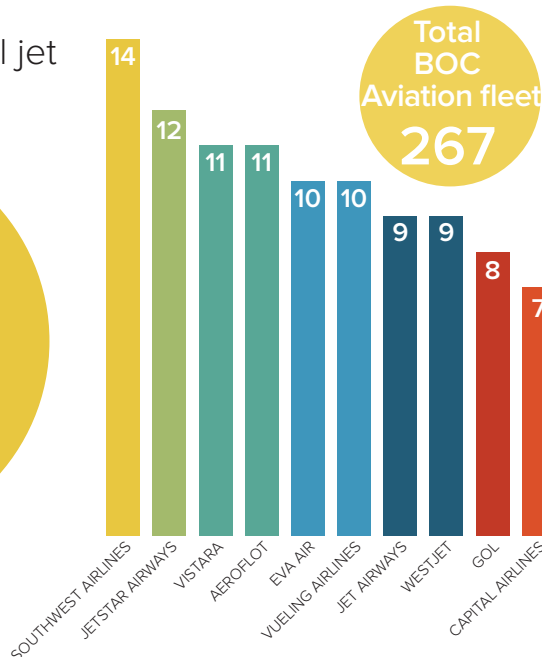
He says the ABS gives BOC Aviation efficiency and scale by being able to sell, in this case, 24 aircraft in a single

transaction. "[It] is far more efficient than trying to sell them individually to 24 different investors. The other big advantage for us is that it allows us to grow our assets under management and grow our aircraft management business."

BOC AVIATION FLEET BY AIRCRAFT TYPE



BOC AVIATION TOP LESSEES



BOC AVIATION KEY FACTS

- Name:** BOC Aviation Limited
- Country:** Singapore
- Founded:** November 1993 (as Singapore Aircraft Leasing Enterprise)
- Ownership:** Publicly listed in Hong Kong (2588 HK)
- Head office:** Singapore
- Number of employees:** 142 (as of 30 June 2016)
- Size of fleet:** 267 aircraft: 228 owned and 39 managed
- Average age of fleet (owned fleet):** 3.3 years
- Number of lessees:** 64 airlines in 31 countries
- Orderbook:** 218
- Delivery commitments (as of 30 June 2016):** N/A
- Unsecured credit ratings:** Fitch A-; S&P A-
- Total assets (30 June 2016):** US\$13.6 billion
- Net income (30 June 2016):** US\$212 million

TOP 10 LESSORS

9 Aviation Capital Group

California-based Aviation Capital Group (ACG) is a wholly owned subsidiary of Pacific Life, an AA- rated insurance company that was founded in 1868. With almost 30 years in aviation, ACG is also one of the oldest leasing companies in the business.

Pacific Life announced it was considering a partial initial public offering of the lessor at the end of 2015. It has not made other announcements since then, and *Airfinance Journal* understands the process is still under consideration.

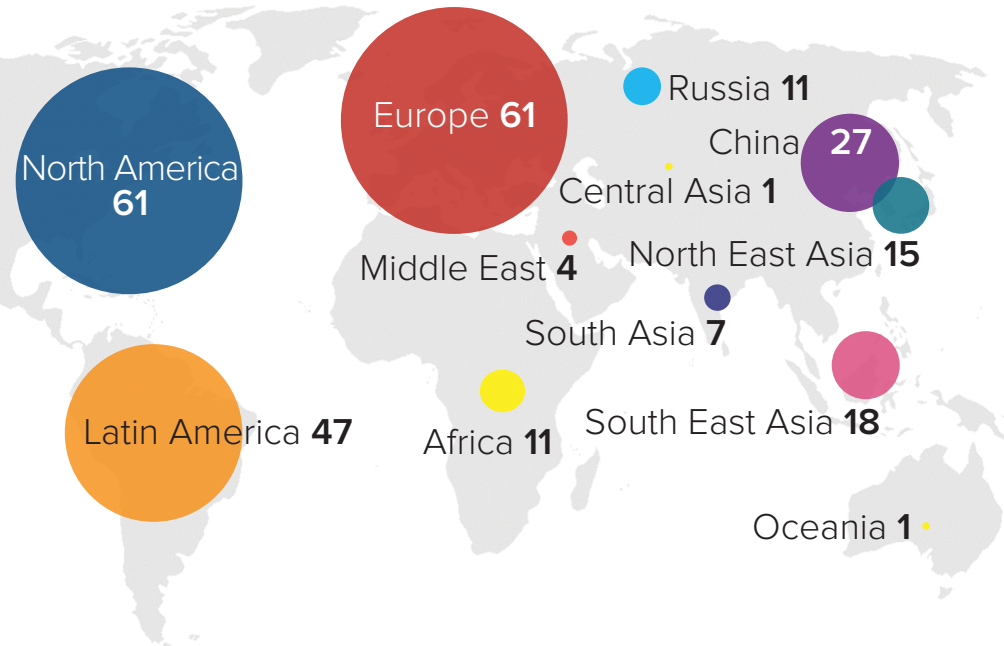
ACG's relationship with Pacific Life, which is rated AA- by Standard & Poor's, A+ by Fitch and A1 by Moody's, helps the lessor to access relatively cheap debt. ACG also has its own strong credit ratings (BBB from Fitch and A- from Standard & Poor's).

The lessor has made strides in recent years to reduce the percentage of secured debt on its balance sheet. In 2011, the percentage of secured debt to total assets was 43.4%. At the end of the second quarter, however, the percentage was 13.6%.

As of June 2016, ACG had outstanding debt of \$5.4 billion. Of this amount, \$4.26 billion was unsecured, consisting of 78% of the total.

In March, ACG announced it had taken a 20% stake in a new leasing joint venture with two Hong Kong partners.

AVIATION CAPITAL GROUP FLEET BY REGION OF LESSEE

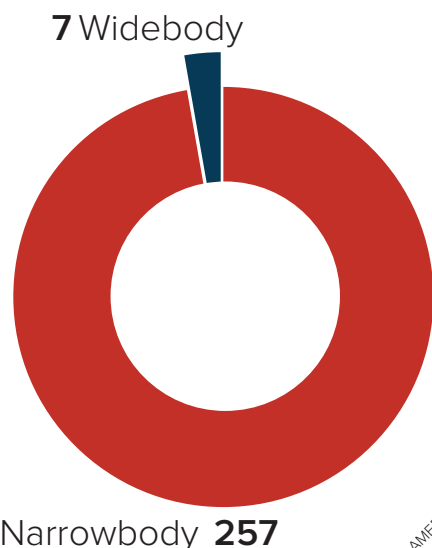


Both Chow Tai Fook Enterprises and NWS Holdings also took 40% stakes in the new company.

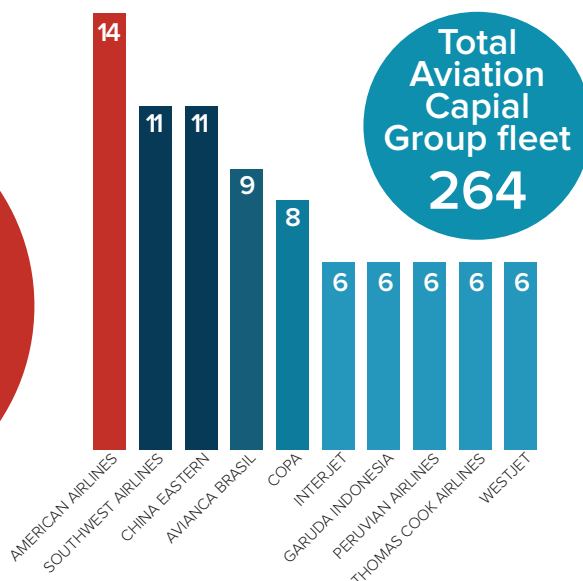
The company was created to buy, sell and lease aircraft similar to the types already in ACG's fleet, such as the Airbus A320 and Boeing 737-family aircraft.

The company also has a considerable orderbook of new-technology aircraft. Its backlog consists of 40 A320neos, 60 737 Max aircraft and five 787-9s. It also has four 737-800s and five refurbished 757s on order.

AVIATION CAPITAL GROUP FLEET BY AIRCRAFT TYPE



AVIATION CAPITAL GROUP TOP LESSEES



AVIATION CAPITAL GROUP KEY FACTS

- Name: Aviation Capital Group
 - Country: USA
 - Founded: 1989
 - Ownership: Pacific Life Insurance Company
 - Head office: Newport Beach, California, USA
 - Number of employees: approximately 100
 - Size of fleet: 264
 - Average age of fleet: 6.1 years
 - Number of lessees: approximately 100
 - Orderbook: 114 aircraft
 - Delivery commitments: \$5.92 billion
 - Unsecured credit ratings: Fitch BBB (stable); S&P A- (stable)
 - Net income (first-half 2016): \$58.7 million
- Source: *Airfinance Journal Fleets*

TOP 10 LESSORS

10 Awas

Awais, a Dublin-based global aircraft leasing company with a total fleet of 246 aircraft, has a \$7.6 billion book value of owned aircraft. The owned fleet features a full-range of popular aircraft types, including 203 narrowbody and 43 widebody aircraft, which are leased to 87 lessees in 48 countries.

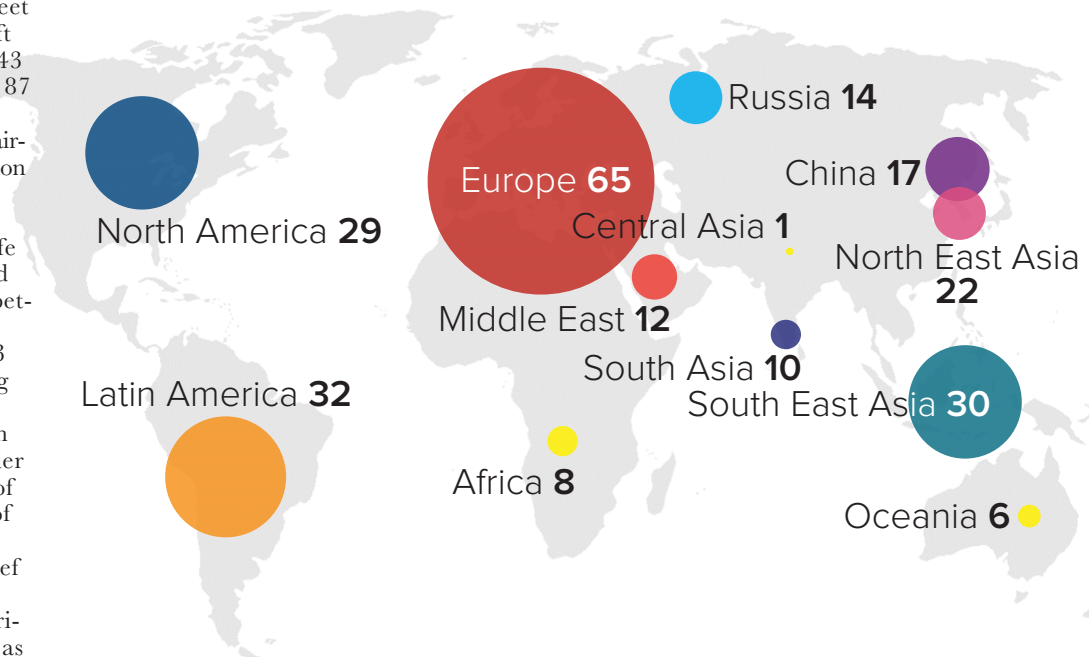
The lessor also acts as servicer for 28 aircraft as part of an asset backed securitisation (ABS) done in 2015.

Awais says it “actively manages its aircraft portfolio” by retiring end-of-life assets, adjusting concentration risk and addressing the asset mix to achieve a better risk-adjusted return.

The lessor closed a total of \$762.3 million of borrowings for the financing of aircraft and forward orders during the six months ended 31 May, 2016. In March, Awais returned to its shareholder \$535 million through a combination of payment of dividend and repayment of shareholder loans.

David Siegel was appointed as chief executive officer (CEO) in April. He brings some 32 years of relevant experience to Awais, including most recently as CEO at Frontier Airlines. Prior to Frontier, he held a number of senior positions within the global aviation industry including CEO of XOJET and US Airways, and senior roles at Continental Airlines and Northwest Airlines.

AWAIS FLEET BY REGION OF LESSEE



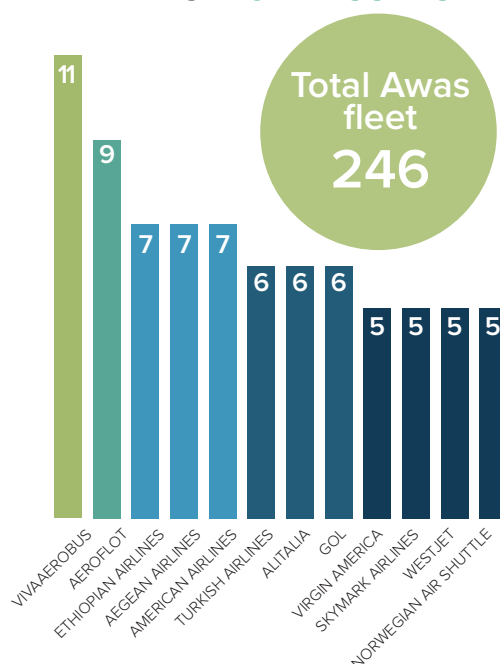
Awais has commitments to purchase six aircraft from aircraft lessors and airlines, of which five are due to deliver during the year ending 30 November. During the first half of the year, Awais

placed an order with Airbus for an additional 15 Airbus A320 family aircraft, comprising 12 A320 and three A321 aircraft. The aircraft are expected to deliver by 2019.

AWAIS FLEET BY AIRCRAFT TYPE



AWAIS TOP LESSEES



AWAIS KEY FACTS

- Name:** Awais
- Country:** Ireland
- Founded:** 2010
- Ownership:** Terra Firma and Canada Pension; Investment Board
- Head office:** Dublin
- Size of fleet:** 246 (including in 28 as servicer)
- Average age of fleet:** 3.7 years
- Number of lessees:** 87
- Unsecured credit ratings:** Moody's, Ba3 (stable); S&P, BB+ (neg)
- Total Assets:** \$7.6 billion
- Total Revenue:** \$1.2 billion (as of 30 November, 2015)

Source: Airfinance Journal Fleets

Source: Awais Sep-16

CEO INTERVIEW

CDB Leasing aviation goes global

CEO Donal Boylan tells Michael Allen about plans to internationalise CDB Leasing's aviation leasing business, and the rationale for expanding in Dublin, establishing teams in Hong Kong and New York rather than in the lessor's home in Shenzhen.



Speculation was rife this summer in Hong Kong's aviation finance community about Donal Boylan's involvement with China Development Bank Leasing's (CDB Leasing) aviation department. While the former Hong Kong Aviation Capital (HKAC) chief executive officer (CEO) kept quiet for a good few months about his career intentions, it has finally become public that he has been appointed CEO of the aircraft leasing business.

The operations of Boylan's former employer HKAC have been absorbed into Avolon after the 100% acquisition of the Irish lessor by Bohai Leasing, which has a common parent with HKAC, HNA Group, which in turn has an 6.31% equity interest in CDB Leasing post the recent Hong Kong initial public offering.

HKAC's Hong Kong office was rebranded as an Avolon office at the beginning of this year, and Avolon's founder and CEO, Domhnall Slattery, took up residence in Hong Kong after the \$7.6 billion takeover.

Boylan outlined that the business will seek to have 75 people by early 2017, expanding the Irish presence to 15, opening New York and growing to 10 people, and concentrating core resources in Hong Kong with 50 people. It will seek to rebrand as CDB Aviation Lease Finance.

Boylan declines to be drawn about the exact background of how he came to head up CDB Leasing, other than to say the senior

management of the lessor and HNA Group were collaborative and amicable in the matter.

The lessor's recent listing on the Hong Kong Stock Exchange in an \$800 million initial public offering signalled its aspiration to be recognised as a global – rather than just a Chinese – leasing company. Boylan plans to relocate more than 25 of the Shenzhen staff to Hong Kong, while others have already relocated to Dublin. Overall, the CDB Leasing team in Hong Kong will total about 40 people by early November, because 15 former HKAC employees will also join the lessor.

Rick Macker, HKAC's former head of capital markets, has been appointed as the chief commercial officer. Will Gramolt, former head of finance at HKAC, is coming on board as chief financial officer.

Why Hong Kong?

While the close timing of CDB Leasing's listing in Hong Kong suggests this may be the reason for the team's re-location, Boylan says this is not the only factor and that practical issues also came into play.

"It's simple things, such as the practical matter in a global and time-sensitive business of ensuring that Chinese nationals can visit and support the lessor's clients and business partners, which is not always feasible from a mainland base.

“Whatever the rationale was, all of the former HKAC team and the new international hires could all have moved to Shenzhen, but there would be significant challenges in attracting people and their families and gaining the approvals to work from China.”

Boylan also points to Hong Kong’s proposed development as an aerospace financing and leasing centre of excellence as being an attractive factor. The plan has been mentioned in speeches by both the city’s chief executive, CY Leung, and financial secretary, John Tsang, though the only concrete measure accomplished so far is a reduction of withholding tax on aircraft leasing transactions between the mainland and Hong Kong.

“We will also have to have a substantial presence in Ireland in order that certain types of decision making and a full capability of sales and marketing, technical, risk, legal exists in Ireland, but the strategic investment decision making and controls will be from Hong Kong – no different to, say, Gecas’ strategy emanating from Stamford, USA. It’s effectively what we did in HKAC, where we had a Dublin office as well,” he says.

Boylan adds that CDB Leasing has 200 aircraft in its portfolio, and had more than 20 aircraft to remarket in 2016, either through lease extensions, or remarketing or transitioning. Just three months in, the business has completed remarketing of about three-quarters of those aircraft, but despite this initial success, he says there is “still a lot of hard work to do on remarketing”.

“Boylan believes aviation can grow to be half of CDB Leasing’s business from the 35% it represents now”

Lessor Growth

CDB Leasing remains ambitious about its aviation business, and Boylan believes it can grow to half of the lessor’s overall business from 35% at present.

It has an orderbook of 75 Airbus Neo and Boeing Max aircraft between 2018 and 2021, and as a “counterbalance” to that had about 55 new Ceos and NGs to place.

“We had 11 Ceos to place between the start of this year and the end of 2017. We will have no Ceos delivering after the end of 2017, and we have now placed all of those aircraft bar two,” he says.

“We’ve been working on remarketing, new placements, and we’re clearly going to be very actively growing our Neo and Max business through speculative orders but also in the sale and leaseback market. It’s early days on the 787-9 and A350. We might selectively look at those opportunities, but we’re not in any rush to do that. We have plenty of access to capital and great support.”

Speculative orders are an excellent way for lessors to work more closely with aircraft and engine manufacturers, but they should not make up an excessive part of a lessor’s means to acquire aircraft. As such, sale and leaseback remains a vital complementary part of the business.

No excess demand for NGs

Boylan says he still has 15 737s to place before the end of 2018, though the “premium or excessive demand” has disappeared for NGs over A320s that the market has seen in the past.

Boeing is seen to be very much on top of things, working diligently with the lessor community to ensure its capacity is matched well to the campaigns out there, Boylan claims.

Boylan’s theory for this is that post-9/11, Airbus was “quite aggressive” in selling speculative orders for the A320 family to lessors, while two to three years later Boeing effectively did the same thing for the NG.

“If one now goes full circle many of those speculative airplanes tended to go on shorter leases like six, eight, 10 years, so aircraft that were ordered in 2002 that delivered in 2004 might have gone on average eight-year leases and come back in 2012,” he says.

Boylan adds: “Because Boeing was about two years behind, a fair number of those speculative NGs are actually coming back now as opposed to two or three years ago. That kind of general availability of a lot of first-run six-, eight-, 10- and 12-year-old NGs, that’s where Airbus was two or three or four years ago.”

Moreover, several A320 operators ceased operations at the beginning of this decade, including Kingfisher, Spanair and Malev Hungarian Airlines. On top of this, subsequently SilkAir converted its whole A320 fleet to NGs and all of AirAsia, Tiger and, to some extent, Jetstar Hong Kong and Jetstar Japan retrenched, leading to surplus A320s on the market.

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SPONSORED EDITORIAL

New Aviation Silk Road

Professor David Yu, CFA, Istat certified aviation appraiser, looks at the trends, drivers and lessons in cross-border investments and M&A in aviation.

In recent years, the number and volume of cross-border investments has increased significantly across all industries, especially in aviation. While there have always been cross-border investments between countries, such deals are now more prominent in the news given their increasing size and frequency, as well as the profile of the targets.

There were 1,320 cross-border deals in the second quarter of 2016, worth \$214 billion, according to law firm Baker & McKenzie. A total of 798 deals, worth \$137 billion, closed across two different geographic regions versus 522 deals worth \$77 billion within one geographic region. During the second quarter, a sizeable portion included Chinese companies, which completed 97 transactions worth \$40.7 billion. A year ago, they accounted for \$17.5 billion.

In a review of the recent activity in

the aviation industry, most of the deals in the first half were in the aerospace sector (see M&A charts) and there have been a significant number of aircraft and airline acquisitions in terms of volume (about \$3.5 billion) and number (about 15), according to MergerMarket/ICF.

In terms of cross-border investments in the aircraft space not originating from Asia, Danish operating lessor Nordic Aviation Capital announced the acquisition of two leasing platforms, Aldus Aviation and Jetscape, along with a purchase of an Embraer E-Jets portfolio of 25 aircraft from Air Lease. The move confirmed the company's cross-border roll-up acquisition strategy in the regional aircraft sector.

In the airline sector, there have been multiple deals by Middle Eastern carriers such as Qatar Airways, which announced

the acquisition of a 49% stake in Italy's Meridiana, completed purchase of a 10% stake in Latam and bought additional shares in IAG, bringing its holding to 20%.

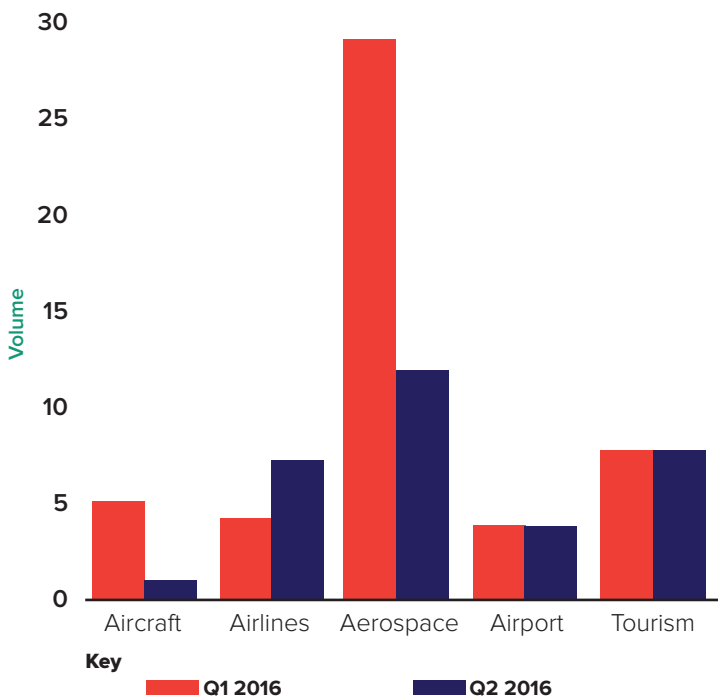
This trend is similar to Etihad's equity alliance strategy of investing in stakes in foreign-operated airlines. Etihad is expected to increase its 24% shareholding in Jet Airways to 49% (the maximum amount of foreign investment allowed in Indian airlines) because of a relaxation of regulations.

During the first half of the year, China Energy Company exercised its option for an additional 39.92% shares of Czech Travel Service Airlines to bring its stake to 49.92% after the initial investment in 2015. In addition, Nanshan Group and HNA Airlines separately invested 20% stakes for \$198 million and 13% for \$114 million,

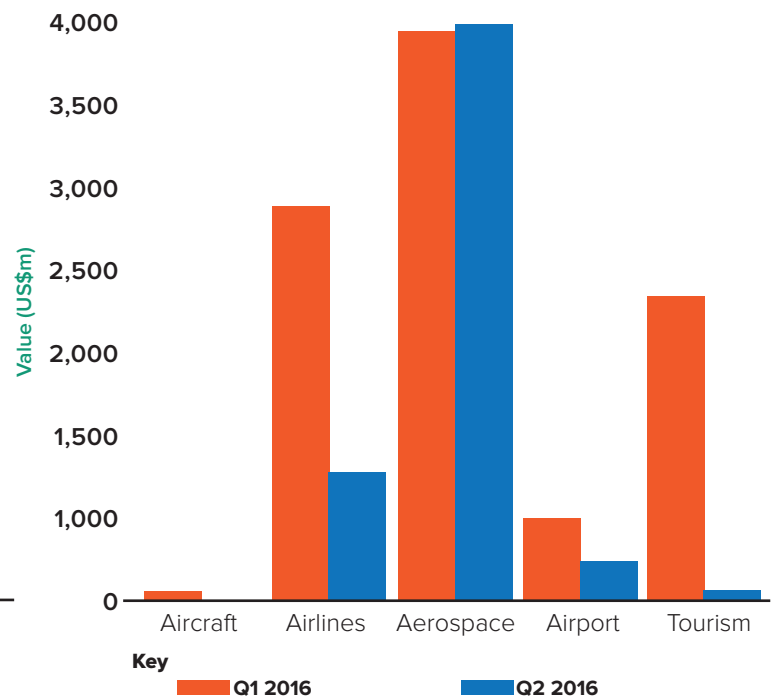


Aviation sector M&A deals 2016

M&A Volume



M&A Value



Source: MergerMarket/ICF

respectively, in Virgin Australia. This continues the acquisition expansion of both groups in the aviation sector domestically and abroad. In South-East Asia, Thailand's King Power Group bought 39.83% of Asia Aviation for \$225 million.

In light of all the cross-border investment activity, there have been a growing and significant number of global outbound investments from Chinese investors (see Greater Chinese outbound charts). This can be attributed partially to the global economy and is highlighted by the fact this is a reversal of inbound investment flows that have occurred in the past few decades.

What are some of the drivers of the increased outbound investments from China?

Some of the volume is reflective of the slowdown of the domestic market. While China's gross domestic product has slowed from strong double digits for the past decade and more to a current target of 6.5% to 7% a year growth, this slowdown has contributed to further desire for higher growth outside of China.

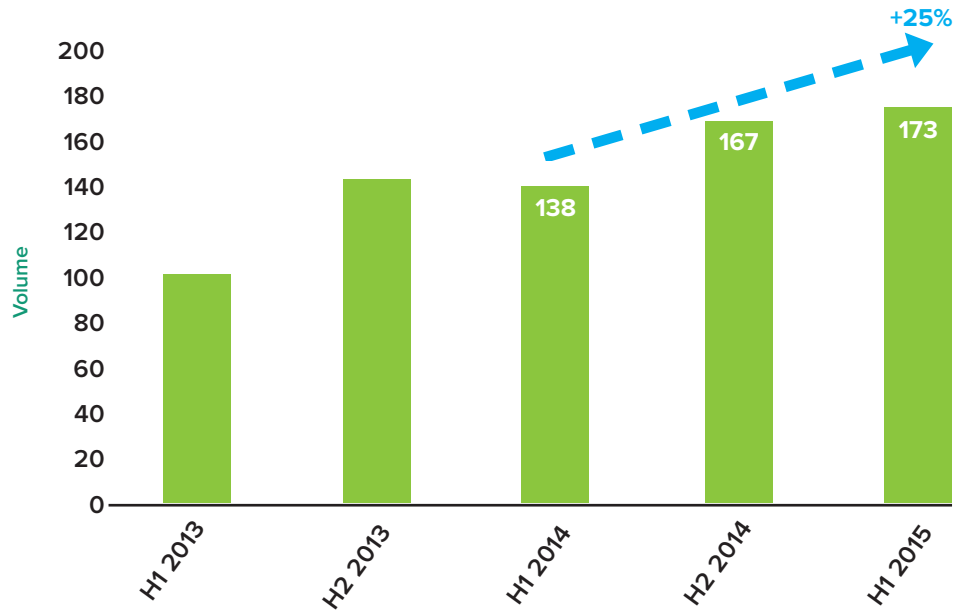
While some traditional industries are under pressure, the tourism, aviation and transportation sectors are still attractive as the overall demographics of the population continue to improve (as populations get wealthier, more disposable income tends to be spent on discretionary travel). This has in turn increased interest in travel and related services especially abroad, which has precipitated the increase for international acquisitions because of the investment strategy of following the customer. In addition, there is a trend for increased vertical integration among the Chinese companies, many of whom are conglomerates.

In addition, with low yields in traditional banks, much of the capital is moving towards higher yielding products. This demand is not being fully met by the slower domestic economy and has also driven investments internationally for higher growth and yielding deals, because there are less and less attractive investment opportunities domestically.

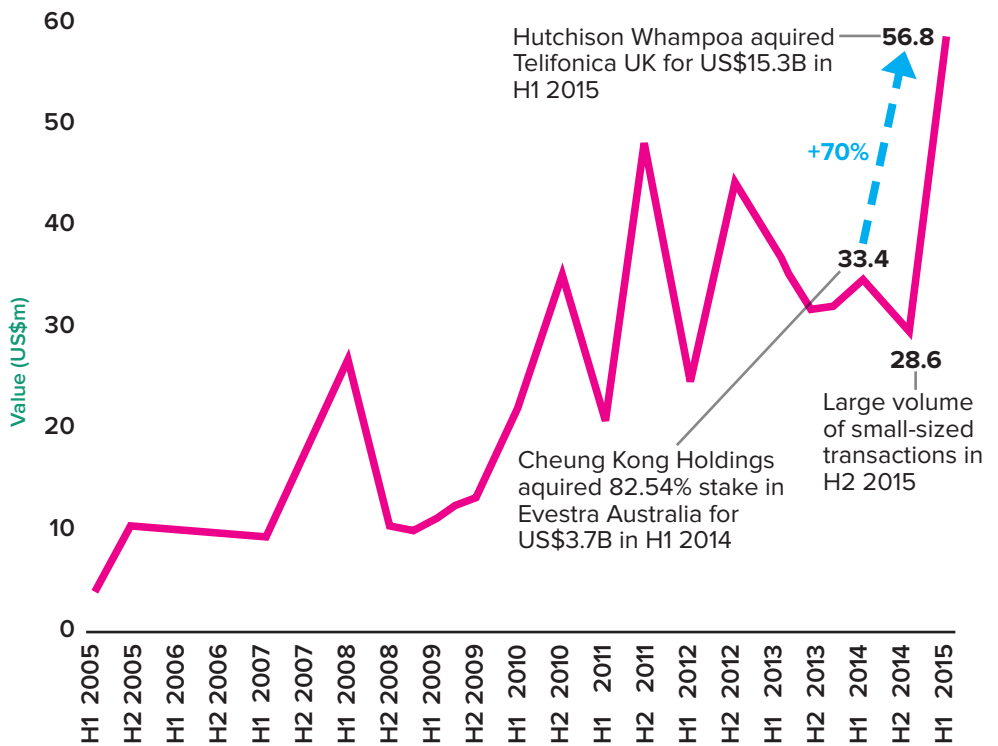
The continuing controlled depreciation of the Chinese renminbi currency by the People's Bank of China over the past few years compared to other major economies has reversed the one-way trade of appreciation since the relaxing of the official peg with the US dollar. Aircraft and other real assets denominated in US dollars or other major currencies are prime examples of this flow. This has also affected airline companies because costs and revenues are mismatched and no hedging is allowed by Chinese airlines. While there is a continued push by the authorities to restrain this outflow effect by restricting foreign exchange conversion per person per trip, shutting down grey channels, this trend continues. Another ramification of depreciating currency is more deals are being denominated in local renminbi currency versus US dollars.

Also, the slowing growth and the push for increased efficiencies have also driven

Greater Chinese outbound M&A volume



Greater Chinese outbound M&A value



Source: Deloitte

the encouragement of consolidation and the creation of national champion companies to look for more expertise both domestically and internationally. One recent example is state-owned enterprise (SOE) Aviation Industry Corporation of China, which finalised the consolidation merger of all of its aircraft engine businesses worth \$19.7 billion as part of the overhaul of China's SOEs.

Other national champion businesses are also being formed in other strategic industries such as the \$21.9 billion shipping merger of

Cosco and China Shipping Group. Another state-owned enterprise, Air China, is rumored to be behind an investment interest for 49% of LOT Polish Airlines. More activity from this segment is expected in the future.

It is also important to note that the Chinese state can act as an investor, financier or both in certain situations. Policy banks such as China Development Bank and China Export-Import Bank have been key drivers of policy-related lending. Also, SOE banks such as the big four – Industrial and Com-

mercial Bank of China, China Construction Bank, Agricultural Bank of China and Bank of China – have also contributed to this expansion overseas, especially through their worldwide branch system in addition to provincial and quasi non-governmental organisations. Funding also comes from various sovereign funds, including China Investment and many other entities such as China's State Administration of Foreign Exchange, which manages the state foreign exchange reserves.

Insurance companies are also a growing force in terms of financing and investments because they are being allowed to diversify their holdings by the various regulators, mostly China Insurance Regulatory Commission, China Securities Regulatory Commission and People's Bank of China. Traditionally, insurance groups have invested, and still have a bulk of their assets, in conservative fixed income such as local bonds and have expanded to equity as well as more alternative investments such as property and financial leasing.

Insurers enter leasing

Examples would be the formation of aviation leasing arms at Ping An and Taiping insurance groups (the latter in a joint venture with Sinopec, a state-owned oil company). Some reasons insurance companies globally and regionally are attracted to aircraft leasing assets include the benefit of depreciation of aircraft assets, which offset other earnings from a tax perspective; the fact the investment is backed by physical assets with long life and stability of cash flows is attractive. Insurance companies try to increase their investment returns as well as match the duration of their liabilities. In addition, sizeable amounts can be deployed, which can be significant for the insurance groups. All of these rationales apply to Chinese insurance groups because they are also backing the expansion of their financial leasing activities in China and abroad to find higher yielding and lower risk returns. Aircraft leasing's structural characteristics are similar to property, with large transaction sizes backed by physical assets. Debt, which is optional, involves rental returns and the potential of asset appreciation for operating leases.

Another driver is government and regulation, because this is always an important factor in the Chinese business. There are many points in the current five-year plan by the central government that encourages the transportation and tourism sector domestically especially in the western growth regions. There have been multiple signals for the encouragement of companies to grow by going abroad for technology and resources. This has been an important part of the growth driver for cross-border activity. One prominent example of this policy is President Xi Jinping's One Belt,

One Road policy and 21st Century Maritime Silk Road, which aims to rebuild the ancient Silk Road trade route between China and Europe and all the intermediate countries and sea routes along with South and South-East Asia. With the purpose of driving economic development, this will inevitably be a driver for more overseas deals by Chinese companies and investors. One example of this resultant investment and development in airlines is in Georgia by the Hualing Group.

Chinese outbound investment, merger and acquisitions have been generally focused on the pursuit of technology, expertise and natural resources. This is overlaid on normal expansion and acquisition growth strategies such as vertical or horizontal integration, as well as conglomerate building activities. Acquirers come from a broad spectrum of backgrounds from private and state-backed companies both having existing industry experience and others diversifying their existing holdings. Cross-border investments come in all shapes and forms whether wholly, majority or minority investments.

While there are many factors that affect the size of the cross-border investment, the main drivers include acquirer's strategy, existing shareholder desires, as well as other external regulatory factors such as specific country regulation. The rationale for minority interests are both strategic or forced upon by local regulation such as the 49% maximum foreign interest in European airlines.

While cross-border appetite, foreign direct investment and minority purchases are generally welcomed worldwide, there are instances where this has created tensions among stakeholders, including existing shareholders, labour unions, governments or local populations. Tensions have arisen by the acquisition of minority shareholdings in the past few years, including Etihad's 24% purchase of Jet Airways by the Indian regulators and its 33.3% stake in the Swiss carrier Darwin Airline, both of which were finally approved. There were also resistances from strong labour unions of state companies.

An example of sustained large acquisition growth strategy is HNA Group, a quasi-private entity, which has had a strong continued appetite for acquiring companies both domestically and internationally in the aircraft leasing, airline and other tourism-related industries. These include airline investments such as a 13% stake in Virgin Australia for \$114 million, \$450 million for a 23.7% stake in Azul and the 100% acquisition of Avolon for \$6.4 billion, along with related investments in airline catering (Gategroup), ground/cargo handling (Swissport) and hotels (Carlson Rezidor Hotel Group and NH Hotel Group). HNA Group also completed the acquisition of Allco Aviation, later renamed Hong Kong Aviation Capital, in 2010.

It is important to understand and appreciate the specific regulatory approvals for foreign exchange and approval of large overseas deals. This has in some instances taken a lengthy period and has been onerous on the investment process because it comes particularly in the way of auction-style sale processes where there are specific timeline targets for each round of bidding and deposits. This has been a particularly sensitive issue to be overcome because it has affected some of the recent industry sales.

Prudent due diligence

Another lesson is to know as much as possible about the counterparty. Not only is it important to know how the investment will be funded, but also other background info on their existing businesses and reputation is key in any potential transaction. While there is never 100% information available, some leap of faith is required. This is not only important for the transaction but also a telling indicator of the post-investment integration and marriage afterwards, if any. An example is the recent failed sale of Frankfurt-Hahn Airport to an unnamed Chinese buyer by the selling German federal state owners, Rhineland Palatinate and Hesse.

Like all acquisitions, prudent due diligence, post-acquisition integration and business planning is necessary, whether done in house or by experienced third-party advisers. There have been multiple examples of cross-border investments that quickly went bust as the expected turnaround situations or synergies were not realised because a lack of understanding of local culture and regulations proved to be too difficult of a barrier for the acquirers to overcome. Even with some of these sensitivities, it is en vogue to mention prospective Chinese buyers because this may be to drum up interest and valuation expectations in company sales. One thing is certain: there is more activity in cross-border investment activity, especially from China. Transactions will have a much more successful path if past lessons are learned and are the most prepared. All in all, signs are pointed to what seems to be a new Aviation Silk Road plan for the aviation industry on the back of the One Belt, One Road policy.

David Yu is the managing director, chief investment officer and co-founder of Inception Aviation Holdings, an aviation investment and financing firm. He is also the executive director Asia of IBA Group, a leading global aircraft appraisal and consultancy, and adjunct professor of finance at New York University Shanghai, where he teaches and focuses on cross-boarder investing and financing and transportation.

SPONSORED EDITORIAL

GECAS: A Reflection on What Makes a Leading Lessor Great

GE Capital Aviation Services (GECAS) continues to be a leading global player in the commercial aircraft leasing and financing industry. What is it that makes GECAS continually successful and relevant? Is it their longevity and ability to weather the cycles of the industry? It's expertise on the ground around the world? Is it the wide array of products and services, coupled with a large fleet and top-tier funding? Or maybe it's strict dedication to ensuring the success of their customers as a measure of their own success?

GECAS Chief Executive Officer and President Alec Burger would respond by saying "all of the above." No stranger to the finer points of succeeding in a tumultuous global market, Alec served as the President and CEO of GE Capital Real Estate, the financing unit of GE Capital that managed properties around the world, before joining GECAS. With 25 years of GE experience behind him, Burger is looking forward to leading this top lessor well into the future.

A history of success

Almost 50 years ago, in 1967, GE Capital closed its first commercial aircraft lease with a US carrier, giving it the longest history of any aircraft lessor. In 1993, GECAS as we know it today was formed through a combination of GE Capital's Commercial Aircraft Group, elements of Guinness Peat Aviation (GPA Group plc), and Polaris Aircraft Leasing.

Because of the company's longevity, the lessor has substantial experience selling aircraft in different economic environments and has a record of succeeding through cycles of new entrants and resulting pressure on pricing.

GECAS has over the years a demonstrated a successful track record of marketing and redeploying aircraft, despite market volatility. GECAS effectively utilizes its relationships with over 270 airlines across 75+ countries, local partners and original equipment manufacturers (OEMs) – along with a superior product and service offering – to drive remarketing initiatives.

Additionally, GECAS has a successful history of actively managing its own portfolio and has been able to realize attractive returns. This type of track record demonstrates the expertise that GECAS possesses with respect to the assets they service, utilizing their deep understanding of market demand dynamics to capitalize on market opportunities.

Global reach, local expertise

GECAS positions its "global reach with local expertise" as another reason for their success. A global leader in the commercial aircraft leasing and financing industry, GECAS maintains close proximity to customers through its large network of regional offices.

With around 600 employees spread across 25 offices around the world and serving over 270 commercial aircraft customers in over 75 countries, GECAS operates as a truly global aircraft leasing platform. GECAS is also a leader in emerging markets with a network of 14 offices solely dedicated to customers in these markets.

GECAS's customers include global commercial airlines, flag carriers, network carriers, low cost carriers, regional operators, start-ups, cargo airlines and charter companies.

World-renowned portfolio

With approximately 1,400 owned and serviced aircraft and a significant order book, GECAS offers an extensive portfolio of solutions to companies across the spectrum of the aviation industry. Product offerings include leases and secured loans on commercial passenger aircraft, freighters and regional jets, engine leasing and financing services, aircraft parts solutions, and airport and airline consulting services.

GECAS has experience across a variety of transactions ranging from large, complex structured finance deals to single aircraft operating lease transactions and secured debt financings.

- GECAS's main business functions involve the following related, but distinct activities:
- purchase of aircraft and engines from manufacturers and placement of those aircraft and engines on lease with airlines;
- acquisition of aircraft and engines directly from airlines for lease back;
- lending of funds secured by mortgages over aircraft and engines through its PK AirFinance business;
- sale of aircraft and recertified aircraft parts through its Asset Management Services business;
- fee-based services including airport and airline consulting services through its AviaSolutions business; and
- Milestone Aviation Group, a leading helicopter lessor.

GECAS owns and services one of the largest portfolios of new and used aircraft, including Boeing, Airbus, Embraer, Bombardier and ATR aircraft. At the core of the GECAS aircraft portfolio



are Airbus and Boeing narrowbody and widebody aircraft, including the Airbus A320, Boeing 737, Airbus A350, Airbus A330, Boeing 787 and Boeing 777.

The GECAS order book includes the Airbus ceo, Airbus NEO, Boeing Next Generation and MAX narrowbody aircraft, and the Boeing 777 and Boeing 787 Dreamliner widebody aircraft.

97% of GECAS's narrowbody fleet consists of high demand Airbus A320 and Boeing 737 Next Generation aircraft, while the majority of GECAS's widebody fleet is made up of attractive Boeing 777s, A330s, A350s and Boeing 767s.

In addition to servicing for its own portfolio, GECAS is a leading servicer of aircraft portfolios for third-party operating lessors, financial institutions and investors. Key services include re-marketing support (including sales upon instruction), technical services, technical budget processes, legal support (LOI, contract, enforcement), billings and collections, aviation insurance monitoring and servicer reporting.

Aside from their extensive portfolio, GECAS differentiates itself from the competition through their top-tier funding. GECAS is able to underwrite larger transactions, enabling airlines to deal with one lessor for large transactions.

"Customers determine our success"

GE lives by the philosophy that "customers determine our success," and this sentiment holds true for GECAS as well. Employees at GECAS seem to understand that every interaction with a customer, ranging from a routine call to the closing of a complex transaction, is a chance to partner with the customer and to help determine their mutual success.

"In my short time with GECAS, it has become abundantly clear that our people are incredibly proud of the work they do and of the impact it has on moving people across the globe," said Alec Burger. "Part of our mission statement is 'We keep the world flying,' and I know that every person here is motivated by this."

REGIONAL PROFILE

Japan



The Japanese operating lease with call option (Jolco) market received a welcome piece of news in December 2015 when the Japanese government announced that while the use of the declining balance method for certain assets will be abolished, aircraft would not be among them.

That collective sigh of relief among Jolco market participants was followed by new names being introduced to the market, including Aeromexico and Pegasus (via lessor China Aircraft Leasing Group). There is an attempt to introduce US airlines to the Jolco market, because their financials have improved in recent years.

Japanese lessors are continuing to look for opportunities with partners outside Japan.

Last year, MC Aviation Partners entered into a joint venture, Vermillion Aviation, with Cheung Kong, which is owned by Hong Kong multimillionaire Li Ka-shing.

This year, at least two Japanese companies have formed joint ventures, or partnerships, with overseas partners to boost their aircraft leasing activities.

IBJ Leasing and Sumitomo Mitsui Trust Bank (SMTB) have set up overseas partnerships this year. A source indicates that this is the “tip of the iceberg” and that the trend is good for the market overall.

However, some less-active lessors in Japan – which the source declines to name on the record – have been slower to form overseas partnerships, despite the benefits these could bring.

“They are carefully examining the asset types, but I don’t see any movement from them in terms of the aircraft investment. I believe those companies have definitely looked at some sidecar projects but they decided to not form a joint venture with them.”

Japanese lessors are still setting up platforms in places such as Hong Kong and Singapore in order to avoid Japanese inheritance tax. However, these are usually family businesses established by very wealthy people looking to pass on their money to their children without paying as much tax. Their companies are typically investors for Japanese operating leases and Jolcos.

One source believes that a future trend for the Japanese market will be a move towards people in Japan investing for the returns rather than the tax benefits.

“If that happens, those Japanese trading houses may want to set up aircraft investment vehicles... they have a very good reputation in this country, so if they have the capability then probably the financial institutions will want to work for them.”

China

The Chinese leasing market continues to grow; however, the way airlines are paying for their leased aircraft has recently changed.

The market is showing a strong trend towards yuan-denominated financings, because of the devaluation of the Chinese currency.

Airlines are financing the majority of their incoming aircraft with yuan-denominated leases, which is putting pressure on non-Chinese lessors who cannot compete with local rates of yuan financing.

A lawyer at *Airfinance Journal*'s 13th annual China Airfinance Conference indicated that his clients are signalling a “clear trend” towards yuan-denominated leases.

“The days of people thinking the US dollar will continue to go up are gone,” adds another lawyer.

High demand from Chinese lessors to place their aircraft and meet internal quotas has reportedly led to lessors accepting low lease-rate factors just to place their aircraft in the market. One source reports a deal with a South American carrier where the lease-rate factor was about 0.6.

“It could be true because some lessors may be having problems meeting their year-end growth targets,” one Chinese lessor source tells *Airfinance Journal*, commenting on the deal.

New lessors seem to be springing up all the time. *Airfinance Journal* recently met with Skyco International Financial Leasing, a new lessor in Guangzhou that is majority owned by the Guangzhou Airport Authority. The company

China and Hong Kong



says it is the first leasing company to have an airport as its major shareholder.

Another new entrant this year is SinoSinga Aircraft Leasing, which was set up by China’s Haite Group.

With its headquarters in Beijing, the company’s first aircraft was a 737-800 with a lease attached to Hainan Airlines.

Hong Kong

Developments in Hong Kong in the aviation finance and leasing space are moving at a snail’s pace. A recent election – the first since the pro-democracy protests of 2014 – has dominated the political scene and, although economic reforms benefiting the aircraft finance industry have been mentioned in policy speeches by both the chief executive and financial secretary,

nothing concrete has emerged.

Since *Airfinance Journal*'s Leasing Top 50 2015 supplement was published, there has been no progress in the government’s goal of developing Hong Kong as an aerospace financing and leasing centre. In early 2015, the government reduced withholding tax on the People’s Republic of China-Hong Kong leasing transactions to 5% from 7%, but this is the only material development so far.

Perhaps the most significant change in Hong Kong’s lessor market in 2016 was CDB Leasing listing on the Hong Kong Stock Exchange this summer. Donal Boylan has been appointed chief executive officer of CDB Aviation Lease Finance, the lessor’s aircraft leasing division, and plans to have his team based in Hong Kong rather than the lessor’s traditional base in Shenzhen, in a bid to position it as a truly international company.

REGIONAL LESSOR PROFILE

ICBC Financial Leasing

ICBC Financial Leasing (ICBC FL) retained its position this year as the biggest aircraft lessor in China.

It has been busy with fundraising this year, having in May raised more than \$340 million using a secured loan facility with Bank of China (Hong Kong). The facility involved five Airbus A320s and two Boeing 737-800s leased to Spring Airlines, Sichuan Airlines, Dalian Airlines and Air China.

In May, the Chinese lessor tapped the capital markets, adding a 10-year term tranche priced at 3.625% to its US dollar-denominated bonds. ICBC FL came to the market with a \$1.3 billion proposed notes offering as part of its existing \$5 billion medium term notes programme, which was rated last November.

The three-year tranche priced at 2.375% with a total issue size of \$500 million, reoffered at 99.753%, yielding 2.461%. The spread above comparable US Treasury securities was 157.5 basis points (bps).

The five-year \$500 million second tranche priced at 2.75%, reoffered at 98.196%, yielding 2.924% at US Treasury plus 170 bps.

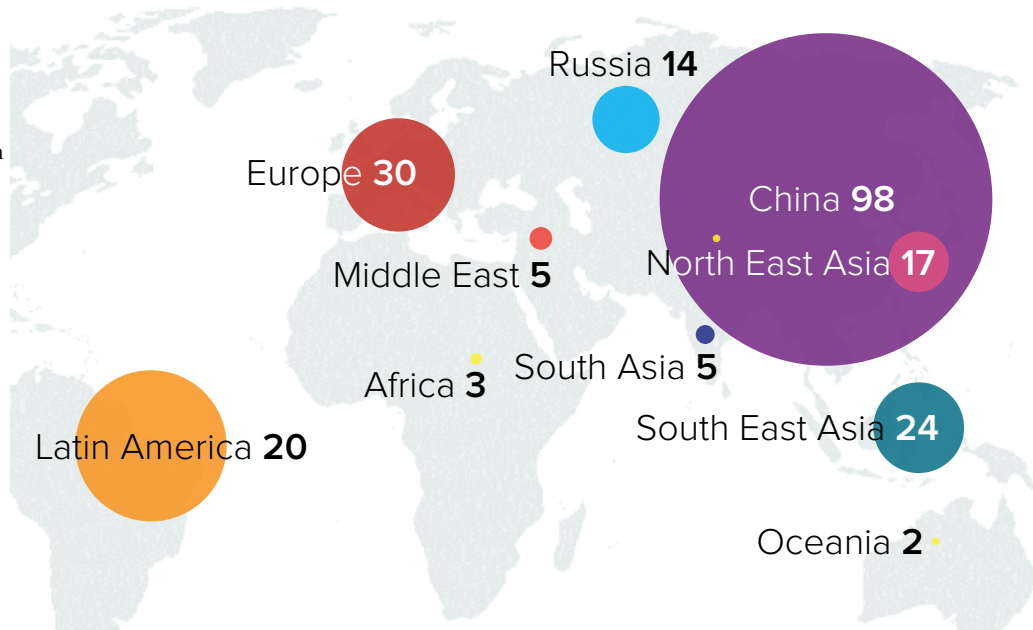
The final \$300 million tranche, with a 10-year maturity, priced at 3.625%. The tranche reoffered at 99.875%, yielding

3.761% at a spread of US Treasury plus 200 bps.

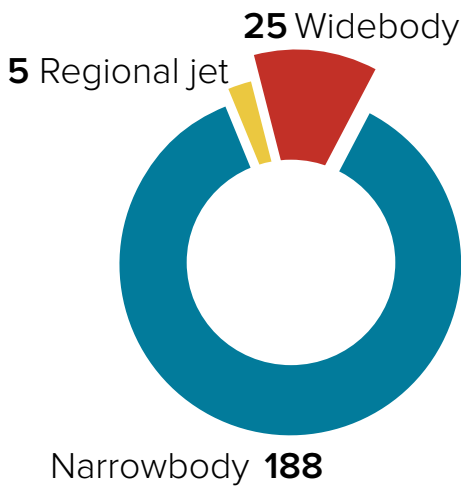
At the beginning of the year, ICBC Financial Leasing sold a portfolio of aircraft to TC-CIT Aviation, a joint venture

between Century Tokyo Leasing and CIT Aerospace. This was the first time ICBC FL was trading aircraft. It is understood the Chinese leasing company is considering selling more units this year.

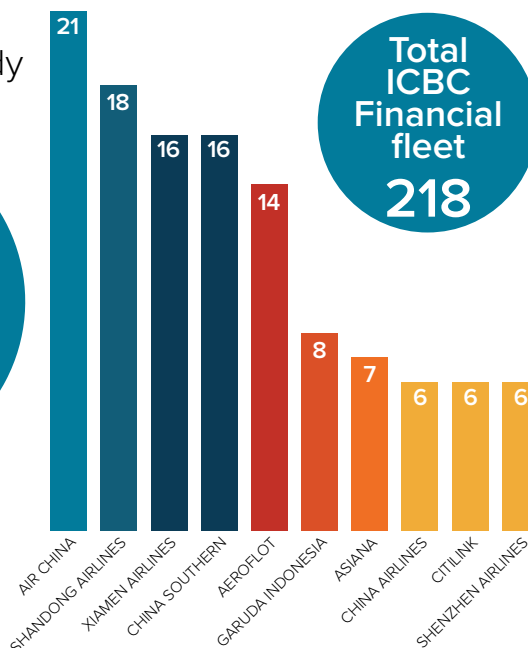
ICBC FINANCIAL LEASING FLEET BY REGION OF LESSEE



ICBC FINANCIAL LEASING FLEET BY AIRCRAFT TYPE



ICBC FINANCIAL LEASING TOP LESSEES



ICBC FINANCIAL LEASING KEY FACTS

- Name: ICBC Financial Leasing Co, Ltd
- Country: China
- Founded: 2007
- Ownership: wholly owned subsidiary of ICBC Group
- Head office: Beijing
- Number of employees: 338
- Size of fleet: 218
- Average age of fleet: 3.21 years
- Number of lessees: 60
- Orderbook: 287 (including delivered and to be delivered)
- Delivery commitments (as of 30 June 2016): 30
- Unsecured credit ratings: Fitch A; Moody's A1; S&P A
- Total assets (30 June 2016): \$44 billion
- Net income (30 June 2016): \$238 million (first-half 2016)

Source: Airfinance Journal Fleets

REGIONAL LESSOR PROFILE

China Aircraft Leasing Group

China Aircraft Leasing Group (CALC), a Hong Kong-based leasing company, has been experimenting with new funding sources over the past year and building up its fleet of aircraft, with the view to becoming a serious player in the Chinese market and elsewhere.

The company's first-half profit for 2016 jumped to more than \$30 million, which is more than double what it reported in the first quarter of 2015. CALC delivered seven aircraft to airlines and grew its aircraft portfolio to 70 by 30 June 2016. At the time of going to press the lessor had added three more units to its fleet.

CALC has been diversifying its customer base and evening the balance between local Chinese clients and international lessees. It recently placed aircraft in Japan with ANA Holdings, in Vietnam with Jetstar Pacific and in Turkey with Pegasus Airlines. The lease to Pegasus utilised a Japanese operating lease with call option (Jolco) structure, which is likely to have secured cheap and competitive financing for CALC.

"The Jolco allows a lessee to finance up to 100% of an aircraft, therefore dramatically reducing the lessee's equity injection in the asset while providing a significant asset risk transfer," says Thierry Pierson, managing director of Asset Brok'Air, which arranged the transaction.

"Traditionally a well-known structure for good-standing airlines, Jolcos are now available to selected tier-one operating lessors. When properly structured, a Jolco reduces the overall cost of funds for that operating lessor, enabling it to offer even more competitive lease rents to its clients," he adds.

CALC returned to the bond market with a bang in August with a \$300 million five-year deal, off the back of a \$1.2 billion orderbook.

The lead managers launched the offering

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

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

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

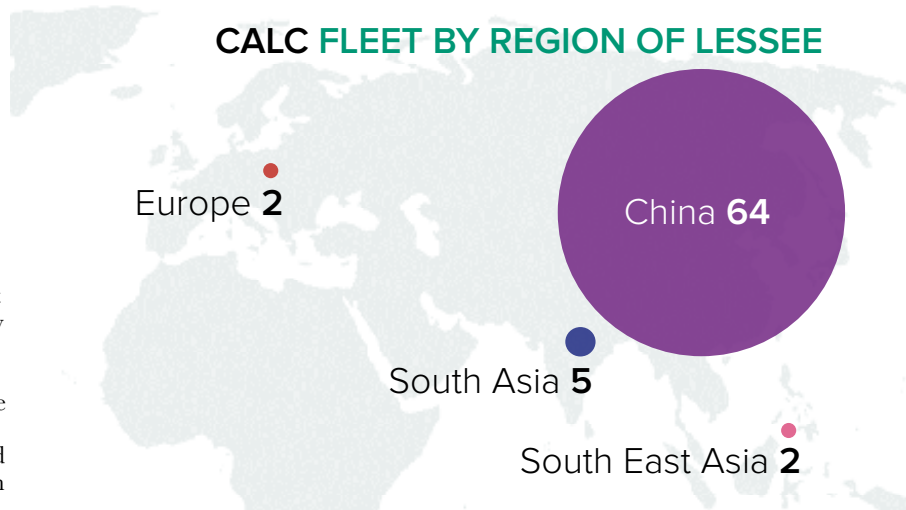
CALC has also used what it calls an "ingenious" lease receivables securitisation structure, in which an undisclosed trust agreed to purchase the

lease receivables of some of its aircraft.

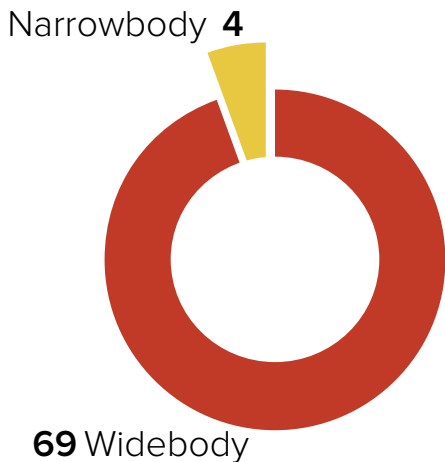
CALC's fleet is made up of Boeing 737-800s, Airbus A319s, A320s, A321s and A330-200s. The lessor also has new-generation aircraft on order, as well as Chinese-manufactured C919-100s and ARJs.

The lessor also has had a recent spate of new hires of western talent, including former Castlelake executive Alistair Dibisceglia, former Avation and Hong Kong Aviation Capital executive Russell Hubbard, former Natixis Transport Finance chief executive officer Christian McCormick and former Tui and Lufthansa executive Jens Dunker. These appointments are in line with the lessor's positioning as an international rather than a domestic lessor.

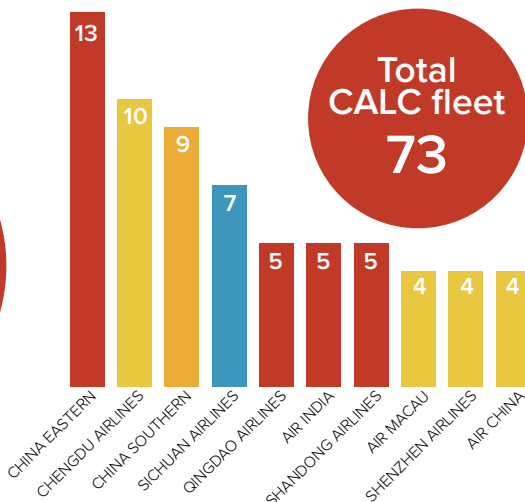
CALC FLEET BY REGION OF LESSEE



CALC FLEET BY AIRCRAFT TYPE



CALC TOP LESSEES



CALC KEY FACTS

- Name:** China Aircraft Leasing Group (CALC)
- Country:** Hong Kong SAR, China
- Founded:** 2006
- Ownership:** public (HKEX: 1848)
- Head office:** Hong Kong SAR, China
- Number of employees:** 114
- Size of fleet:** 73
- Average age of fleet:** 3.7 years
- Number of lessees:** 13
- Orderbook:** 103
- Delivery commitments:** \$3.4 billion over next three years
- Unsecured credit ratings:** Fitch N/A; Moody's N/A; S&P N/A
- Total assets (30 June 2016):** \$3.72 billion
- Net income (30 June 2016):** trailing 12 months \$65 million

Source: *Airfinance Journal Fleets*



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REGIONAL PROFILE

USA



The US aviation industry is the most mature in the world. A wave of restructurings and mergers has left it more competitive than at any point in its history. Similarly, aircraft operating lessors have been doing business in the USA for decades.

Six of the world's 10-largest lessors by fleet size have headquarters in the USA, meaning the health of US lessors is a good indicator of the health of the whole industry.

For the past 12 months, US-based leasing companies have enjoyed a mix of low interest rates, plenty of available sources of funding from banks and the capital markets. Lessors have also benefited from lessees improved financial positions because of low fuel prices and strong levels of global demand.

Steady growth in global passenger demand should reassure investors about the fundamental strength of air travel. Despite softening demand on some routes,

global year-on-year growth in passenger traffic was 6% for the first six months of 2016, according to the International Air Transport Association.

Even so, there is more volatility in the market than there was one year ago. Pockets of instability in Latin America, Turkey and Russia have forced some US lessors to remarket aircraft as airlines constrict capacity growth.

Ron Wainshal, chief executive officer of Airastle, addressed this topic head-on in a recent call with investors. Discussing the effects of a surge in terror attacks, political instability in Turkey and the fallout from the UK's decision to leave the European Union, he also noted the effects of a slowdown in economic growth.

"Apart from geopolitics, we appear to be going through a cycle of slowing economic growth worldwide, central bank stimulus packages and lower interest rates. Investors seem uncertain, and we're seeing rapid switches between risk-on and

risk-off attitudes," he said.

Wall Street has also kept a close eye on the Federal Reserve in recent weeks, because of mixed comments by the bank about whether the market should expect a hike to interest rates. Recent data showed core US inflation rising at its fastest pace in six months, prompting speculation about a rate rise. At the time of writing, the bank had not announced its decision.

Another question mark hangs over the impact of the upcoming Dodd-Frank regulations, which may change the asset-backed securities (ABS) market for aircraft-backed deals. A fresh round of legislation will come into effect in December, forcing the issuers of certain classes of asset-backed securities deals to retain equity in the issuance.

The jury is still out on whether aircraft-backed deals will be affected. But, if they are, some issuers of ABS deals, particularly those that use ABS deals to trade out large portfolios by selling on the E-notes to third parties, may find that these structures become less efficient.

REGIONAL LESSOR PROFILE

Intrepid Aviation is a private equity-owned operating lessor whose fleet consists primarily of widebody aircraft. According to *Airfinance Journal Fleets*, the lessor owns almost 30 aircraft, consisting primarily of Airbus A330-family and Boeing 777-300ER widebodies.

Speaking to *Airfinance Journal*, Intrepid's chief financial officer, Mike Lungariello, outlined a few of the elements of the lessor's strategy for the remainder of 2016 and beyond.

One of those, he says, is for Intrepid to diversify by increasing the number of narrowbodies in its fleet. At present, the lessor only owns one: an A321 on lease to Eva Air. However, Intrepid aims to increase its presence in this space by acquiring more single-aisle aircraft. It sold a 2015-vintage A330-300 in April to an affiliate of Banco Santander, which Lungariello says was part of this diversification strategy.

Assessing the potential for a direct order with Boeing or Airbus, Lungariello says this is unlikely to work for Intrepid at present given the long lead times on the A320 and 737 programmes.

"Making an investment decision on a 25-year-old asset is a challenge to begin with, but making a bet on a 25-year asset four to six years down the road is a bigger challenge and it takes time," he notes.

Intrepid may also close some portfolio deals with other lessors in the near future, says Lungariello. This option would allow the lessor to grow quickly at a time when the sale and leaseback market is very competitive for airlines with strong credit ratings. Given the competition, relying solely on sale and leaseback deals for expansion could hinder its growth rate.

Instead, the Stamford-based lessor believes it can work with some of the world's largest lessors if they choose to divest

from certain asset types or minimise their exposure to certain airlines. Lessors such as Gecas and AerCap regularly have to manage their exposure to airlines and jurisdictions by trading out aircraft or portfolios of aircraft, giving other lessors the opportunity to snap up aircraft on lease.

Lungariello explains: "It's very difficult right now to compete in the sale and leaseback market for the better credits. We feel there are opportunities in this market, but it is competitive and we will keep at it. In the near term, there seems to be a lot more opportunity with our competitors as an example, particularly those with larger balance sheets, to do portfolio trades."

He adds: "Aircraft that come with leases attached from a lessor that put the aircraft at a really good price can make a lot of economic sense, and I think that's where we see ourselves fitting into the market quite

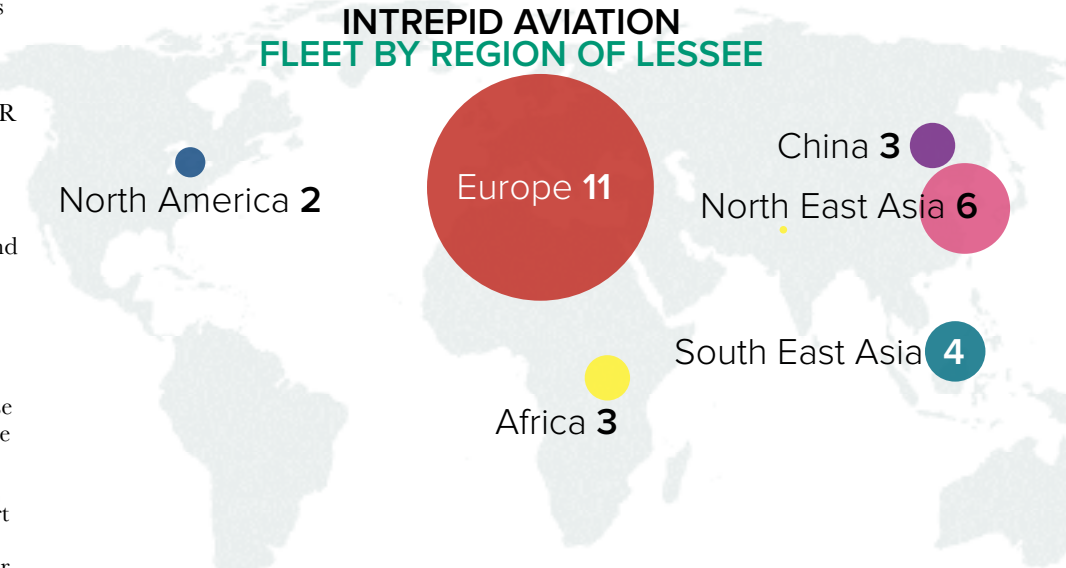
substantially in the near future."

Fresh from a rebrand in June, the lessor is in far better shape than this time last year. In February 2015, bankrupt Japanese airline Skymark left Intrepid in a tight spot when it cancelled lease agreements for seven A330s.

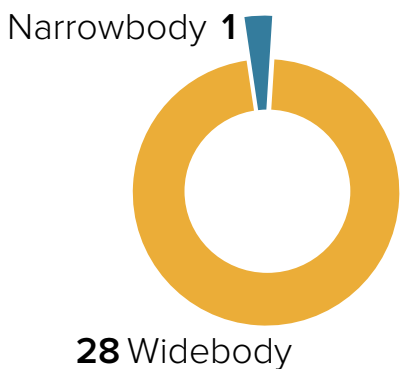
Intrepid was then forced to remarket the widebodies and reconfigure the interiors to change Skymark's high-density configuration. But, in February this year, it announced that Turkish Airlines had signed long-term leases for these aircraft. In mid-September, the first aircraft was undergoing the reconfiguration ahead of delivery.

Intrepid Aviation

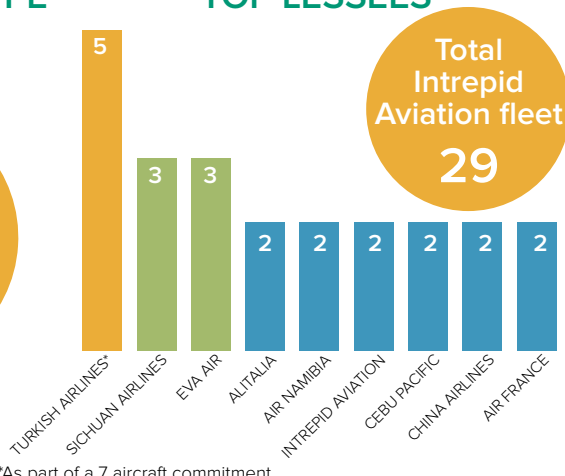
INTREPID AVIATION FLEET BY REGION OF LESSEE



INTREPID AVIATION FLEET BY AIRCRAFT TYPE



INTREPID AVIATION TOP LESSEES



INTREPID AVIATION KEY FACTS

- Name: Intrepid Aviation
- Country: USA
- Founded: 1992
- Ownership: Reservoir Capital, Centerbridge Partners
- Head office: Stamford, CT
- Number of employees: 27 (according to *Airfinance Journal Fleets*)
- Size of fleet: 29
- Number of lessees: 13
- Orderbook: 6
- Delivery commitments (as of 30 June 2016): \$1.1 billion through 2018
- Unsecured credit ratings: Fitch A; Moody's A1; S&P A
- Total assets (30 June 2016): \$44 billion
- Net income (30 June 2016): \$238 million (first-half 2016)

Source: *Airfinance Journal Fleets*

REGIONAL LESSOR PROFILE

Macquarie AirFinance

Macquarie AirFinance broke into the top 11 aircraft lessor rankings last year, when it acquired a portfolio of up to 92 aircraft from Awas.

The deal valued the portfolio at \$4 billion and doubled the size of Macquarie AirFinance's portfolio. It also won *Airfinance Journal's* Overall Deal of the Year 2015 because of its size, complexity and significance for the aircraft leasing community.

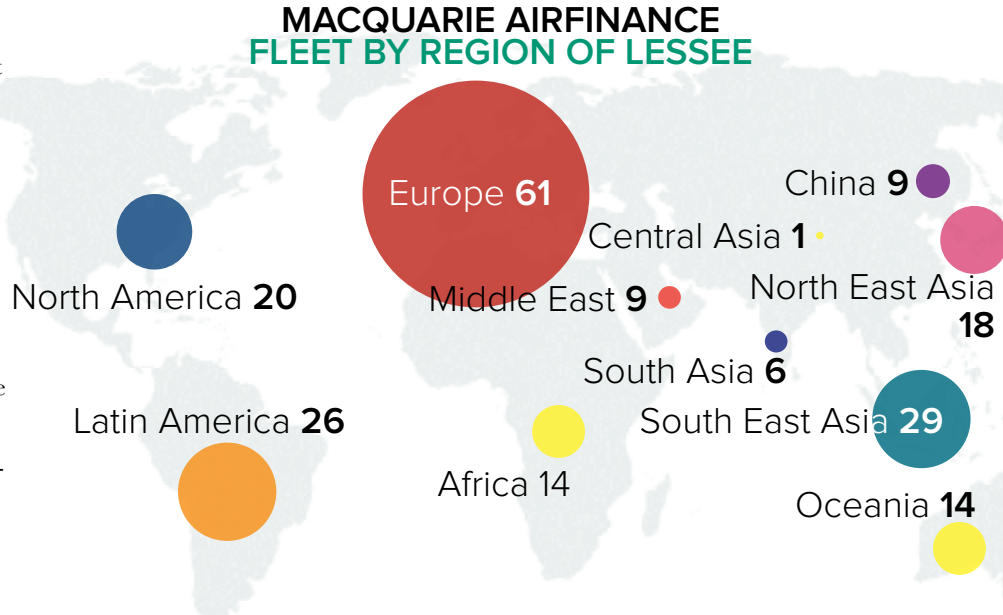
To finance the portfolio acquisition, the lessor entered into a \$3.04 billion, three-year non-recourse secured bank loan facility. Macquarie plans to refinance the debt on more attractive terms using different financing structures.

Buying the portfolio allowed Macquarie to diversify its client base and improve its return on equity and earnings per share. On lease to 41 airlines, the portfolio consisted of Airbus A320s and Boeing 737s, as well as A330s.

The company owns and manages 207 aircraft; 115 Airbus A320-family aircraft, 76 Boeing 737s, nine A330s, four E-Jets plus two 777s and one 757.

The lessor counts Vueling, Jetstar Airways, Thai Smile, IndiGo and Frontier Airlines among its largest leasing customers by number of aircraft, according to *Airfinance Journal Fleets*.

Macquarie AirFinance placed an order with Bombardier's CSeries programme in September 2014, for 40 CS300s and options for a further 10. The aircraft were



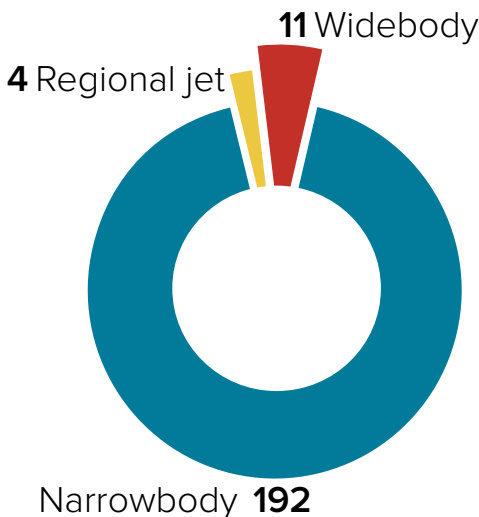
originally scheduled for delivery between 2017 and 2019, but the delivery dates are likely to have changed given the considerable delays to the programme.

Macquarie is the lessor with the largest order book for the CSeries programme. Only Air Canada and Delta Airlines have placed larger orders for the aircraft type. When it placed the order, the company praised the jet's performance in the 100- to 150-seat market, as well as its technologies and attractive economics.

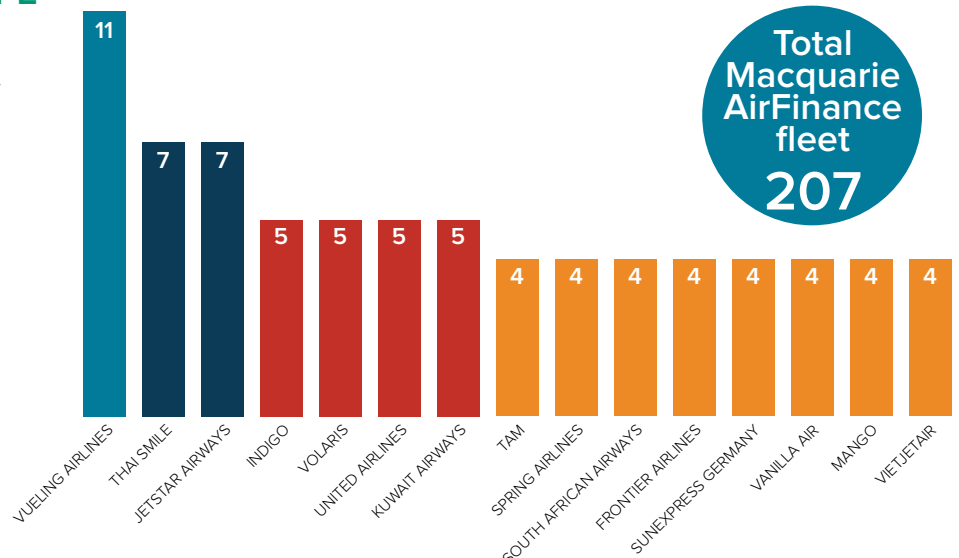
MACQUARIE AIRFINANCE KEY FACTS

- Name: Macquarie AirFinance
- Country: USA
- Ownership: Macquarie Bank
- Head office: San Francisco
- Size of fleet: 207
- Number of lessees: 94
- Orderbook: 40

MACQUARIE AIRFINANCE FLEET BY AIRCRAFT TYPE



MACQUARIE AIRFINANCE TOP LESSEES



Total Macquarie AirFinance fleet
207

Source: *Airfinance Journal Fleets*

REGIONAL PROFILE

Middle Eastern lessors have continued to expand their portfolios and their funding bases to keep up with the increased global demand for travel.

Alafco, the region's second-largest lessor by fleet size, is looking to grow its fleet to 100 aircraft by the end of the decade, and is aggressively pursuing its goal by purchasing portfolios and burning off its orderbook of 117 aircraft. In August, the Kuwait-based lessor purchased a portfolio of nine aircraft from Gecas, comprising two 2012-vintage Boeing 737-800s, two 2014-built Airbus A321s, three 2013-vintage A320s and two 2014-built 737-800s. All nine aircraft have leases attached to them and three of the four lessees are new customers for Alafco.

Alafco received financing for the portfolio from Korea Development Bank and Germany-based NordLB. As part of the deal, the lessor added three A320 aircraft to its portfolio in August under lease agreements with Indonesia's Citilink. In May, the lessor also bought a portfolio of two A320s and two 737-800s from BOC Aviation with leases attached. It now has a fleet of 59 aircraft, according to *Airfinance Journal Fleets*.

Novus Aviation Capital, a Dubai-based lessor which focuses on widebody aircraft, found a new source of capital when it formed a joint closed-end fund with Tokyo-based lender Sumitomo Mitsui Banking Corporation earlier this year.

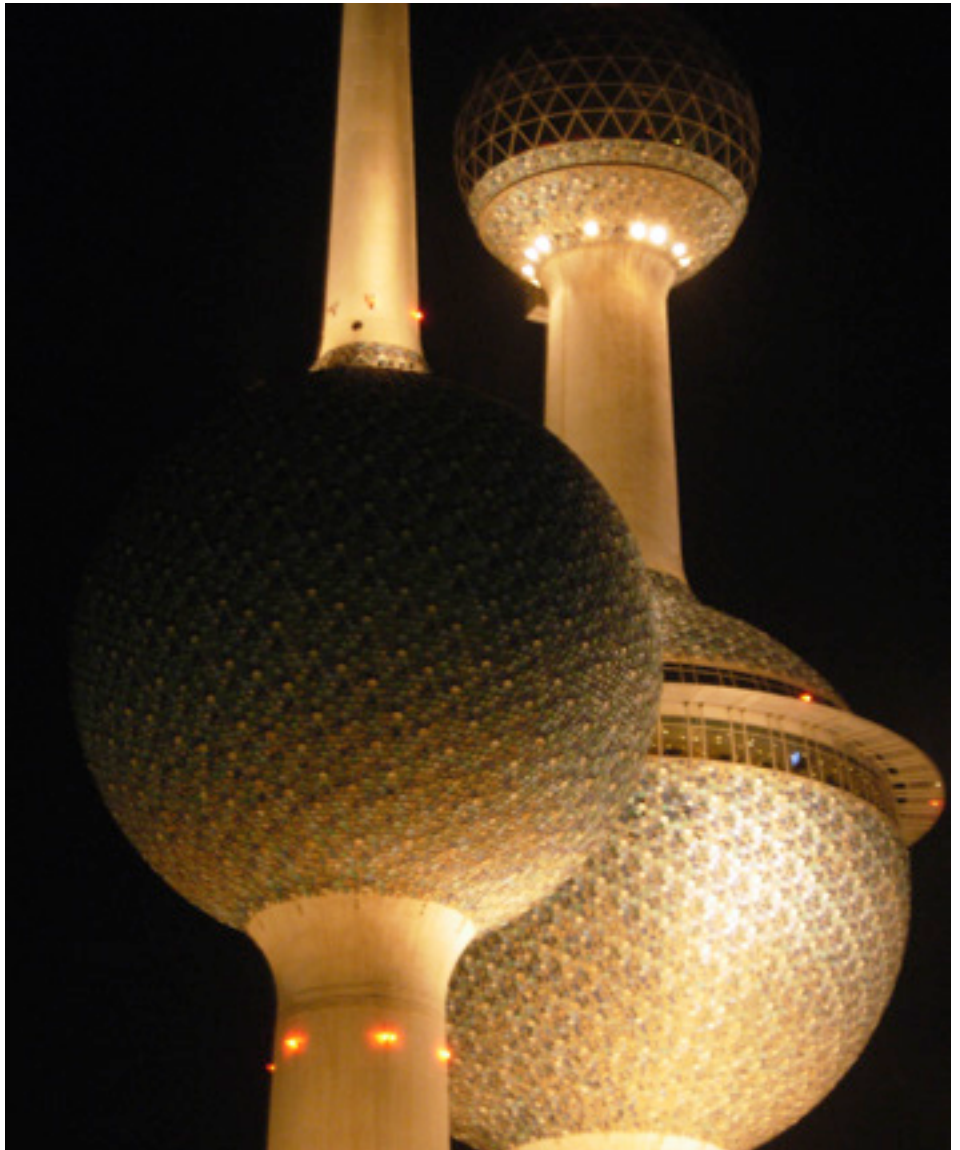
The 50/50-owned fund, Ortus Aircraft Leasing, has a target size of \$200 million and will purchase aircraft with investors' capital and from "other finance sources". The investors will receive dividends based on the cash flow coming from the lease rentals and sales proceeds of the aircraft.

Some Middle Eastern lessors have also been keen on the idea of leasing aircraft into Iran, after the opening up of the market when the United Nations lifted its sanctions on the country in January. Firoz Tarapore, chief executive officer of Dubai Aerospace Enterprise (DAE), told *Airfinance Journal* in February this year that "it was only a matter of time" before lessors will become comfortable to lease aircraft into Iran.

Although Boeing and Airbus have signed deals to bring more than 200 aircraft to Iran, the US Office of Foreign Assets Control (OFAC) will dictate if and when those deals will become firm.

In September, OFAC approved the sale of 17 aircraft from Airbus and 80 aircraft from Boeing to Iran. The remaining

Middle East



aircraft are pending further approval from OFAC, which according to the OEMs, should come in the "coming weeks".

UAE-based DAE, the biggest aircraft lessor in the Middle East by fleet size with 74 aircraft, not only leased out but also provided financing for eight Egyptian aircraft last year through its financing arm DAE Capital. Market sources state that the leasing company is also exploring the opportunity of issuing an asset-backed securitisation later this year to help it sell a portfolio of aircraft.

Foreign lessors in the region are also bringing in new sources of capital into the Middle Eastern market, which has seen an increase in structured sale and

leaseback deals. Earlier this year, Dublin-based Aviation Finance (AFC) closed a couple of deals which had Spanish banks financing aircraft in the Middle East. Banco Santander, Spain's most prominent aviation finance bank, provided AFC funding for three Emirates 777-300ERs. Bankinter, Banco Popular and Caixa-bank – three Spanish banks which are less active in the aviation space than Banco Santander – are also expected to finance a senior tranche of a structured operating lease transaction arranged by AFC. The Irish lessor also tapped both the German and Islamic markets to fund new and 2013-vintage A380s for Emirates.

REGIONAL LESSOR PROFILE

DAE Capital

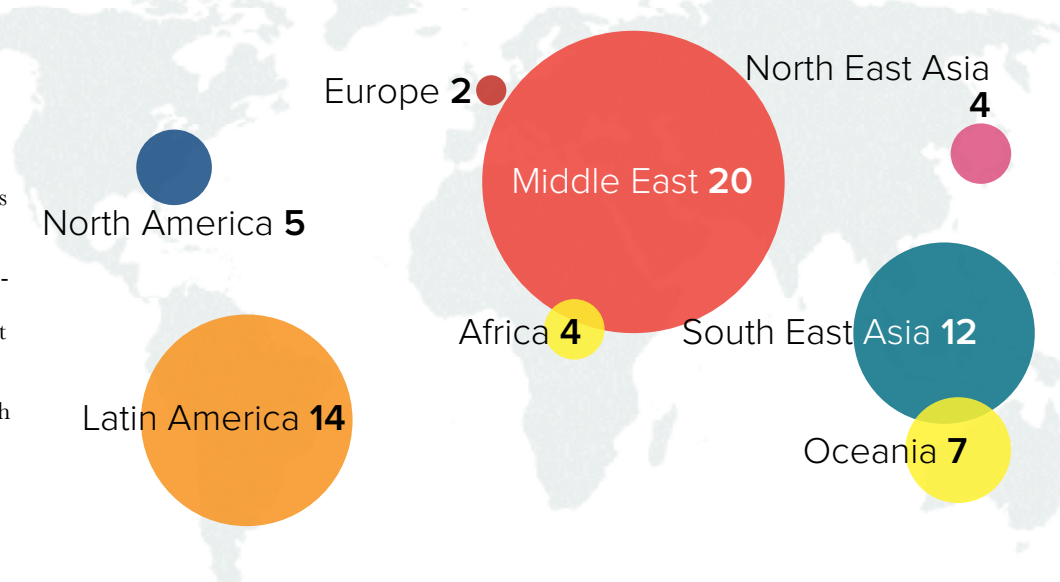
DAE Capital, the leasing and finance arm of Dubai Aerospace Enterprise (DAE), was formed in May 2007 and has a portfolio worth \$4 billion. It has a fleet of 78 aircraft and offers services in operating leases, aircraft sales and aircraft remarketing. It is the largest leasing company in the Middle East by fleet size: it has 12 Boeing 777-200Fs, two 777-300ERs, three 737-700s, 15 737-800s, eight Airbus A319s, seven A320s, 11 A330-200s and 20 ATR72-600s.

The company is owned by the Government of Dubai (87.83%) and the Ruler of Dubai (12.17%). It looks to have about 35% of its portfolio based in Asia, 25% based in the Middle East, 30% based in Europe and the remainder based in North America.

Commenting on the state of the leasing market, Firoz Tarapore, DAE's chief executive officer, tells *Airfinance Journal*: "DAE has seen the leasing market become more selective in the last year. The top credits continue to receive aggressive bids but the market is making a much more definitive distinction between the top credits and the story credits."

Tarapore notes that liquidity is plentiful and demand for leasing products is robust.

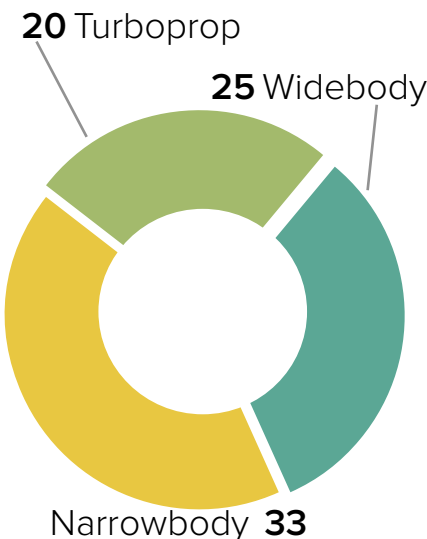
DAE CAPITAL FLEET BY REGION OF LESSEE



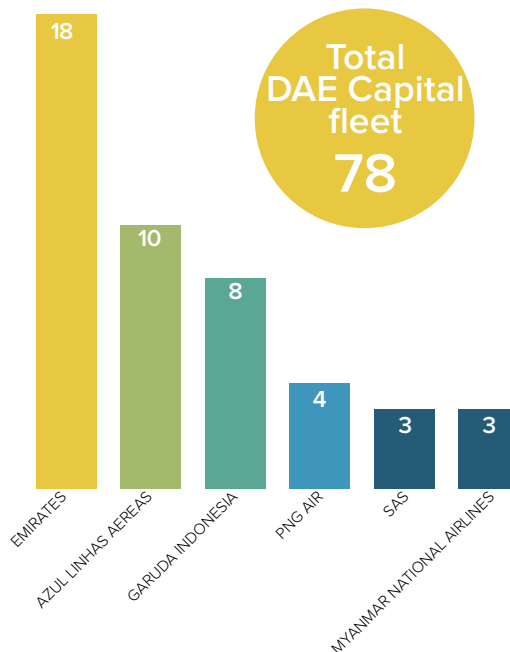
"As the technology migration accelerates over the next coming years," he says, "demand for leasing solutions will continue to remain strong, reflecting lessors' appetite to price and accept metal risk on current-technology assets and desire to add new-technology assets to their portfolios."

DAE plans to continue expanding its portfolio. Tarapore says: "We have used commercial bank financing and export credit agency financing to fund our requirements. We would like to add at least \$1 billion per year to our aircraft portfolio for the next several years."

DAE CAPITAL FLEET BY AIRCRAFT TYPE



DAE CAPITAL TOP LESSEES



DAE CAPITAL KEY FACTS

- Name:** Dubai Aerospace Enterprise (DAE) Ltd
- Country:** UAE
- Founded:** 2006
- Ownership:** Government of Dubai (87.83%), Ruler of Dubai (12.17%)
- Head office:** Dubai
- Number of employees:** 36
- Size of fleet:** 78
- Average age of fleet:** 6.7 years
- Number of lessees:** 26
- Orderbook:** 36 (ATR72-600s, includes 20 options)
- Delivery commitments:**
- Unsecured credit ratings:** N/A
- Total assets (as of 30 June 2016):** \$4 billion

Source: *Airfinance Journal Fleets*



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