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Asset Brok'Air closes new Jolco structure for SAS

Scandinavian Airlines System (SAS) has closed financing for a new Airbus A320neo delivery through a Japanese operating lease with call option (Jolco) that was structured through an in-house asset management platform.

This deal is the first Jolco transaction closed with SAS Group's Gorm Asset Management.

Although the aircraft is Swedish-registered, the Jolco package was structured so that SAS could transition the aircraft to any of the SAS Group's operating platforms, including Scandinavian Airlines Ireland, in a "seamless" manner.

Asset Brok'Air won the mandate for the deal after bidding on a request for proposal SAS issued in February 2018 for the financing of 10 A320neos.

Credit Industriel et Commercial is acting as security trustee, facility agent and lender. Banque Postale and Banque Palatine are lenders.

Watson Farley & Williams (Paris), Walkers (Dublin) and Mannheimer Swartling (Stockholm) advised the lenders; Norton Rose Fulbright (London) and McCann Fitzgerald (Dublin) advised SAS and Gorm Asset Management. K&L Gates (Tokyo) advised the lessor.

"This transaction is the first Jolco closed involving an airline leasing platform," says Asset Brok Air managing director, Jean-Gael Duboc.

SAS has mandated Asset Brok'Air for an additional three A320neo deliveries, which will be funded in the coming months with a wider banking group.

Earlier this year, the Jolco arranger closed a Jolco refinancing covering three Boeing 737-800s operated by SAS. Two aircraft financings closed in June, and one in July.

The mandate was in addition to 10 737s arranged for SAS since 2016.

Industry overview: **Key financials**

As shown in Figure 1 the airline industry had a successful year in 2017/18. Revenues of $651 billion were 4% higher than the year before. Ebitdar was however, slightly lower, while net income increased 9% to $36.9 billion, short of the record $40.6 billion in 2015/16.

Ebitdar margin was a full percentage point lower at 20.5%, reflecting tough competition and higher costs, especially fuel and staff.

Notwithstanding some key bankruptcies, capital structure remained benign. The leverage trend has been favourable, despite the record capital expenditure.

Adjusted net debt was down slightly at $473 billion and leverage (measured as adjusted net debt/Ebitdar) declined marginally from 3.6x to 3.5x. Fixed charge coverage declined from 3.2x to 3.1x.

One indicator which has not improved over the last six years is liquidity as a percentage of revenues, which remains at the 16.8% level, equivalent to only about two months' worth of liquidity. Given the cost to carry, a number of airlines have been reducing cash on balance sheet in favour of committed liquidity facilities. Another factor reducing liquidity has been special dividends and stock buy backs by

"The airline industry had a successful year in 2017/18. Revenues of $651 billion were 4% higher than the prior year. Ebitdar was however slightly lower while net income increased 9% to $36.9 billion."

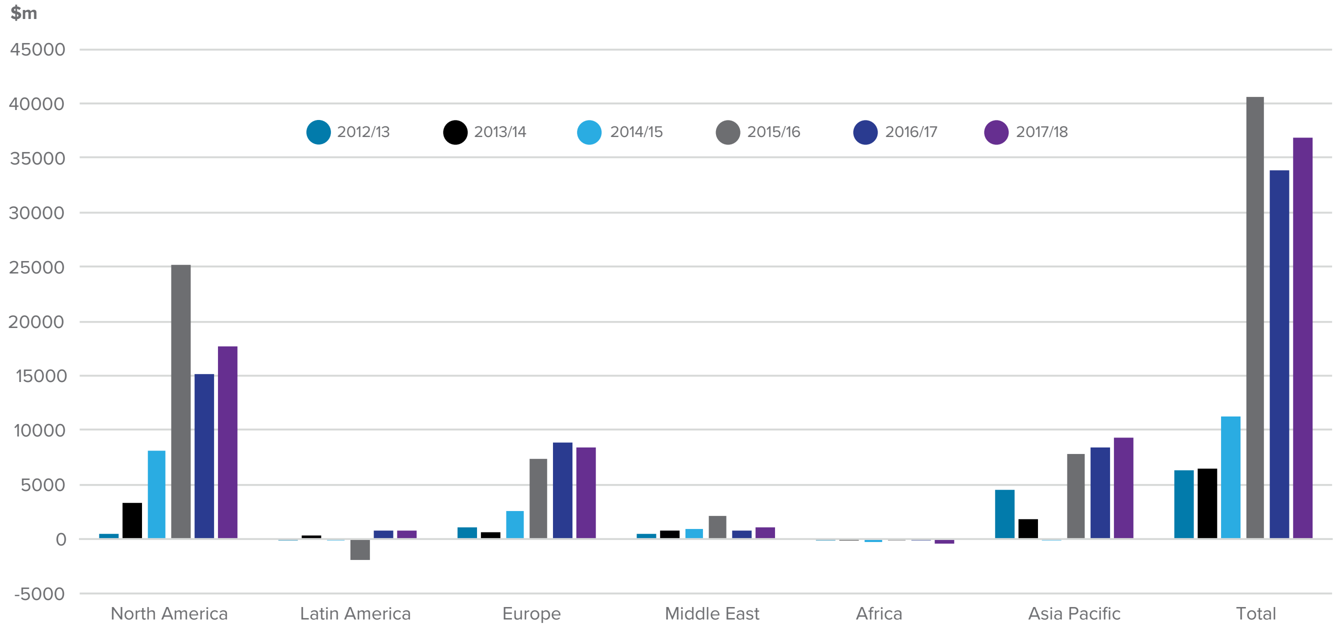
Figure 1: Global airline industry[1] key financials

	Financial periods ending in					
$m	**2012/13**	**2013/14[2]**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
Total revenue	545,111	535,827	589,317	598,967	626,050	650,929
% change		-1.7%	10.0%	1.6%	4.5%	4.0%
Ebitdar	76,628	81,078	96,404	126,001	134,443	133,335
% change		5.8%	18.9%	30.7%	6.7%	-0.8%
Net income	6,369	6,532	11,234	40,568	33,836	36,868
% change		2.6%	72.0%	261.1%	-16.6%	9.0%
Adjusted net debt	342,528	344,954	392,283	424,159	477,521	472,521
% change		0.7%	13.7%	8.1%	12.6%	-1.0%
Net fixed charges	31,626	31,842	34,731	37,973	42,552	43269
Ebitdar margin	14.1%	15.1%	16.4%	21.0%	21.5%	20.5%
Ebitdar/Net fixed charges (x)	2.4	2.5	2.8	3.3	3.2	3.1
Unrestricted cash/Total revenues	17.4%	18.3%	16.0%	16.5%	16.8%	16.8%
Adjusted net debt/Ebitdar (x)	4.5	4.3	4.1	3.4	3.6	3.5
Parent groups with positive net income	13,960	14,748	19,254	45,795	37,259	39,711
Parent groups with negative net income	(7,591)	(8,216)	(8,020)	(5,227)	(3,423)	(2,843)
Total	6,369	6,532	11,234	40,568	33,836	36,868
Parent groups with positive net income	85	86	74	93	101	105
Parent groups with negative net income	35	34	44	29	27	28
[3] Number of parent groups	120	120	118	122	128	133

Source: *The Airline Analyst*

[1] *Aggregate values for airline groups included in study*
[2] *2013/14 excludes Delta's $8.3 billion tax credit*
[3] *Number of "parent groups" varies due to consolidation (US Airways, Tigerair, Vueling, Aer Lingus), IPOs (IndiGo, Wizz, Azul), de-consolidation (Frontier), bankruptcy (Air Berlin, Monarch, Alitalia) and financials for additional airlines becoming available.*

Figure 2 - Net income by major region



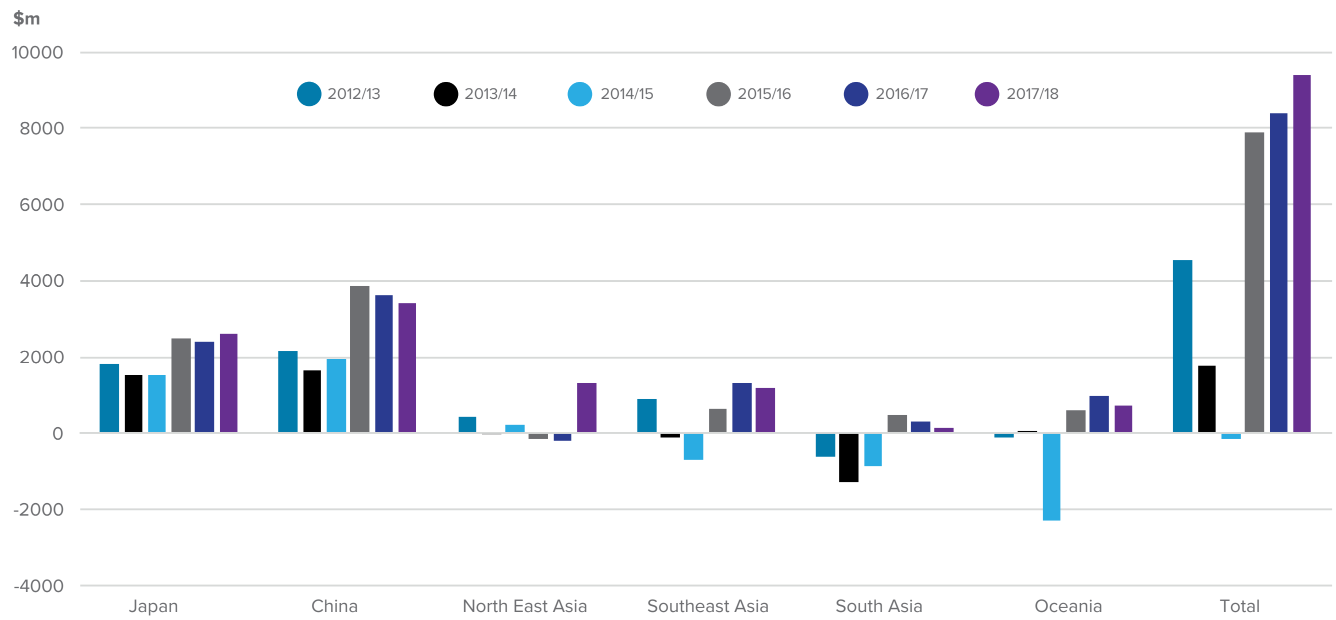
Source: *The Airline Analyst*

a significant number of airlines. Figure 2 shows net income broken down by region and illustrates clearly illustrates that the growth in profitability in the latest year was primarily driven by North American and Asia-Pacific carriers. The Middle East airlines had a tough year and Latin America remained only marginally profitable in aggregate. Africa was again loss-making. However, some of the perennial loss-makers improved their performance. Of the 133 airline groups in the study, 28 made aggregate net losses of $2.4 billion, the lowest such figure over the last 6 years.

"Of the 133 airline groups in the study, 28 made aggregate net losses of $2.4 billion."

It is also helpful to look at the breakdown of the Asia-Pacific numbers by sub-region as there are huge differences that tend to be camouflaged in the aggregates. This is presented in Figure 3 and shows repetition of clearly the large, stable and growing contribution from Japan, the decline for China over the last three years and the strong performance by the North East Asia, Southeast Asia and Oceania sub-regions. South Asia remained weak overall. The China performance needs monitoring.

Figure 3 - Asia-Pacific net income by sub-region



Source: *The Airline Analyst*

Analysis: **Revenue and income***

Top 50 by total revenue

Rank	Airline	$m
1	American Airlines Group	42,207
2	Lufthansa Group	41,902
3	Delta Air Lines	41,244
4	United Continental	37,736
5	Air France-KLM	29,533
6	International Airlines Group	26,312
7	Emirates	25,011
8	Southwest Airlines	21,171
9	Lufthansa Parent	18,780
10	China Southern	18,675
11	ANA	17,789
12	Air China	17,755
13	British Airways	15,632
14	China Eastern	14,974
15	Japan Airlines	12,480
16	Air Canada	12,410
17	Cathay Pacific	12,394
18	KLM - Royal Dutch Airlines	11,843
19	Qantas Airways	11,753
20	SIA Group	11,458
21	Turkish Airlines	11,054
22	Qatar Airways	10,913
23	Korean Air	10,724
24	Latam Airlines Group	10,164
25	Hainan Airlines	8,753
26	Ryanair	8,191
27	Aeroflot	7,942
28	Alaska Air Group	7,933
29	Jetblue	7,015
30	Easyjet	6,452
31	Thai Airways	5,761
32	Iberia	5,624
33	Asiana Airlines	5,522
34	Eva Airways	5,327
35	UPS Airlines	5,274
36	China Airlines	5,084
37	SAS	4,696
38	Swiss International Air Lines	4,604
39	Avianca Holdings	4,442
40	Garuda Indonesia	4,177
41	Shenzhen Airlines	4,040
42	Xiamen Airlines	3,817
43	Latam Brasil	3,799
44	Norwegian Air Shuttle	3,710
45	Virgin Australia	3,692
46	Vietnam Airlines	3,573
47	Jet Airways	3,562
48	Westjet	3,438
49	TAP Group	3,386
50	Air New Zealand	3,370

Top 50 by net income

Rank	Airline	$m
1	Delta Air Lines	3,577
2	Southwest Airlines	3,488
3	Lufthansa Parent	2,812
4	Lufthansa Group	2,708
5	International Airlines Group	2,292
6	United Continental	2,131
7	American Airlines Group	1,919
8	British Airways	1,771
9	Ryanair	1,661
10	Air Canada	1,556
11	ANA	1,298
12	Japan Airlines	1,222
13	Jetblue	1,147
14	Air China	1,059
15	Alaska Air Group	1,034
16	China Eastern	927
17	China Southern	871
18	Emirates	761
19	Korean Air	702
20	SIA Group	651
21	Qantas Airways	624
22	Qatar Airways	547
23	Hainan Airlines	486
24	Swiss International Air Lines	443
25	Republic Airlines	434
26	Skywest	429
27	Spirit Airlines	421
28	Airasia	399
29	Easyjet	390
30	Copa	370
31	Hawaiian Airlines	364
32	Aeroflot	341
33	Indigo	326
34	Wizz Air	315
35	Xiamen Airlines	314
36	Air New Zealand	252
37	Atlas Air Worldwide	224
38	Asiana Airlines	223
39	Turkish Airlines	223
40	Vietjet Air	219
41	Westjet	217
42	Shenzhen Airlines	210
43	Allegiant Travel	195
44	Finnair	194
45	Juneyao Airlines	194
46	Eva Airways	187
47	Spring Airlines	184
48	Atlas Air	172
49	Air Arabia	172
50	Frontier Airlines	165

Top 50 by net income margin

Rank	Airline	%
1	Republic Airlines	36.3%
2	Vietjet Air	22.5%
3	Ryanair	20.3%
4	Euroatlantic Airways	18.2%
5	Air Arabia	16.6%
6	Southwest Airlines	16.5%
7	Airasia	16.5%
8	Jetblue	16.4%
9	Spirit Airlines	15.9%
10	Lufthansa Parent	15.0%
11	Horizon Air	14.8%
12	Copa	14.6%
13	Jazeera Airways	14.5%
14	Wizz Air	14.1%
15	Hawaiian Airlines	13.5%
16	Skywest	13.4%
17	Alaska Air Group	13.0%
18	Allegiant Travel	13.0%
19	Air Canada	12.5%
20	Chorus Aviation	12.3%
21	Cebu Pacific	11.6%
22	Spring Airlines	11.5%
23	British Airways	11.3%
24	Juneyao Airlines	10.7%
25	Atlas Air Worldwide	10.4%
26	Indigo	10.0%
27	Japan Airlines	9.8%
28	Swiss International Air Lines	9.6%
29	Pegasus Airlines	9.4%
30	Atlas Air	9.2%
31	International Airlines Group	8.7%
32	Delta Air Lines	8.7%
33	Frontier Airlines	8.6%
34	Skymark Airlines	8.5%
35	Jin Air	8.3%
36	Xiamen Airlines	8.2%
37	Luxair Group	8.1%
38	Compass Airlines	8.0%
39	Mesa Airlines	7.9%
40	Jeju Air	7.8%
41	Thai Airasia	7.5%
42	Air New Zealand	7.5%
43	Grupo Aerobus	7.4%
44	ANA	7.3%
45	Spicejet	7.3%
46	Peach Aviation	6.8%
47	Azul S.A.	6.8%
48	Tway Airlines	6.8%
49	Korean Air	6.5%
50	Eastarjet	6.5%

* Most recent financial statements between March 2017 and March 2018.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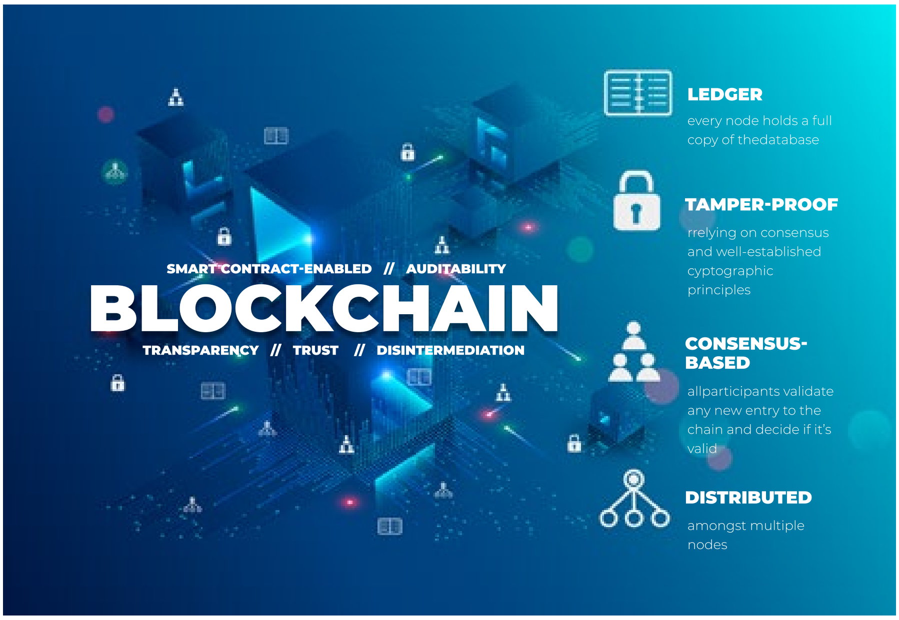
Blockchain: **The next big thing for aircraft lessors and lesses**



Cashflows, maintenance reserves tracking, lease novations—all these aspects of aircraft leasing operations are considered as ripe for blockchain technology. Is blockchain the next big corner for aircraft lessors and lessees to turn? Maybe.

"The aircraft leasing industry has been talking about and slowly moving towards blockchain technology in nearly every aspect of its operations. The movement forward has the potential to change the approach of lessors and lessees around the world, however it will require a large industry buy-in and it will not be an easy road forward during the adoptive curve," explains Joey Johnsen, principal of Seattle-based technology consulting firm, Zeevo Group, who holds a digital badge for *Blockchain Fundamentals for Accounting and Finance Professionals Certificate*.

Blockchain is a distributed ledger, a system that creates a verifiable record of every transaction. It is nearly tamper-proof, fast, occurring in real time, and allows money and physical assets to be securely transferred. While blockchain is currently best known for its use in cryptocurrencies, the ability to have a secure ledger for aircraft has the lessors taking a close look at utilising this technology to streamline the leasing process.

Payments, contracts, customs, dispute resolution, international trade issues can all be handled in real time on an aircraft-by-aircraft basis. The industry is heavy with high value assets, yet in many cases simple computer-based spreadsheets, and at times even simple pen to paper, are used to record transactions.

"Blockchain technology allows those with appropriate permissions to access each transaction across the company's entire leasing network, providing the required element of 'trust' in the documentation of the portion of the aircraft lifecycle handled by blockchain," adds Johnsen.

With the possibility of every party being able to view every transaction in the history of the network, if anyone attempts to defraud or change the ledger, the network will see their copy is not valid and reject it.

Johnsen further elaborates on the challenges facing aircraft lessors who struggle with the novation of leases. "The novation process is long, time-consuming, and expensive when done by novation agreement. However, a possible solution has been created using blockchain as the platform."

SMBC Aviation Capital has developed The Global Aircraft Trading System (GATS). Featuring a full toolbox of electronic or e-systems, GATS will provide e-delivery for e-documents, e-signatures, and a secure e-ledger. All parts, engines, sales of engines, leasing, financing transactions, and transfers of aircraft ownership are supposed to be handled by GATS utilising a blockchain platform.

"This allows for the real time transfer of ownership without the hard asset transfer and novation process. Everything is left in place, all lease, and transactions documents are contained in the trust-specific ledger. The original lease remains in place and there is no need for changes to the basic documents," notes Johnsen while acknowledging that one notable drawback is that "there is a lessened opportunity for renegotiation of the lease. On the other hand, the speed and low-cost aspect of using GATS may outweigh a potential opportunity to renegotiate portions of the original lease."

The GATS system will be online in the first quarter of 2019. It will be a non-profit operation. The Aviation Working Group (AWG) is also working on standardised documentation to use alongside GATS.

There are other applications being developed that have even further reaching possibilities. It may become possible to utilise blockchain technology to record and track all aspects of an aircraft's lease lifecycle, as well as notify the parties of all maintenance deadlines, actual maintenance performed, parts replaced or repaired, in addition to all cycles and lease terms. Using 'smart contracts' blockchain technology and compatible programming, the complete data for the lifespan of an aircraft, sometimes as long as 30 years, and even involving four to six owners, can be kept and reviewed in the same digital location, while providing required notices and documents together in a logically structured system.

Johnsen concludes: "This may seem like a huge leap as many engine and aircraft records are still kept on paper, thousands upon thousands of pages of paper. But as the industry moves forward the security, and ease of access that is provided utilising blockchain technology will make what is now a time-consuming and costly process a much quicker, cheaper, and more accurate process lending itself to a readily available audit trail."

This is of course what is being worked towards and will take time to bring to fruition. However, with GATS going live in 2019, the ongoing work being done in the industry to digitise processes and the immense interest in blockchain technology the option will clearly be within the industry, to move forward with a new technology. How long this will take, only time will tell.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European ECAs to close more transactions

European export credit agencies (ECA) are expected to close more transactions in the final quarter of this year, according to one source with direct knowledge of the matter.

An investigation by the UK's Serious Fraud Office into Airbus had prevented UKEF and the other European ECAs from underwriting any new Airbus deals since 2016, but the market reopened in March with a transaction for African carrier Rwandair.

The carrier refinanced two 2016-vintage Airbus A330-200s in the German market with KfW IPEX-Bank and Deutsche Pfandbriefbank. The two German banks co-arranged the transaction with KfW IPEX-Bank, assuming a 51% and acting as Euler Hermes's agent and security trustee. Deutsche Pfandbriefbank assumed the remainder of the Euler Hermes facilities.

The bank-to-bank financing package for 85% of the total purchase price for both aircraft enabled the Rwandan airline to repay financing issued in September 2016. The loan was passed on to the Rwandan airline via the Eastern and Southern African Trade and Development Bank, a financial institution specialised in the African region. The transaction was supported by a 100% ECA guarantee, which is based on the guidelines in the Aircraft Sector Understanding under OECD consensus.

Earlier this year Airbus celebrated acceptance of a first ECA application since 2016 under the process previously agreed with the ECAs.

"We anticipate a return to ECA cover in 2018 for a limited number of transactions while the level of appetite for commercial financing remains high," says Airbus.

Airfinance Journal understands that multiple aircraft transactions are in the pipeline with BPI Assurance Export acting as the guarantor ECA. The aircraft deals are expected to close by the end of 2018.

Sources say the financing market is still very liquid and although yearly deliveries have grown in dollar volumes, the ECAs are not expected to make a blockbuster return.

"The ECAs are not back in massive numbers, but this year will close with half a dozen aircraft," says one source, who adds: "The process is still heavy because of the investigation".

The person does not see lessors tapping into the market. "Lessors have access to plenty of liquidity. This year's unsecured bond market will be over $10 billion in issuances," he says.

Junior and mezzanine debt markets 'underserved': **Novus**

Given record numbers of new aircraft deliveries, junior and mezzanine debt markets are "underserved" by the financial community, the managing director of Novus Aviation has said.

In September the Dubai-based lessor came to market with Cedar Aviation Finance (CAF).

Novus will manage the junior debt fund designed to provide airlines and lessors with higher loan-to-value financing for the acquisition of Boeing-manufactured aircraft.

Novus will provide the junior and mezzanine loans to bridge the gap between equity and senior debt.

"We believe the junior and mezzanine financing segment of the market remains underserved by the financial community at a time when the OEMs are delivering a record number of aircraft," Mounir Kuzbari says in an interview with *Airfinance Journal*.

CAF comes off the back of similar platforms like Tamweel Aviation Finance (TAF), which was launched in 2013 by Novus, DBJ and Airbus. Novus expects the first CAF transaction to take place by the end of the third quarter of 2018.

Kuzbari adds: "The initial thesis of our first junior debt initiative back in 2013 was to plug the gap left by the changes in the ECA market and the retrenchment of the traditional aviation banks. Liquidity has been back across the capital structure but, when listening to our customers, the offer of attractive junior loan products remains relatively limited. This, combined with new regulatory changes for banks and raising interest rates will, put stress on some of the legacy players and new entrants."

Novus will not disclose the target size and ambitions for the fund, but the lessor has no minimum number of aircraft it will place in the fund and a "fairly flexible model", in terms of how long it has to deploy the capital.

"We could probably induct 30 to 50 aircraft without too much of an issue in the next 12 to 18 months, if the right opportunities arise," says Kuzbari. "We expect two to four aircraft to be financed in this quarter assuming deliveries don't slip into next year."

The fund complements the Dubai-based lessor's operating lease business, and Novus is in select discussions with additional investors about joining the fund.

"Any partner that will be added will have to work well with the existing partnership. We're not marketing wide – chemistry is very important. We're being selective," adds fellow managing director Hani Kuzbari.

"We have more funding capacity than what we see in terms of pipeline in the next 12 to 18 months. So we certainly could do more transactions."


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Disagreements on NMA market footprint

Appraisers differ on market size but Boeing's new aircraft type could enter service as early as 2026.

No announcement was made at the Farnborough air show about the proposed New Midsize Airplane (NMA). With Airbus' A321neo model selling well, the ball is in Boeing's court.

The A321neo is Airbus's weapon to challenge that market, and the European manufacturer is trying to move fast into the middle of the market segment with more A321neo improvements in an effort to challenge further Boeing on its business case.

The aircraft's current maximum range is 4,000 nautical miles (nm), but Airbus is understood to be working on an improved version that would be capable of 4,500nm or more. This would enable airlines to operate the aircraft on transatlantic services to destinations further south on the US East Coast and further east.

After the A330-800neo market

Extending the range of the A321LR, among other things, could be the reason why there are delays in announcing the NMA business case.

Airbus A321LR possible improvements might yet tighten the mid-market pincer from below but, the Toulouse-based manufacturer has yet to convince the market with its A330-800neo.

This has not gone unnoticed by Boeing, whose strategy will be pointing out the commercial difficulties of the A330-800neo.

Appraiser firms believe Boeing will launch the NMA with an entry-into-service of about 2026-27.

"Analysis of recent all new programmes suggest there is a typical seven- to eight-year development period between authority to offer and entry into service, so if there is no authority to offer before the end of 2018, then the earliest entry into service would likely be sometime in 2026 or 2027," says Flightglobal Ascend's head of consultancy Rob Morris.

He believes the Boeing business case is clearly sensitive to volume and price and a case both for "launch and no launch" can be made.

Production transformation is very important in making the business case. "This could be key as the NMA could become an enabler for the production system for the next-generation single-aisle aircraft, which is where the key battleground will be for Airbus and Boeing in the future," says Morris.

For Ascend's head of consultancy Rob Morris, Airbus has the NMA market covered to some extent with its A321neo and A330-800 model. "Boeing also already has some of this market covered with the Max 10 and 787-8 model. The future of the NMA depends upon how market share plays out between these aircraft."

"I think production transformation is part of the business case but not all," says Gueric Dechavanne, vice-president, Collateral Verifications. He adds: "The OEMs [original equipment manufacturers] have become more and more efficient at building aircraft, so this will just be a continuation of that. My belief is that in order for the NMA business case to make sense, it needs to include the top end of the Max family."

Market footprint

Angus Mackay, principal at ICF, says the size of the market is between 3,000 and 3,500 aircraft over a 20-year period. Dechavanne thinks more of a 1,000 to 1,500 aircraft market.

Morris says the NMA market footprint will be highly dependent on the aircraft's size and range, which appears to be coalescing about 5,000nm and 220 to 275 seats dual-class, as well as Boeing's ability to manage unit cost and, of course, the competitive reaction from Airbus.

Ascend believes there is an opportunity for the NMA to capture a significant share of the demand between 2025 and 2040. "There are a wide range of demand and supply scenarios, with the NMA capturing upwards of 1,500 deliveries through 2040."

Mackay says: "Optimum NMA appears to be around 220-270 passengers in a two-three-two ovoid fuselage, with a range of around 4.500nm. The key sweet spot is the 45,000lbs thrust engine. Neither Airbus type covers this without any compromises."

Morris says that Airbus has that market covered to some extent with its A321neo and A330-800 model. "Boeing also already has some of this market covered with the Max 10 and 787-8 model. The future of the NMA depends upon how market share plays out between these aircraft."

Dechavanne believes that the current and future improvements of A321neo and A330-800 models could cover the segment well, but he also warns should Boeing launch a new family of aircraft that replaces the top end of the 737 Max family, Airbus will need to react with a new family as well.

Engine choice and price

The appraisers are divided as to which engine providers will power the NMA.

Dechavanne sees Pratt & Whitney and Rolls-Royce being in the programme "as long as they can get their act together with their current issues". Oriel's Les Weal expects General Electric and another engine manufacturer.

Mackay anticipates one engine provider only with the programme share risk: General Electric and CFM International.

Weal expects NMA pricing to be in the $70 million and $80 million bracket, though he expects early orders to get significant discounts. "Having engine choice will help pricing too," he says.

Mackay sees pricing at about $75 million and $80 million net to airlines, with significant buyer-furnished equipment content.

Morris says net delivered price will be in the $67 million to $82 million range.

Dechavanne is at the upper range of the market with an $80 million and $90 million estimated price range.

Lessors increase narrowbody market share

Aircraft leasing companies slightly increased their market share of the Airbus narrowbody deliveries for the nine-month period to 30 September 2018, *Airfinance Journal's* analysis shows.

Airbus delivered 503 aircraft to customers for the January-September period with lessors' direct orders accounting for 29.8%, or 150 aircraft.

In last year's corresponding period, lessors represented 28% of the 454 deliveries by the European manufacturer, the data shows.

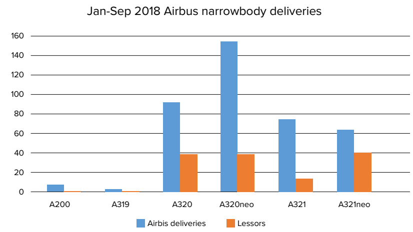
A closer look at the deliveries show lessors' market share for narrowbodies was up one percentage point to 33% in the first nine months of this year.

Lessors represented 43% of the Airbus A320 direct deliveries between January and September, up from 31% in the same period last year. Airbus delivered 128 aircraft of the type to customers in the January-September 2017 period, but as expected, this year's A320 deliveries were down to 94 units.

On the A321 side, lessors represented 18% of the 76 deliveries for the first nine months, compared with 22% of the 129 deliveries last year.

The impact of the lessors was less apparent on the Neo models.

For the January-September 2018 period, direct lessor orders accounted for a quarter of the 157 A320neo deliveries with 39 units. In comparison, they represented 38 of the 82 A320neo deliveries last year, or 46%.



Airbus delivered 65 A321neo aircraft during the first nine months of this year. Direct lessor orders had a major share with almost two-thirds of deliveries. The A321neo model's entry-into-service was in 2017 and Airbus delivered eight A321neos between January-September 2017. Lessors took five of the eight A321neos.

During the third quarter, Airbus delivered 164 narrowbody aircraft to customers. Direct lessor deliveries accounted for 46 units, or 28%.

Lessors represented 45% of the A321neo deliveries (14 out of 31) and 21% of the A320neo deliveries (17 out of 81) during the July-September quarter.

Of the 14 A321neo deliveries, seven aircraft were leased to Chinese carriers, the data shows, while six of the 17 A320neo leased aircraft were for Chinese airlines.

Last year they accounted for 50% of the A320neo deliveries (14 out of 28) and two out of three A321neo deliveries for the same quarter.

Their market share increased in percentage terms on the current engine option models as Airbus delivered less models (43 A320/A321s versus 78 A320/A321s last year).

They accounted for nine of the 25 A320 deliveries and six of the 18 A321 deliveries in the quarter.

Last year lessors accounted for 15 of the 38 A320 deliveries and 10 of the 40 A321 deliveries in the quarter.

DAY ONE | Wednesday 31st October

0800 Registration and networking breakfast

0900 Chairman's welcoming remarks
Killian Croke, Partner, **KPMG Ireland**

0900 Chairman's opening remarks
Joe O'Mara, Tax Partner, **KPMG**

0910 View from the top – Will lessors' outlook on 2019 remain optimistic?
John Higgins, President and Chief Commercial Officer, **Avolon**
Firoz Tarapore, Chief Executive Officer, **DAE Capital**
Soren Overgaard, Chief Executive Officer, **Nordic Aviation Capital**
David Swan, Chief Operating Officer, **SMBC Aviation Capital**
Moderator: **Killian Croke**, Partner, Head of Aviation Finance Audit, **KPMG**

0950 Fireside chat with Peter Chang
Peter Chang, Chief Executive Officer, **CDB Aviation Lease Finance**
Moderator: **Olivier Bonnassies**, Managing Director, **Airfinance Journal**

1010 In conversation with Ruth Kelly
Ruth Kelly, Chief Executive Officer, **Goshawk**
Moderator: **Laura Mueller**, Managing Director, **Airfinance Journal**

1030 Networking coffee break

1050 Presentation: Hong Kong – A growing aircraft leasing and financing hub
Jimmy Chiang, Associate Director-General, **InvestHK**

1105 Transfer Pricing: "The Road Ahead" – OECD developments and the importance of governance structures for lessors
Neil Casey, Director, **KPMG**

1130 Presentation: Liability management strategy of Chinese lessors
Sun Lei, Vice President, **Bocomm Leasing**
(Simultaneous interpretation from Putonghua to English provided)

1150 Presentation: Growth prospects for Chinese lessors
Fang Shuhua, Managing Director, Aviation Leasing Department, **CMB Financial Leasing**
(Simultaneous interpretation from Putonghua to English provided)

1205 Presentation: An update on the development of DFTP "aviation cluster"
Yang Liu, Deputy Director-General, **Administrative Commission of DFTP**
(Simultaneous interpretation from Putonghua to English provided)

1225 In conversation with Airbus & Boeing
Mark Pearman-Wright, Head of Leasing & Investor Marketing, **Airbus**
Kemp Harker, Managing Director for Marketing, **Boeing Commercial Airplanes**
Moderator: **Olivier Bonnassies**, Managing Director, **Airfinance Journal**

1255 Lunch
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1405 In conversation with Robert Martin: Key lessons learned from over the last 20 years
Robert Martin, Managing Director and Chief Executive Officer, **BOC Aviation**
Moderator: **Michael Allen**, Asia Finance Editor, **Airfinance Journal**

1425 Panel discussion: With lease rate factors falling, how will investors respond to the squeezed yields?
Mark Lapidus, Chief Executive Officer, **Amedeo**
Joe McConnell, Partner, **Castlelake**
Radha Tilton, Managing Director, **Goldman Sachs**
James Meyler, Chief Executive Officer, **ORIX Aviation Hong Kong**
Moderator: **Marie O'Brien**, Partner, Aviation and Transport Finance, **A&L Goodbody**

1505 Panel discussion: Are mid-life and old aircraft desirable as an asset class?
Bob James, CEO and Managing Director, **AerFin**
Russ Hubbard, Director - Aircraft Remarketing, **Air Partner**
John Vitale, President & CEO, **AVITAS**
Dermot Manifold, EVP Commercial Operations, **GECAS**
Stuart Hatcher, Chief Operating Officer, **IBA Group**
Moderator: **Andy Mansell**, Executive Vice President and Chief Commercial Officer, **Aviation Capital Group**

1545 Networking coffee break

1615 The Trent 1000 Challenge
Simon Goodson, Senior Vice President – Customer Business**, Rolls-Royce plc**
Moderator: **Andy Mansell**, Executive Vice President and Chief Commercial Officer, **Aviation Capital Group**

1630 Engine panel: How to respond to the technical issues of new generation engines
David Li, Marketing Director, **CFM**
Jon Sharp, Group President & CEO, **Engine Lease Finance Corporation**
Paul Finklestein, Vice President – Marketing, **Pratt & Whitney**
Craig W. Welsh, SVP & Chief Commercial Officer, Americas & Asia, **Willis Lease Finance Corporation**
Moderator: **Andy Mansell**, Executive Vice President and Chief Commercial Officer, **Aviation Capital Group**

1710 Crystal ball: Will the aircraft finance and leasing industry embrace the blockchain revolution any time soon?
Dewey Yee, Vice Chairman & Managing Director, **Aergo Capital**
Kieran O' Brien, Head of Aviation Finance & Leasing Advisory, **KPMG**
Peter Huijbers, Director, **PH Aviation Asia**
Paul Jebely, Managing Partner, **Pillsbury**
Moderator: **Michael Allen**, Asia Finance Editor, **Airfinance Journal**

1750 Close of day one followed by cocktail reception
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