

Aerospace Manufacturers and Lessors Outlook

ASA/AFRA Conference June 2023

Bloomberg Intelligence

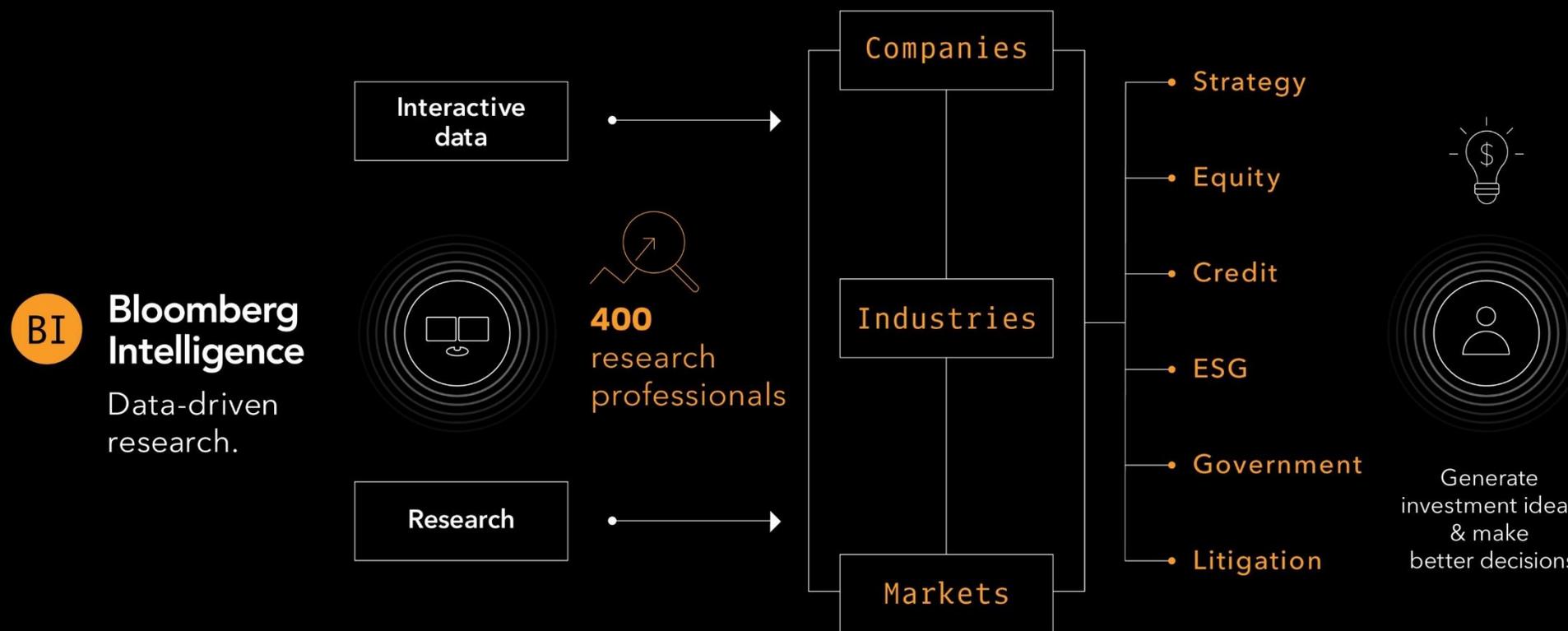
500+
data contributors

135+
industries

2,000+
companies

15yrs
avg. analyst experience

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George Ferguson

Senior
Aerospace/Defense
Analyst

Bloomberg Intelligence

Global Recovery Almost Complete Except Widebodies

	Q2			Q3			Q4		
	Flights	Seats	ASMs	Flights	Seats	ASMs	Flights	Seats	ASMs
North America	-8.2%	4.1%	5.6%	-6.2%	6.7%	9.1%	-14.4%	-6.1%	-2.0%
South America	-2.1%	6.0%	5.5%	-1.9%	5.3%	5.4%	-2.2%	3.1%	2.7%
Europe	-10.2%	-5.4%	-3.1%	-6.4%	-1.1%	0.5%	-6.6%	-2.2%	2.5%
Asia	-0.8%	1.5%	2.5%	3.2%	5.4%	7.0%	2.2%	3.8%	4.7%
Australasia	0.7%	0.0%	2.5%	3.2%	1.8%	4.4%	5.1%	3.8%	5.8%
Widebodies	-13.1%	-13.3%	-15.8%	-13.1%	-13.2%	-13.2%	-12.2%	-13.3%	-10.5%

Diio data as of 15 May 2023

Widebody Percent of Global ASMs Down 500bps

	Q2 2023			Q2 2019		
	Flights	Seats	ASMs	Flights	Seats	ASMs
North America	30.0%	24.2%	19.5%	30.6%	22.8%	17.3%
South America	4.8%	4.7%	2.5%	4.6%	4.3%	2.2%
Europe	22.9%	22.6%	14.9%	23.8%	23.4%	14.4%
Asia	31.0%	30.2%	19.2%	29.2%	29.1%	17.5%
Australasia	1.8%	1.7%	1.2%	1.7%	1.7%	1.1%
Widebodies	9.5%	16.6%	42.8%	10.2%	18.8%	47.5%

Diio data as of 15 May 2023

Up, Up and Away...

Manufacturer & Aircraft Deliveries	22Q1	22Q2	22Q3	22Q4	2022	23Q1	23Q2	23Q3	23Q4	2023	2H 2022	2H 2023	Percent Change
	Actual						Estimate						
Boeing	95	121	112	152	480	130	94	142	153	519	264	295	11.7%
737	86	103	88	110	387	113	68	107	113	401	198	220	11.1%
Built	47	72	69	93	281	93	48	87	93	321	162	180	11.1%
Inventory	39	31	19	17	106	20	20	20	20	80	36	40	11.1%
747	1	2	0	2	5	1	0	0	0	1	2	0	-100.0%
767	5	7	9	12	33	1	3	8	8	20	21	16	-23.8%
777	3	9	6	6	24	4	5	9	9	27	12	18	50.0%
787	0	0	9	22	31	11	18	18	23	70	31	41	32.3%
Built	0	0	3	3	6	3	10	10	15	38	6	25	316.7%
Inventory	0	0	6	19	25	8	8	8	8	32	25	16	-36.0%
Airbus	142	155	140	226	663	127	167	155	261	710	366	416	13.7%
A220	11	14	9	19	53	10	18	11	15	54	28	26	-7.1%
A320	109	121	110	176	516	106	132	120	204	562	286	324	13.3%
A330	6	7	8	11	32	6	7	9	9	31	19	18	-5.3%
A350	16	13	13	20	62	5	10	15	33	63	33	48	45.5%

Source: Company Filings, Bloomberg Intelligence.

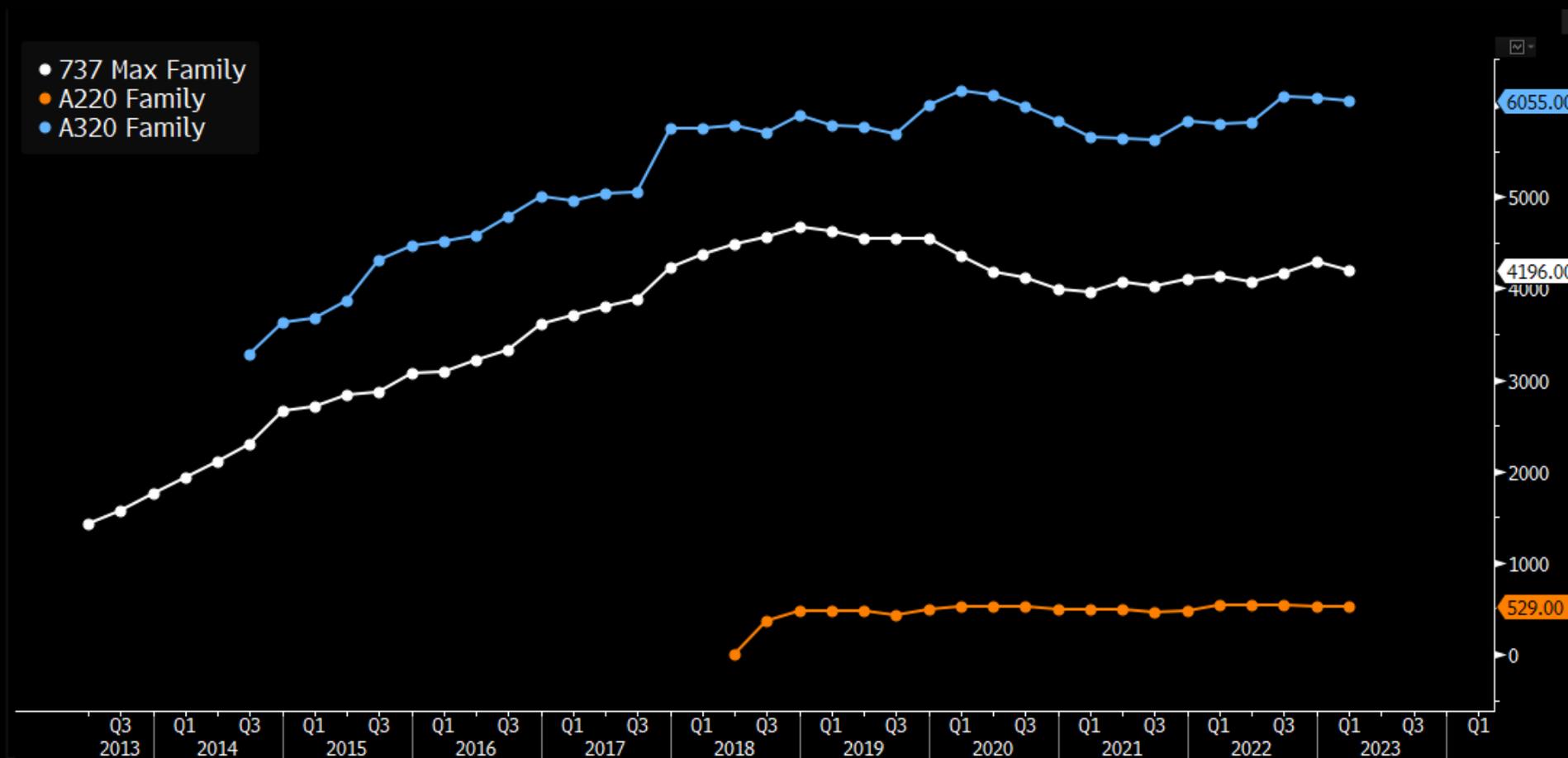
Stored Fleet Shows Old Aircraft Challenge

Aircraft	In Service	Storage	Storage Percent	Total	Stored Owned by Financial Entities	Average Age	Percent of Stored
737 Max	1072	107	9%	1179	80	4.3	75%
737 Max 8	912	103	10%	1015	77	4.3	75%
737 Max 9	160	4	2%	164	3	3.5	75%
A320neo	2536	226	8%	2762	194	3.7	86%
A319neo	9	5	36%	14	1	2.4	20%
A320neo	1556	163	9%	1719	147	4.0	90%
A321neo	971	58	6%	1029	46	2.8	79%
737 NG	6079	626	9%	6705	400	16.2	64%
737-700	902	157	15%	1059	69	19.1	44%
737-800	4665	403	8%	5068	310	15.6	77%
737-900	501	54	10%	555	21	12.7	39%
A320	6151	877	12%	7028	638	15.6	73%
A318	24	9	27%	33	5	14.8	56%
A319	994	208	17%	1202	131	17.2	63%
A320	3614	484	12%	4098	385	14.7	80%
A321	1519	176	10%	1695	117	17.0	66%

Cirium data as of 5/15/2023

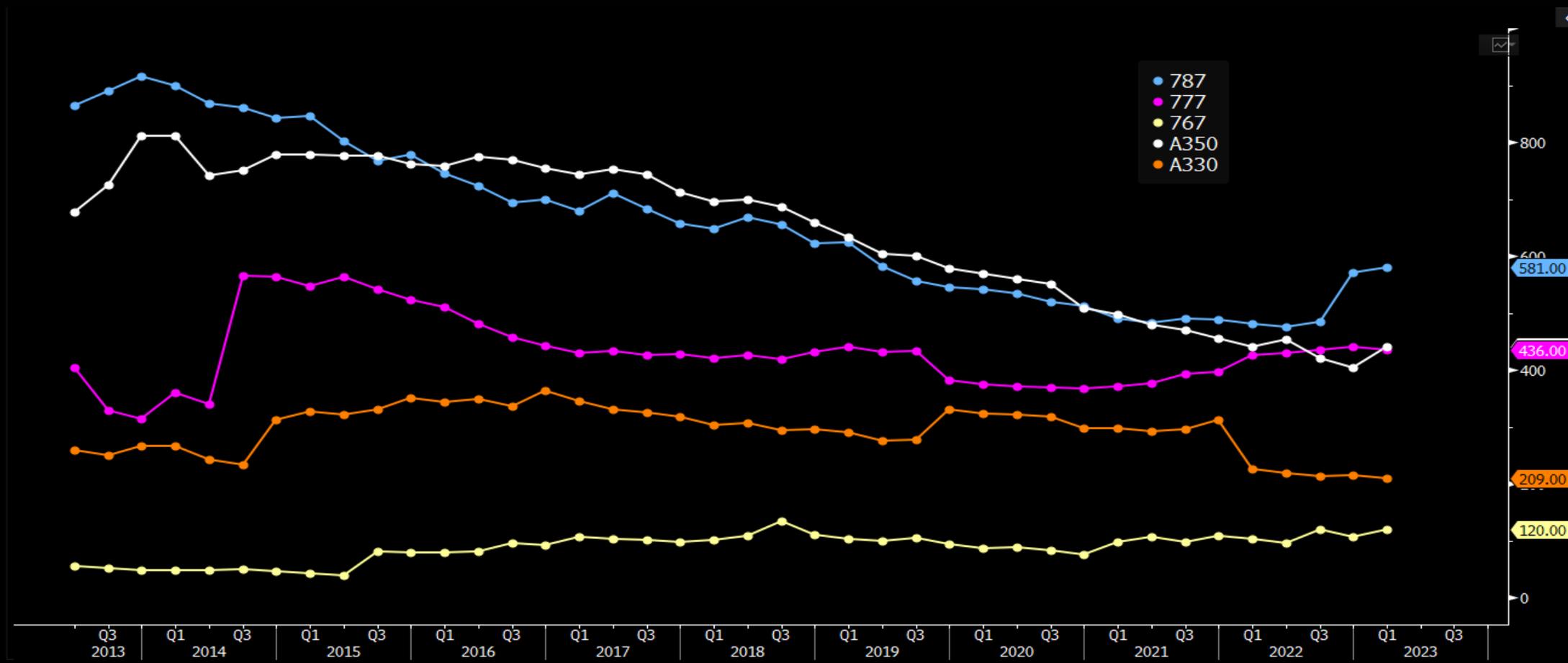
Source: Cirium, Bloomberg Intelligence

Narrowbody Backlogs



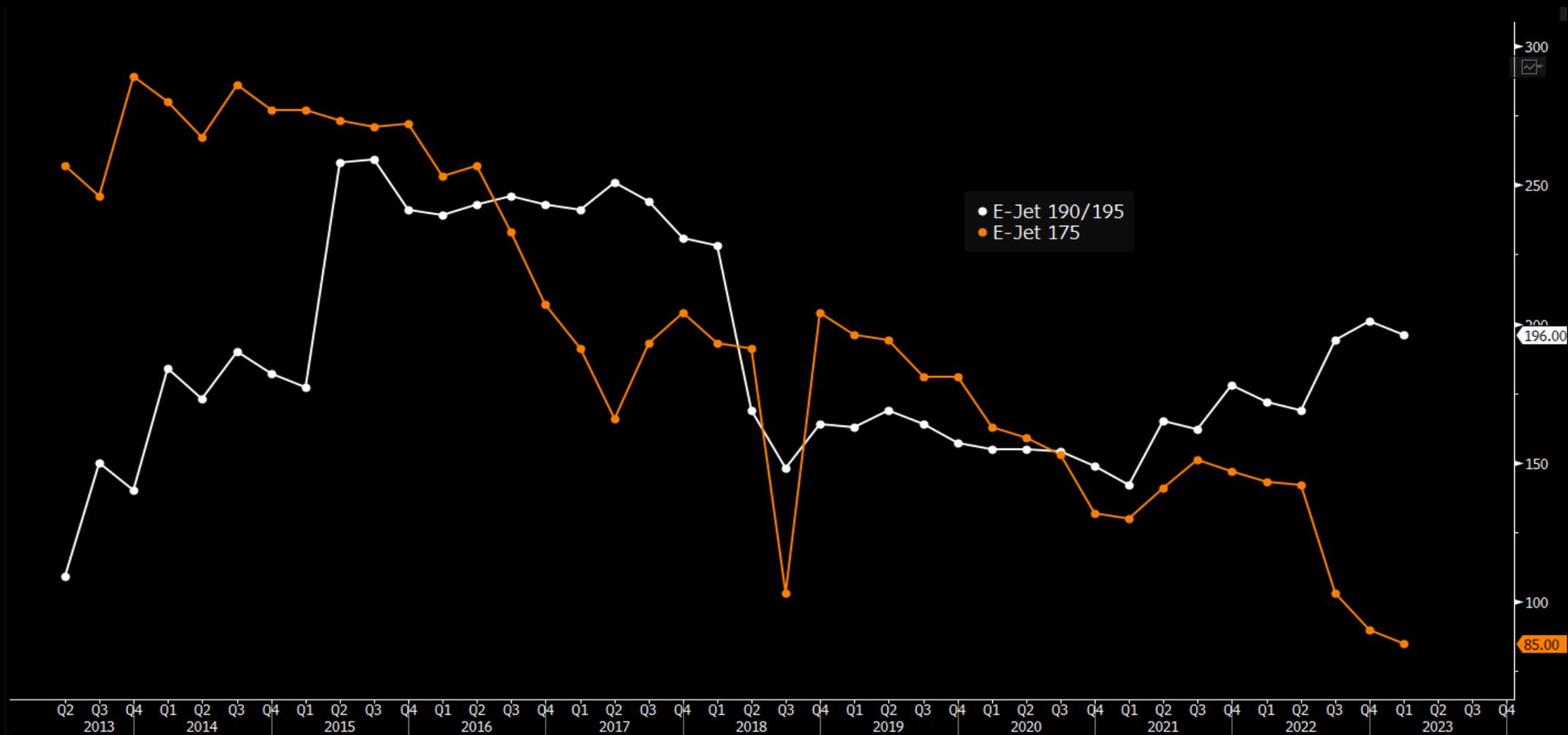
Source: Bloomberg Intelligence, Company Reports

Widebody Backlogs



Source: Bloomberg Intelligence, Company Reports

Regional Backlogs



Source: Bloomberg Intelligence, Company Reports

Best Laid Plans of Manufacturers

Bloomberg Intelligence : Boeing, Airbus Planned Production Rates

Airbus							Boeing							
Announced	Effective	A220	A320	A330	A350	A380	Announced	Effective	737	767	777	787	747	
Jan 2012	2012		42	9.5	-	2	Dec 2014	Sep 2015	-	-	-	-	1.3	
Feb 2011	2Q 2013		-	10	-	-	-	2015	-	1.5	-	-	-	
July 2014	Nov 2015		-	-	5	-	June 2015	Mar 2016	-	-	-	-	1	
Oct 2014	4Q 2015		-	9	-	-	Sep 2015	1Q 2016	-	2	-	-	-	
2010	Jan 2016		A320 neo enters service				Jan 2016	Mid 2016	-	-	-	12	-	
Feb 2015	Q1 2016		-	6	-	-	Jan 2016	Sep 2016	-	-	-	-	0.5	
Feb 2014	Spring 2016		46	-	-	-	Jan 2016	Jan 2017	-	-	7	-	-	
Feb 2015	Q2 2017		50	-	-	-	Oct 2013	3Q 2017	47	-	-	-	-	
Feb 2016	H2 2017		-	7	Cancelled		Dec 2016	Aug 2017	-	-	5	-	-	
July 2016	2018		A330 neo enters service				Sep 2015	Late 2017	-	2.5	-	-	-	
Feb 2015	Late 2018		-	4	10	-	May 2016	Jan-18	-	-	3.5 (2)	-	-	
Jan 2019	Jan 2019		-	-	-	0.66	Oct 2014	2018	52	-	-	-	-	
July 2017	Jan 2019		-	-	-	-	Jan 2016	2019	57	-	-	-	-	
Oct 2015	Mid 2019		60	-	-	-	Oct-17	2019	-	-	-	14	-	
Jan 2020	Immediately		-	3.33	9-10	-	Apr-18	2020	-	3	-	-	-	
Apr 2020	2020		40 (1)	2 (1)	6 (1)	-	Oct-19	2020	-	-	3 (2)	12	-	
May 2015	2021		63	-	-	-	Apr-20	2020	-	3	2.5 (2)	10	0.5	
Jan 2021	2021		5 (2)	45 (1,3)	2 (1)	5	Apr-20	2021	31(1)	3	1.5 (2)	10	0.5	
May 2021	2021			45 (3)	-	-	Aug-20	2021	31(1)	3	1 (2)	6	0.5	
May 2021	2022		5	-	6 (4)	-	Jan-21	2021	31(1)	3	1 (2)	5 (3)	0.5	
Latest Rate			5	45	3(9)	6(10)	0	Mar-21	2021	-	-	1	2(3)	-
May 2022	2023		-	-	6	-	Latest Rate	Mid-2022	31(1)	3	3(4,5)	2(3)	0	
February 2023	Late 2024			65	-	-	Oct-22	2023	41(7)	-	-	5 (8)	-	
February 2023	2026		14(8)	75 (7)	-	-	Apr-22	2025	-	-	777X Enters Service			
May 2023	2024			4	-	-	Nov-22	2026	50 (10)	-	-	10 (9)	-	
May 2023	End 2025			-	9	-								

(1) Temporary cut by a third in March 2020, due to Coronavirus

(2) From April 2021; (3) 45 in 4Q21/22/2023 (4) By autumn 2022

(5) Closer to 3 at the end of 2023; (6) 6 in early 2023

(7) 65 by the end of 2024 and 75 in 2026, announced during 4Q earnings call

(8) Guillaume Faury mentioned they envision 14 rate by middle of the decade

(9) Guillaume Faury confirmed rate increased to around 3 at the end of 2022

(10) Guillaume Faury confirmed rate increased to around 6 at the end of 2022

Notes: A320 and 737 include each manufacturer's family of narrowbody aircraft

Source: Boeing, Airbus, Compiled by Bloomberg Intelligence

(1) Temporary cut from 52 to 42 on April 5th, 2019 then to 0 December 16, 2019. Exit rate of 31 early 2022
 (2) Combined 777 and 777x build rate
 (3) From March 2021, reduced to two since July 2021 until FAA approval
 (4) Moved from 2 to 3 in 2H22; (5) In transition to full 777X production (3 per month 2 - 777s/1 - 777X)
 (7) Supply-chains constrain production rates through end of 2022, increased to ~40/month rate end of 2023
 (8) Gradual return to 5/month over time; (9) Production expectation announced during Investor Day
 (10) Production expectation announced during Investor Day

The Gap is Still Yawning



Source: Bloomberg Intelligence, Company Reports

How Much from China?

Bloomberg Intelligence : China Aircraft Requirements Model

Year					Estimate					Five Year Total	
	2019	2020	2021	2022	2023	2024	2025	2026	2027		
GDP Growth (1)	6.0%	2.2%	8.4%	3.0%	5.7%	5.0%	4.8%	4.8%	4.8%	762,602	
Multiplier	1.4	-10.4	1.3	-11.9	14.5	1.3	1.3	1.3	1.3		
Domestic and Regional Capacity Growth (2)	8.2%	-23.0%	10.7%	-35.7%	82.7%	6.5%	6.2%	6.2%	6.2%		
New Capacity					472,991	67,943	69,465	73,799	78,404		
Total Capacity (ASKs)	1,043,701	804,075	890,511	572,282	1,045,273	1,113,216	1,182,680	1,256,480	1,334,884		
Total Narrowbodies Needed (3)	2,964	2,918	2,946	3,075	3,240	3,451	3,666	3,895	4,138		
Total Aircraft in Market					3,177	3,240	3,451	3,666	3,895		
Aircraft Needed					63	211	215	229	243		961
Average Seats per Narrowbody	167	167	167	167	167	167	167	167	167		
Hours Operated per Day					8.5	8.5	8.5	8.5	8.5		
Cycles					4.4	4.4	4.4	4.4	4.4		
Cruise Speed (kilometers)					840	840	840	840	840		
Kilometers Flown per Day					5,292	5,292	5,292	5,292	5,292		
Million Asks Generated per Year per Aircraft	352.1	275.56	302.3	186.11	322.6	322.6	322.6	322.6	322.6		

Values in Brown Shaded Boxes Can be Changed

Notes: (1) Consensus for Growth rates (3) 3177 Narrowbodies in Service as of 1 Jan 2023, 3482 Including Parked - Cirium Data

Sources: Cirium, Civil Aviation Administration of China Stats (CAACS), Bloomberg Intelligence

At Higher Growth, Pre-Pandemicity is Achieved

Bloomberg Intelligence : China Aircraft Requirements Model

Year						Estimate					Five Year Total
	2019	2020	2021	2022	2023	2024	2025	2026	2027		
GDP Growth (1)	6.0%	2.2%	8.4%	3.0%	5.7%	5.0%	5.5%	5.5%	5.5%	797,199	
Multiplier	1.4	-10.4	1.3	-11.9	14.5	1.3	1.3	1.3	1.3		
Domestic and Regional Capacity Growth (2)	8.2%	-23.0%	10.7%	-35.7%	82.7%	6.5%	7.2%	7.2%	7.2%		
New Capacity					472,991	67,943	79,595	85,286	91,384		
Total Capacity (ASKs)	1,043,701	804,075	890,511	572,282	1,045,273	1,113,216	1,192,811	1,278,097	1,369,481		
Total Narrowbodies Needed (3)	2,964	2,918	2,946	3,075	3,240	3,451	3,698	3,962	4,245		
Total Aircraft in Market					3,177	3,240	3,451	3,698	3,962		
Aircraft Needed					63	211	247	264	283		1,068
Average Seats per Narrowbody	167	167	167	167	167	167	167	167	167		
Hours Operated per Day					8.5	8.5	8.5	8.5	8.5		
Cycles					4.4	4.4	4.4	4.4	4.4		
Cruise Speed (kilometers)					840	840	840	840	840		
Kilometers Flown per Day					5,292	5,292	5,292	5,292	5,292		
Million Asks Generated per Year per Aircraft	352.1	275.56	302.3	186.11	322.6	322.6	322.6	322.6	322.6		

Values in Brown Shaded Boxes Can be Changed

Notes: (1) Consensus for Growth rates (3) 3177 Narrowbodies in Service as of 1 Jan 2023, 3482 Including Parked - Cirium Data

Sources: Cirium, Civil Aviation Administration of China, Stats (CAACS), Bloomberg Intelligence

Rates are Higher

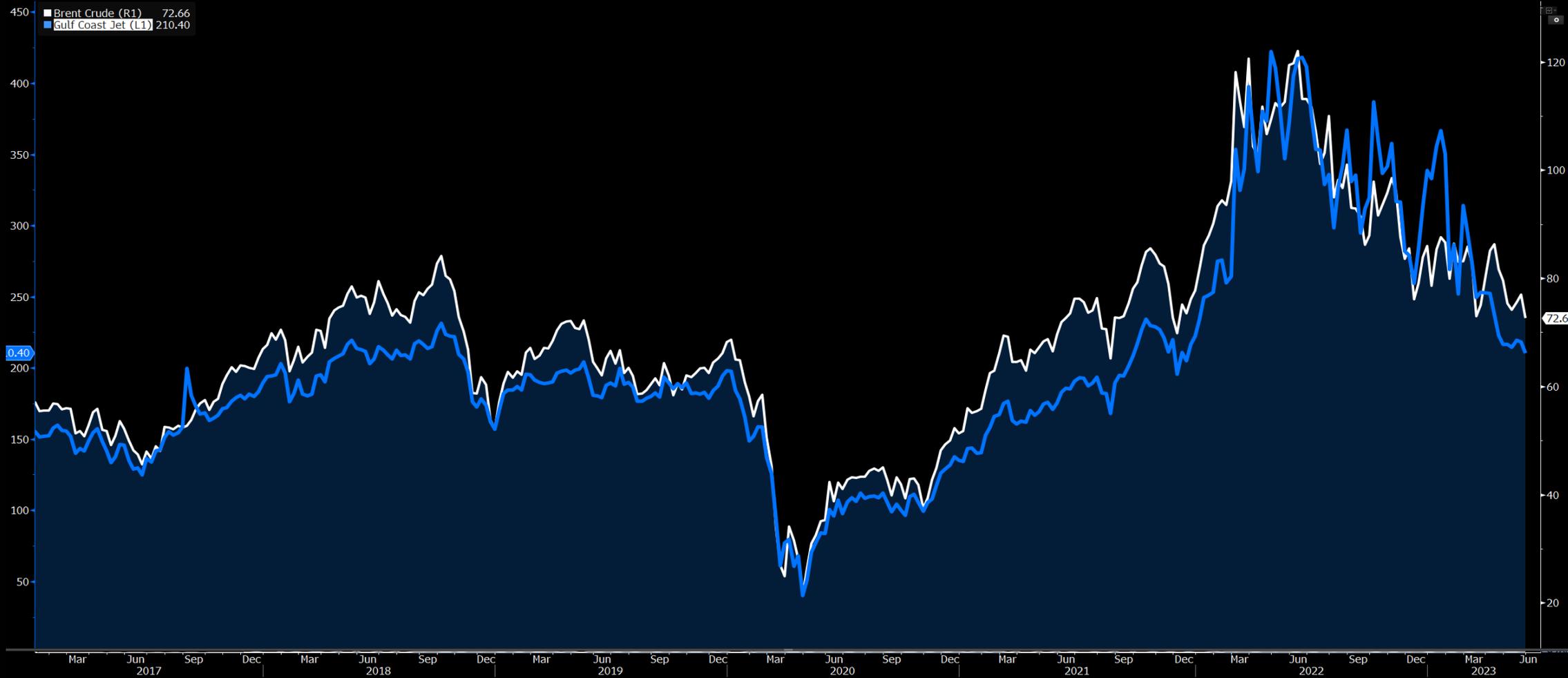
Airlines Dashboard (BI AIRLN) **North America** ☆

- Research
- Dashboard Ho...
- Industry
- Equity
- Litigation
- Data Library
- Market Share
- Macro
- Industry
- Company
- Analyzer
- Valuation
- Cost Analysis
- Airline Traffic
- EETC**
- Contributors
- Monitor
- News/Research
- Events
- Comp Sheets
- Markets

By Year		By Company		Oriel Aircraft Values		Cirium Aircraft Values						
2022-2012 Tranches		Pre-2012		A-Tranches		Sub-Tranches						
Name	Series	Coupon	Maturity Date	Amount Issued	Amount Outstand...	Price (mid)	Yield to Maturity	Yield to Worst	Z-Spread (Mid)	S&P Rating	Moody's Rating	
EETC Issuance by Year												
▼ 2021 Issuance (Avg.)												
▼ Senior Tranches												
AMER AIRLINE 2021-1A	A	2.875	07/11/34	757.83M	737.51M	83.41	4.81	5.70	323.98	A-	Baa1	
▼ Sub Tranches												
AMER AIRLINE 2021-1B	B	3.950	07/11/30	202.06M	192.97M	81.00	7.42	9.30	758.53	BB+	Baa3	
UNITED 2020-1 B		4.875	01/15/26	600.00M	411.00M	96.06	6.50	7.31	374.54	BBB+	Baa2	
▼ 2020 Issuance (Avg.)												
▼ Senior Tranches												
UNITED 2020-1A	20-1	5.875	10/15/27	3.00B	2.16B	99.41	6.03	6.13	230.92	A+	A3	
AIR CANADA 2020-2A	144A	5.250	04/01/29	452.62M	310.38M	97.66	5.72	5.96	260.85	A		
JETBLUE 2020-1A	1A	4.000	11/15/32	635.46M	531.51M	92.10	5.06	5.59	268.49		A2	
FEDEX 2020-1 AA PPT		1.875	02/20/34	970.00M	840.33M	82.91	3.83	4.82	244.33	AA-	Aa3	
HAWAIIAN 2020-1 A PPT	REGS	7.375	09/15/27	216.98M	0.00							
ALASKA AIR 2020-1 A PTT	144A	4.800	08/15/27	965.77M	776.51M			5.63		A+		
DELTA AIR LINES 2020-1 AA PTT	AA	2.000	06/10/28	795.89M	676.92M	88.62	4.54	5.40	255.32	A+	A1	
DELTA AIR LINES 2020-1 A PTT	A	2.500	06/10/28	204.11M	158.00M	86.88	5.50	7.03	479.64	BBB	A3	
▼ Sub Tranches												
AIR CANADA 2020-2B	REGS	9.000	10/01/25	100.00M	55.68M	102.47	7.83	7.35	260.50	BBB+		
JETBLUE 2020-1 B PTT	1B	7.750	11/15/28	172.33M	127.38M	99.79	7.80	7.82	420.22		Baa2	
HAWAIIAN 2020-1 B PPT	144A	11.250	09/15/25	45.01M	0.00							
AIR CANADA 2020-1C		10.500	07/15/26	315.78M	315.78M	106.65	8.07	8.07	449.64	B+	Ba3	
ALASKA AIR 2020-1 B PTT	144A	8.000	08/15/25	208.15M	114.32M	101.82	7.10	6.69	191.24	BBB		
▼ 2019 Issuance (Avg.)												
▼ Senior Tranches												
AMER AIRLINE 2019-1 AA PTT	AA	3.150	02/15/32	578.71M	484.55M	86.75	5.04	5.79	316.54	A-	Baa1	
AMER AIRLINE 2019-1 A PTT	A	3.500	02/15/32	289.36M	242.28M	81.50	6.28	7.40	513.68	BB+	Baa3	
DELTA AIR LINES 2019-1 AA PTT	AA	3.204	04/25/24	425.00M	425.00M	97.57	5.90	5.90	109.68		A1	
DELTA AIR LINES 2019-1 A PTT	A	3.404	04/25/24	75.00M	75.00M	97.77	5.88	5.88	107.74		A3	
JETBLUE 2019-1 AA PTT	2019	2.750	05/15/32	588.68M	495.37M	84.17	4.95	5.68	307.72		A2	
JETBLUE 2019-1 A PTT	2019	2.950	05/15/28	183.57M	154.47M	85.83	6.30	6.82	394.17		Baa1	
UNITED AIR 2019-1 AA PTT	AA	4.150	08/25/31	716.62M	537.53M	91.85	5.38	5.78	283.39		A2	
UNITED AIR 2019-1 A PTT	A	4.550	08/25/31	296.44M	222.64M	95.41	5.24	5.46	233.68		Baa1	
UNITED AIR 2019-2 AA PTT	AA	2.700	05/01/32	702.15M	603.14M	85.65	4.68	5.36	269.58		A2	
UNITED AIR 2019-2 A PTT	A	2.900	05/01/28	286.72M	244.65M	84.12	6.72	7.35	457.36		Baa1	

Source: Bloomberg market data

Fuel is Higher Too, But Falling



Source: Bloomberg market data

Air Lease Debt Costs

Aerospace & Defense Dashboard (BI AER0G) Global ☆

- Research
- Dashboard Ho...
- Industry
- Equity
- Credit
- Litigation
- Data Library
- Market Share
- Macro
- Industry
- Company
- Analyzer
- Valuation
- Credit
- Lessors
- Contributors
- Monitor
- News/Research
- Events
- Comp Sheets
- Markets

Key Indicators		Ascend Lease Returns Index		Key Data		Debt		Backlogs				
Overview	Air Lease By Issuance	Air Lease By Maturity	AerCap By Issuance	AerCap By Maturity								
Name	Coupon	Amount Outstand...	Currency	Price (mid)	Gov't YTM Spread	Yield to Maturity	Issue Date	Amount Issued	Maturity Type	Yield to Worst	Z-Spread (Mid)	R
▼ Air Lease Corp												
▼ Outstanding By Maturity												
▼ Maturity in 2023												
01/15/2023	2.750	0.00 USD					11/20/17	600.00M	CALLABLE			NR
01/15/2023	2.250	0.00 USD					09/16/19	600.00M	AT MATURI			NR
07/03/2023	3.875	500.00M USD		99.76	46.25	5.61	06/18/18	500.00M	CALLABLE	5.61	43.10	BBB
09/15/2023	3.000	750.00M USD		99.07	70.46	5.83	08/15/16	750.00M	CALLABLE	5.83	61.33	BBB
▼ Maturity in 2024												
02/01/2024	4.250	700.00M USD		98.93	91.79	5.81	01/23/19	700.00M	CALLABLE	5.81	80.98	BBB
02/15/2024	0.700	750.00M USD		96.30	97.22	5.83	01/26/21	750.00M	CALLABLE	5.83	86.93	BBB
08/18/2024	0.800	600.00M USD		94.12	126.58	5.72	08/18/21	600.00M	CALLABLE	5.72	127.47	BBB
09/15/2024	4.250	500.00M USD		98.24	124.29	5.64	09/16/14	500.00M	CALLABLE	5.64	123.85	BBB
12/05/2024	2.625	400.00M CAD		95.59	167.55	5.62	12/05/19	400.00M	CALLABLE	5.62	112.78	BBB
▼ Maturity in 2025												
02/01/2025	2.300	750.00M USD		94.87	139.54	5.49	01/14/20	750.00M	CALLABLE	5.49	137.18	BBB
03/01/2025	3.250	700.00M USD		95.66	180.21	5.83	01/16/18	700.00M	CALLABLE	5.83	178.08	BBB
07/01/2025	3.375	850.00M USD		95.68	170.88	5.55	06/24/20	850.00M	CALLABLE	5.55	168.64	BBB
▼ Maturity in 2026												
01/15/2026	2.875	1.45B USD		92.62	223.68	5.91	08/17/20	1.45B	CALLABLE	5.91	225.68	BBB
06/01/2026	3.750	750.00M USD		95.10	196.36	5.52	05/23/19	750.00M	CALLABLE	5.52	197.62	BBB
08/15/2026	1.875	1.20B USD		88.73	219.04	5.73	05/24/21	1.20B	CALLABLE	5.73	224.42	BBB
▼ Maturity in 2027												
01/15/2027	2.200	750.00M USD		89.08	204.08	5.53	01/12/22	750.00M	CALLABLE	5.53	212.87	BBB
04/01/2027	3.625	500.00M USD		93.56	202.01	5.49	03/08/17	500.00M	CALLABLE	5.49	211.18	BBB
12/01/2027	3.625	500.00M USD		92.04	223.51	5.64	11/20/17	500.00M	CALLABLE	5.64	233.15	BBB
12/15/2027	5.850	700.00M USD		100.68	228.23	5.68	12/05/22	700.00M	CALLABLE	5.68	235.12	BBB
▼ Maturity in 2028												
02/01/2028	5.300	700.00M USD		98.70	223.23	5.61	01/13/23	700.00M	CALLABLE	5.61	231.02	BBB
09/01/2028	2.100	500.00M USD		83.25	246.48	5.82	08/18/21	500.00M	CALLABLE	5.82	258.37	BBB
10/01/2028	4.625	500.00M USD		95.14	232.74	5.69	09/17/18	500.00M	CALLABLE	5.69	243.03	BBB
▼ Maturity in 2029												
10/01/2029	3.250	500.00M USD		86.44	246.31	5.83	09/16/19	500.00M	CALLABLE	5.83	261.67	BBB

Source: Bloomberg market data

AerCap Debt Costs

Aerospace & Defense Dashboard (BI AEROG) Global ☆

- Research
 - Dashboard Ho...
 - Industry
 - Equity
 - Credit
 - Litigation
- Data Library
 - Market Share
 - Macro
 - Industry
 - Company
 - Analyzer
 - Valuation
 - Credit
 - Lessors
 - Contributors
- Monitor
 - News/Research
 - Events
 - Comp Sheets
 - Markets

Key Indicators		Ascend Lease Returns Index		Key Data		Debt		Backlogs					
Overview		Air Lease By Issuance		Air Lease By Maturity		AerCap By Issuance		AerCap By Maturity					
Name	Coupon	Amount Outstand...	Currency	Price (mid)	Gov't YTM Spread	Yield to Maturity	Issue Date	Amount Issued	Maturity... Type	Yield to Worst	Z-Spread (Mid)	S&P Rating	Mood Rat
AerCap													
Outstanding By Maturity													
Maturity in 2023													
01/23/2023	3.300	0.00	USD				01/23/18	600.00M	CALLABLE			NR	WR
07/03/2023	4.125	0.00	USD				06/12/18	600.00M	CALLABLE			NR	WR
09/15/2023	4.500	1.25B	USD	99.59	58.99	5.71	07/02/20	1.25B	CALLABLE	5.71	49.89	BBB	Baa2
09/29/2023	5.664	500.00M	USD	99.68		6.60	10/29/21	500.00M	AT MATURI	6.60	154.75	BBB	Baa2
10/29/2023	1.150	1.75B	USD	97.92	78.29	5.87	10/29/21	1.75B	AT MATURI	5.87	72.78	BBB	Baa2
Maturity in 2024													
01/16/2024	4.875	900.00M	USD	99.39	88.95	5.82	01/16/19	900.00M	CALLABLE	5.82	79.35	BBB	Baa2
02/15/2024	3.150	900.00M	USD	97.92	116.94	6.03	09/25/20	900.00M	CALLABLE	6.03	106.29	BBB	Baa2
08/14/2024	2.875	750.00M	USD	96.24	159.31	6.06	08/14/19	750.00M	CALLABLE	6.06	159.44	BBB	Baa2
10/29/2024	1.650	3.25B	USD	93.68	197.32	6.27	10/29/21	3.25B	CALLABLE	6.27	197.08	BBB	Baa2
10/29/2024	1.750	1.00B	USD	94.16	170.81	6.01	10/29/21	1.00B	CALLABLE	6.01	170.54	BBB	Baa2
Maturity in 2025													
01/15/2025	3.500	800.00M	USD	96.20	179.99	5.93	11/21/17	800.00M	CALLABLE	5.93	177.85	BBB	Baa2
07/15/2025	6.500	1.25B	USD	100.75	228.89	6.12	06/08/20	1.25B	CALLABLE	6.11	220.19	BBB	Baa2
10/01/2025	4.450	600.00M	USD	96.84	213.08	5.89	08/21/18	600.00M	CALLABLE	5.89	213.10	BBB	Baa2
Maturity in 2026													
01/30/2026	1.750	1.00B	USD	89.84	220.97	5.87	01/13/21	1.00B	CALLABLE	5.87	223.74	BBB	Baa2
04/03/2026	4.450	500.00M	USD	96.60	214.42	5.74	04/03/19	500.00M	CALLABLE	5.74	215.20	BBB	Baa2
10/29/2026	2.450	3.75B	USD	89.57	231.26	5.83	10/29/21	3.75B	CALLABLE	5.83	238.29	BBB	Baa2
Maturity in 2027													
07/21/2027	3.650	1.00B	USD	92.77	217.43	5.61	07/21/17	1.00B	CALLABLE	5.61	227.29	BBB	Baa2
10/15/2027	4.625	600.00M	USD	95.74	231.71	5.73	09/25/20	600.00M	CALLABLE	5.73	240.60	BBB	Baa2
Maturity in 2028													
01/23/2028	3.875	550.00M	USD	92.49	233.92	5.72	01/23/18	550.00M	CALLABLE	5.72	242.93	BBB	Baa2
10/29/2028	3.000	3.75B	USD	87.24	240.16	5.76	10/29/21	3.75B	CALLABLE	5.76	252.11	BBB	Baa2
Maturity in 2032													
01/30/2032	3.300	4.00B	USD	81.60	267.14	6.05	10/29/21	4.00B	CALLABLE	6.05	285.92	BBB	Baa2
Maturity in 2033													
10/29/2033	3.400	1.50B	USD	79.34	269.53	6.10	10/29/21	1.50B	CALLABLE	6.10	290.04	BBB	Baa2

Source: Bloomberg market data

Lessor Return Model - \$350k, 3% Debt

Bloomberg Intelligence : Lessors Returns Scenario Analysis

Aircraft Purchase Price (USD, million)	\$ 51.90
Resale Value as a % of Purchase Price	61%
Resale Value (\$mm)	\$ 31.40
Lease Rate (\$ '000s/month)	\$ 350
Maintenance Reserve (\$ '000s/month)	\$ -
SG&A and Leasing Expense (\$ '000s/month)	\$ 32
Interest Rate on Debt	3%
Asset Financed by Debt at %	80%
Financed Amount (USD, million)	\$ 41.52
Weighted Average Cost of Capital (WACC)	8%

Sample values provided by IBA:

Model	Engine	MTOW	CMV	CMLR	12Yr HLMV	12Yr FLMV	Maintenance
A320N	Leap-1A26	78,000 Kg	51.9	0.325	21.95	31.3	0.177
A321NX	Leap-1A33	93,500 Kg	60.8	0.373	25.7	35.35	0.217
A321NX(LR)	PW1135G	97,000 Kg	64	0.393	28.35	35.65	0.199
737 Max 8	Leap-1B27	182,200 lb	50.7	0.317	21.85	31.15	0.165
737 Max 9	Leap-1B28	187,700 lb	52.6	0.325	22.75	30.1	0.180
Average			56.0	0.347	24.12	32.71	0.188

CMV: Current Market Value (in USD, million); CMLR: Current Market Lease Rate (in USD, million, monthly)

12Yr HLMV: Average Half Life Value; 12Yr FLMV: Average Full Life Value

Maintenance Reserve in USD, million, per month

	Year													
	0	1	2	3	4	5	6	7	8	9	10	11	12	Total
Lease Income		4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	50,400,000
Maintenance Reserve		-	-	-	-	-	-	-	-	-	-	-	-	-
Financing Cost		(1,245,600)	(1,245,600)	(1,245,600)	(1,245,600)	(1,245,600)	(1,245,600)	(1,245,600)	(1,245,600)	(1,245,600)	(1,245,600)	(1,245,600)	(1,245,600)	(14,947,200)
SG&A, Leasing Expenses and Other Operating Costs		(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(4,608,000)
Cash Contribution from Asset		2,570,400	2,570,400	2,570,400	2,570,400	2,570,400	2,570,400	2,570,400	2,570,400	2,570,400	2,570,400	2,570,400	2,570,400	30,844,800
Acquisition / Resale Cash Flows	(51,900,000)													31,399,500
Aircraft Remarketing / Reconfiguration								(1,200,000)						(9,100,000)
Cash Flows	(51,900,000)	2,570,400	2,570,400	2,570,400	2,570,400	2,570,400	2,570,400	1,370,400	2,570,400	2,570,400	2,570,400	2,570,400	24,869,900	
Present Value Cash Flow at WACC	(51,900,000)	2,380,000	2,203,704	2,040,466	1,889,321	1,749,371	1,619,788	799,615	1,388,707	1,285,840	1,190,593	1,102,401	9,876,179	
Total Present Value (sum of PV cash flows) at 8.0%	(24,374,015)													
Internal Rate of Return (IRR)		0.0%												

Source: Bloomberg Intelligence, IBA

Values in Brown Shaded Boxes Can be Changed

Lessor Return Model - \$420k to parity

Bloomberg Intelligence : Lessors Returns Scenario Analysis

Aircraft Purchase Price (USD, million)	\$ 51.90
Resale Value as a % of Purchase Price	61%
Resale Value (\$mm)	\$ 31.40
Lease Rate (\$ '000s/month)	\$ 420
Maintenance Reserve (\$ '000s/month)	\$ -
SG&A and Leasing Expense (\$ '000s/month)	\$ 32
Interest Rate on Debt	5%
Asset Financed by Debt at %	80%
Financed Amount (USD, million)	\$ 41.52
Weighted Average Cost of Capital (WACC)	10%

Sample values provided by IBA:

Model	Engine	MTOW	CMV	CMLR	12Yr HLMV	12Yr FLMV	Maintenance
A320N	Leap-1A26	78,000 Kg	51.9	0.325	21.95	31.3	0.177
A321NX	Leap-1A33	93,500 Kg	60.8	0.373	25.7	35.35	0.217
A321NX(LR)	PW1135G	97,000 Kg	64	0.393	28.35	35.65	0.199
737 Max 8	Leap-1B27	182,200 lb	50.7	0.317	21.85	31.15	0.165
737 Max 9	Leap-1B28	187,700 lb	52.6	0.325	22.75	30.1	0.180
Average			56.0	0.347	24.12	32.71	0.188

CMV: Current Market Value (in USD, million); CMLR: Current Market Lease Rate (in USD, million, monthly)

12Yr HLMV: Average Half Life Value; 12Yr FLMV: Average Full Life Value

Maintenance Reserve in USD, million, per month

	Year													Total
	0	1	2	3	4	5	6	7	8	9	10	11	12	
Lease Income		5,040,000	5,040,000	5,040,000	5,040,000	5,040,000	5,040,000	5,040,000	5,040,000	5,040,000	5,040,000	5,040,000	5,040,000	60,480,000
Maintenance Reserve		-	-	-	-	-	-	-	-	-	-	-	-	-
Financing Cost		(2,076,000)	(2,076,000)	(2,076,000)	(2,076,000)	(2,076,000)	(2,076,000)	(2,076,000)	(2,076,000)	(2,076,000)	(2,076,000)	(2,076,000)	(2,076,000)	(24,912,000)
SG&A, Leasing Expenses and Other Operating Costs		(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(384,000)	(4,608,000)
Cash Contribution from Asset		2,580,000	2,580,000	2,580,000	2,580,000	2,580,000	2,580,000	2,580,000	2,580,000	2,580,000	2,580,000	2,580,000	2,580,000	30,960,000
Acquisition / Resale Cash Flows	(51,900,000)													31,399,500
Aircraft Remarketing / Reconfiguration								(1,200,000)						(9,100,000)
Cash Flows	(51,900,000)	2,580,000	2,580,000	2,580,000	2,580,000	2,580,000	2,580,000	1,380,000	2,580,000	2,580,000	2,580,000	2,580,000	24,879,500	
Present Value Cash Flow at WACC	(51,900,000)	2,345,455	2,132,231	1,938,392	1,762,175	1,601,977	1,456,343	708,158	1,203,589	1,094,172	994,702	904,274	7,927,375	
Total Present Value (sum of PV cash flows) at 10.0%	(27,831,157)													
Internal Rate of Return (IRR)	0.0%													

Source: Bloomberg Intelligence, IBA

Values in Brown Shaded Boxes Can be Changed

Q&A

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