

Parked Fleet Update

Parked competitive fleet at 11.2%; parked freighters remain near recent highs

Industry Overview

Parked competitive fleet at 11.2%, versus 5.1% in 2019

As of 14 February 2024, the parked competitive fleet was 11.2% of total fleet, still significantly above 2019 pre-pandemic levels of 5.1%. We see significant improvement from mid-April 2020 peak of 61.7%, and since Feb 2023 of 15.6%. While the negative impacts from the pandemic were softer on freighters vs. the passenger fleet, parked freighters have increased considerably in recent months. Parked freighter fleet was 16.7% of total freighter fleet as of February 2024 vs. 12.6% at the beginning of 2023.

Parked narrowbodies at 8.4%, versus 2.8% in 2019

The parked narrowbody fleet was 8.4%, down 3.2ppt Y/Y and 54.2ppt below April 2020 peak of 62.6%, but above 2019 levels of 2.8%. Narrowbodies continue to experience a faster recovery than widebodies, as domestic travel has already demonstrated that it will return sooner and faster than international travel.

Parked widebodies at 12.0%, versus 6.3% in 2019

The parked widebody fleet was 12.0%, above 2019 levels of 6.3%, but 50ppt below April 2020 record of 61.6%. Widebody parked fleet levels remain under pressure driven by continued international travel and border restrictions as well as increasing recession risks. However, we have seen modest improvement since the beginning of 2022, from 1,376 parked aircrafts to 725 in February 2024. Additionally, we note that although Boeing 787 parked levels are higher than pre pandemic, they remain lower than other WB driven by its flexibility even for domestic operations.

Parked 70-120 seaters at 13.4%, versus 4.9% in 2019

The parked regional jets fleet was 13.4%, above 2019 levels of 4.9%, but down 4.8ppt Y/Y and 42.3ppt below April 2020 peak of 55.7%. Prior to COVID-19, the 70-120 seater competitive parked fleet was trending to 7% levels after bottoming in Sep 2018 (3%).

Oversupply? - Parked freighters at 16.7%, up 1.7ppt Y/Y

The parked freighters fleet was 16.7%, slightly below the last 10-year peak of 16.9% reached in 2023, up 1.7ppt Y/Y, 9.9ppt vs. 2019 levels and 7.6ppt since COVID peak in April 2020 of 9.1%. Parked freighter LTM average levels have exhibited a downward trend since April 2010 peak level of 24.4% but have increased in the last year. LTM parked freighters have now risen to 15.7% of total freighter fleet in February and increased from 175 to 456 parked aircraft since the beginning of 2022. As mentioned in our recent [note on parked freighters](#), we believe this implies slowing consumer demand and, more broadly, a slowdown in the global economy. We are increasingly worried that there is an oversupply of freighters in the market.

Full year 2023 aircraft retirements increased 15% Y/Y

Total 2023 retirements were 400, vs. 347 in 2022. As of 14 Feb 2024, there have been 26 retirements YTD. We note that airlines expect to retire an additional 194 aircraft in 2024, according to Cirium. See Exhibit 27.

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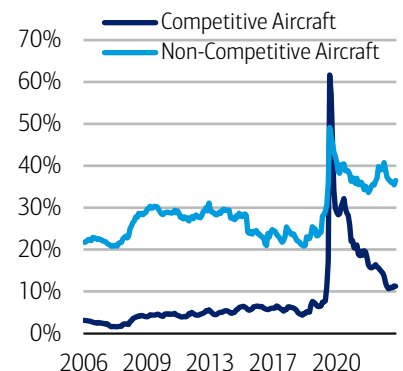
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Exhibit 1: Parked Fleet as of Total Fleet

Parked comp fleet was 11.2% of total fleet as of Feb 14, 2024

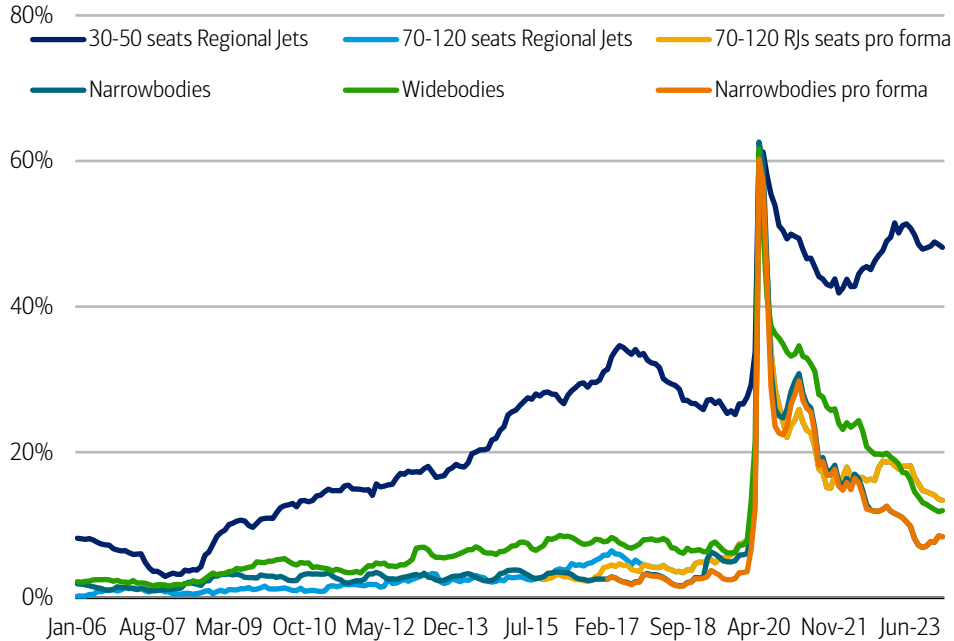


Source: BofA Global Research, Cirium
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Parked Competitive Jets

Exhibit 2: Parked Competitive Jets as of Total Fleet

Significant improvement from mid-April 2020 peak of 61.7%

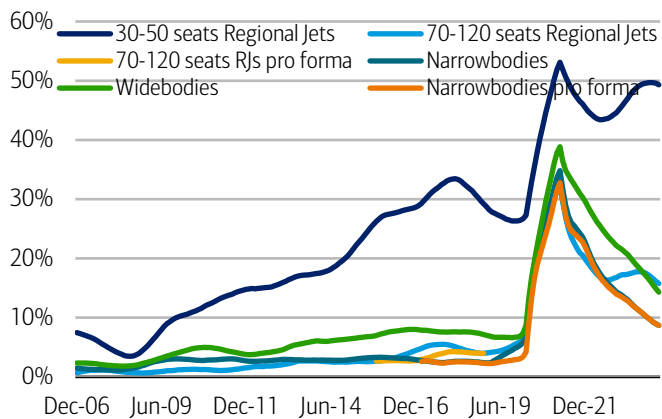


Source: BofA Global Research, Cirium

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Exhibit 3: Parked Competitive Jets as of Total Fleet

Narrowbodies showed faster recovery, LTM average

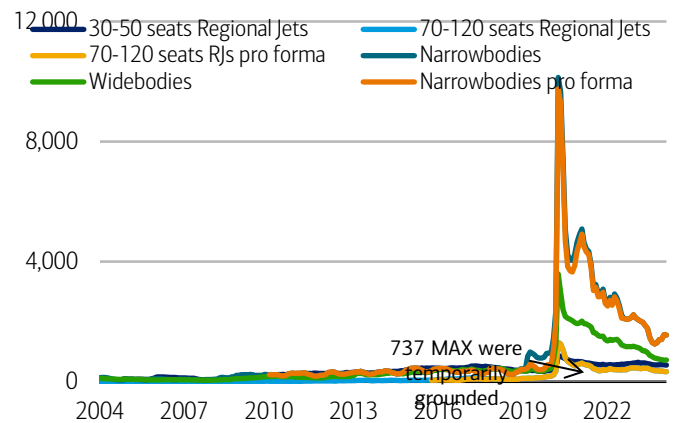


Source: BofA Global Research, Cirium

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Exhibit 4: Parked Competitive Jets

COVID impacts on parked aircraft levels are unprecedented



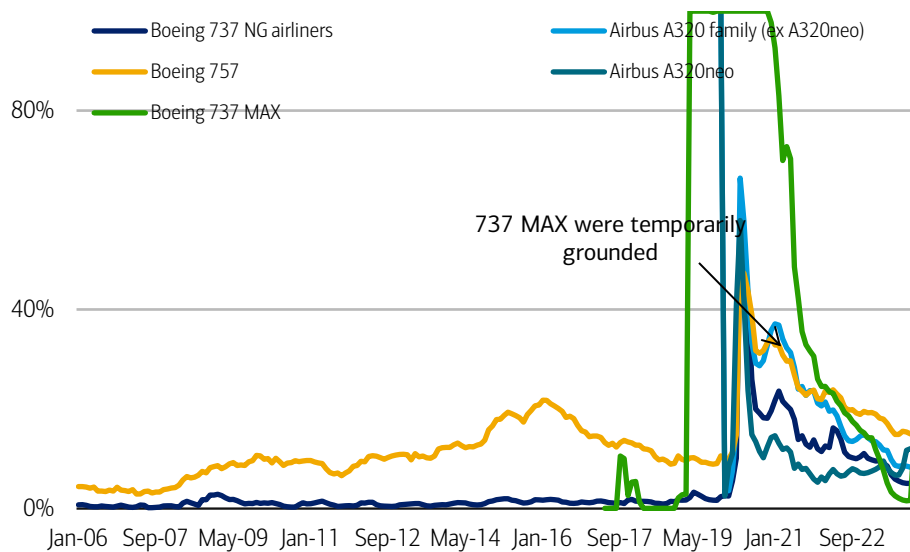
Source: BofA Global Research, Cirium

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Parked Narrowbodies

Exhibit 5: Parked Competitive Narrowbodies as of Total Fleet

The 737 MAX fleet is returning to service

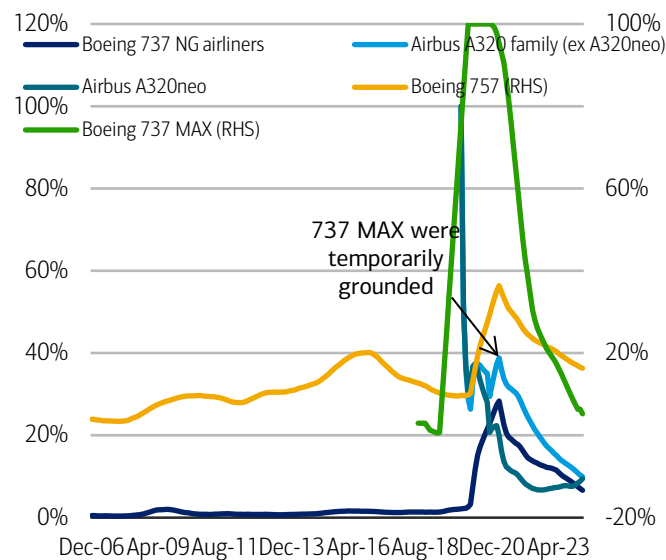


Source: BofA Global Research, Cirium

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Exhibit 6: Parked Competitive Narrowbodies as of Total Fleet

Parked narrowbody levels still higher than pre-COVID, LTM

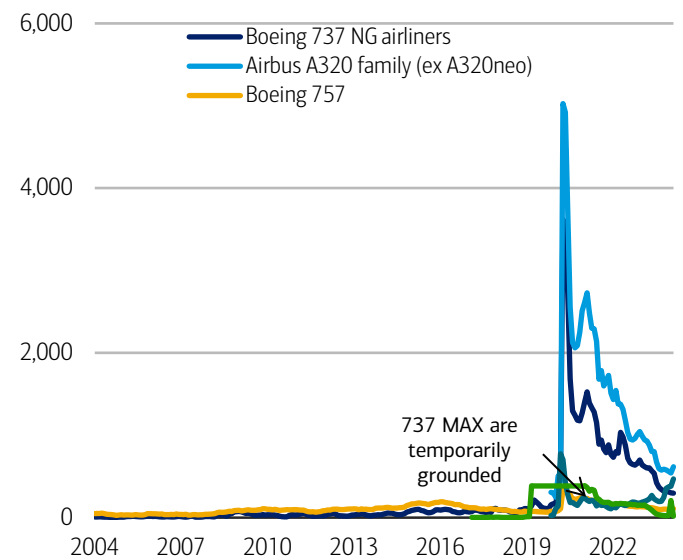


Source: BofA Global Research, Cirium

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Exhibit 7: Parked Competitive Narrowbodies

Parked NBs slightly increased in early 2021



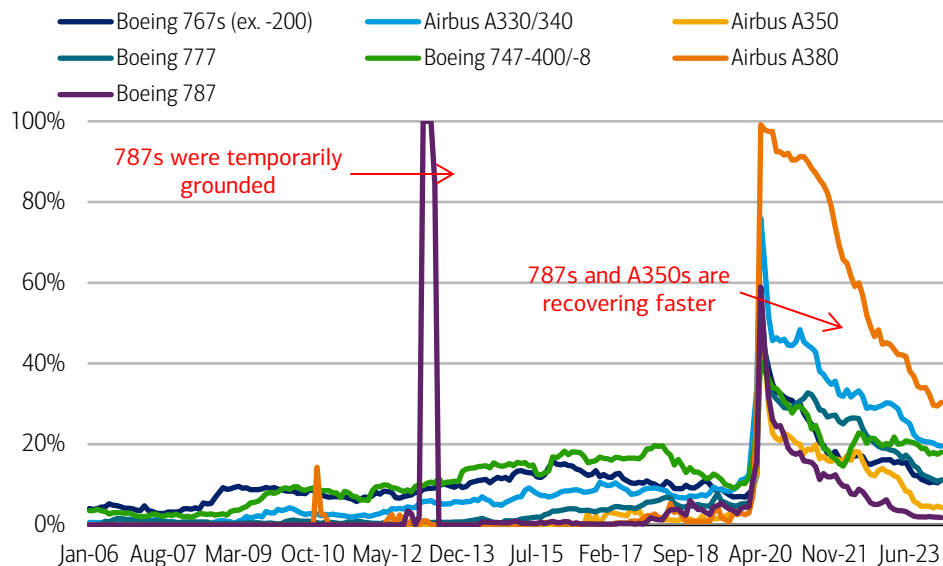
Source: BofA Global Research, Cirium

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Parked Widebodies

Exhibit 8: Parked Competitive Widebodies as of Total Fleet

Parked widebodies were 12.0%, versus 6.3% in 2019

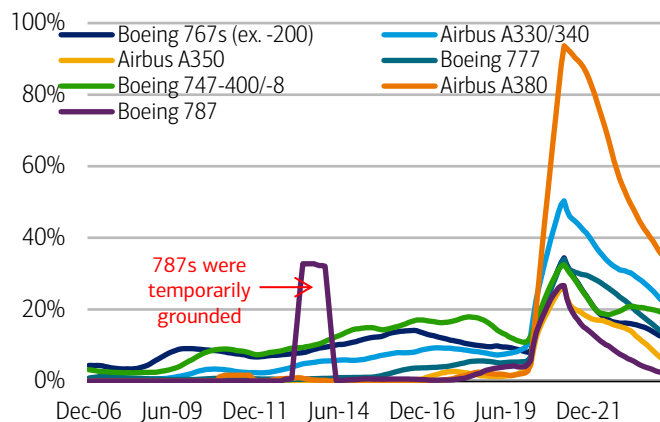


Source: BofA Global Research, Cirium

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Exhibit 9: Parked Competitive Widebodies as of Total Fleet

A380 shows slowest recovery, LTM average

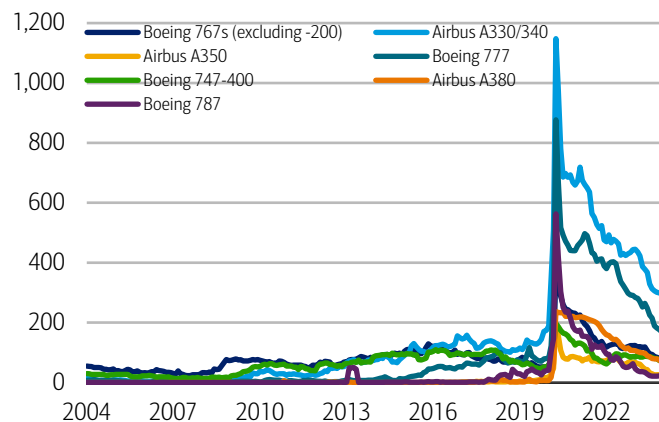


Source: BofA Global Research, Cirium

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Exhibit 10: Parked Competitive Widebodies

WBs remain under significant pressure



Source: BofA Global Research, Cirium

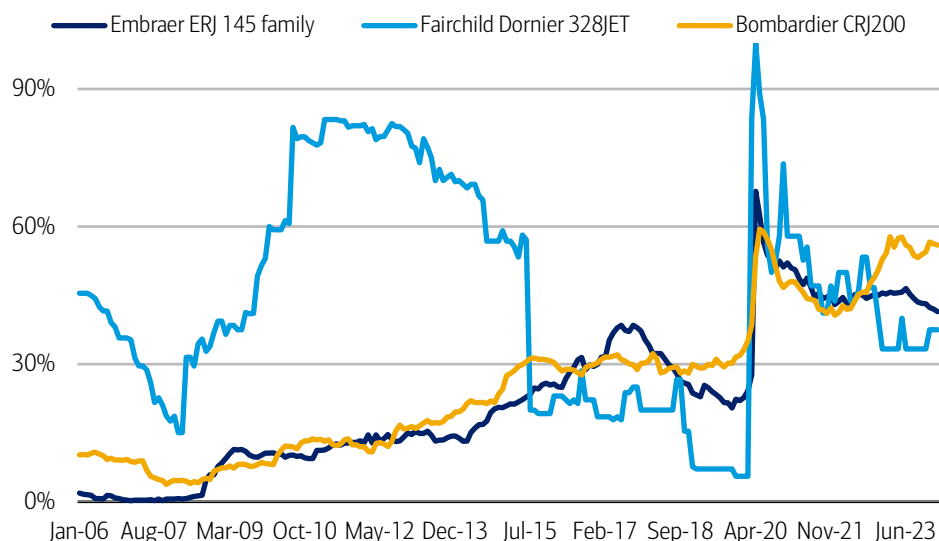
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Parked Regional Jets

Competitive 30-50 Seats Regional Jets

Exhibit 11: Parked Competitive 30-50 seats Regional Jets as of Total Fleet

Parked Competitive 30-to-50-seat Regional Jets were 49.3%, vs. 28.2% in 2019

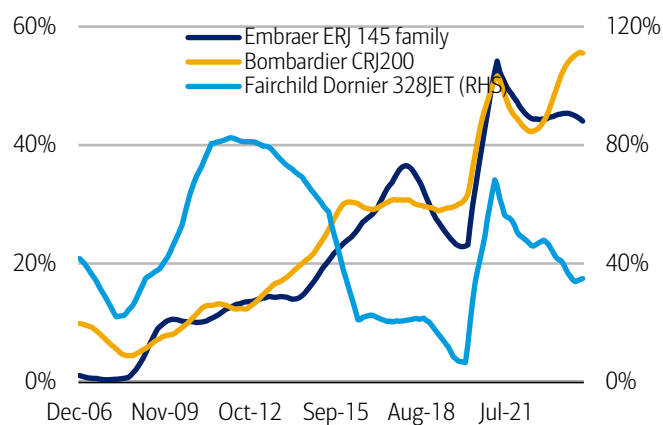


Source: BofA Global Research, Cirium

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Exhibit 12: Parked Competitive 30-50 seats Regional Jets as of Total Fleet

Parked ERJ 145 family and Bombardier CRJ200 show slower recovery after higher peak in mid-April 20

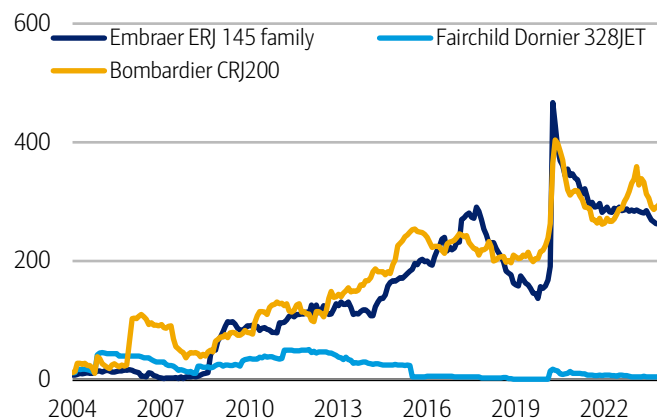


Source: BofA Global Research, Cirium

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Exhibit 13: Parked Competitive 30-50 seats Regional Jets

ERJ 145 and CRJ200 parked levels were already increasing prior to COVID



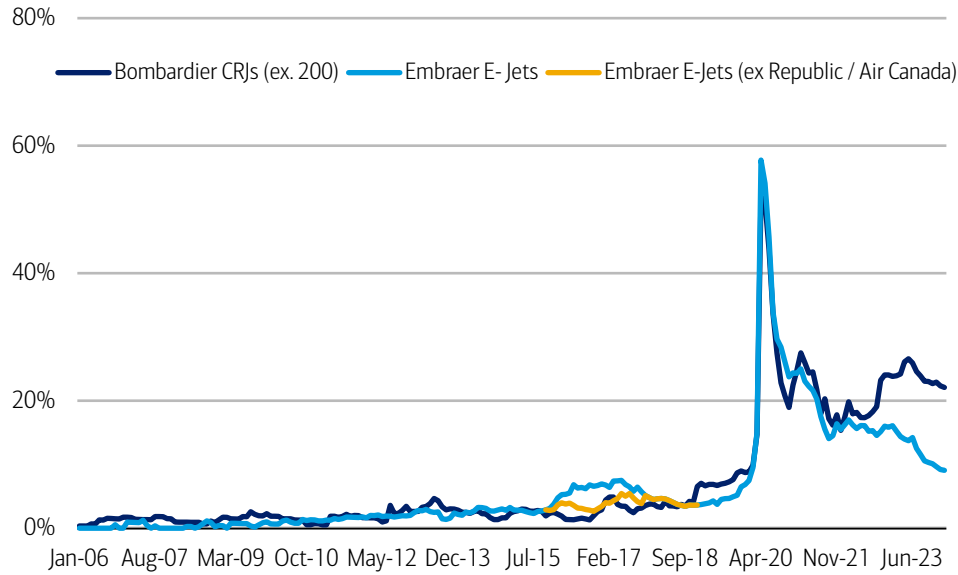
Source: BofA Global Research, Cirium

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Competitive 70-120 Seats Regional Jets

Exhibit 14: Parked Competitive 70-120 seats Regional Jets as of Total Fleet

Parked Regional Jets are significantly above pre-pandemic levels

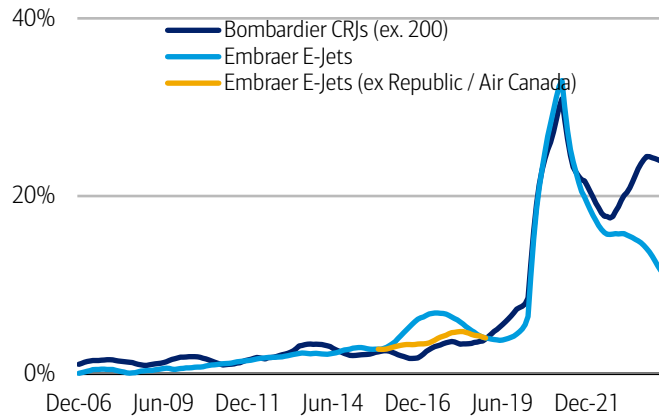


Source: BofA Global Research, Cirium

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Exhibit 15: Parked Competitive 70-120 seats Regional Jets as of Total Fleet

The 70-120-seat competitive parked fleet was trending to 7% levels prior to COVID

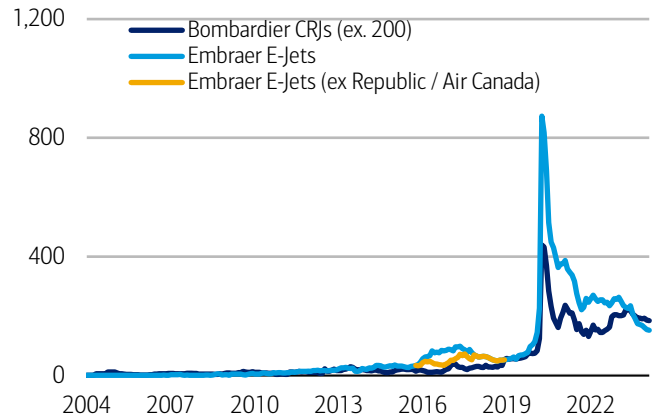


Source: BofA Global Research, Cirium

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Exhibit 16: Parked Competitive 70-120 seats Regional Jets

Parked RJ levels ticked-up in early 2021



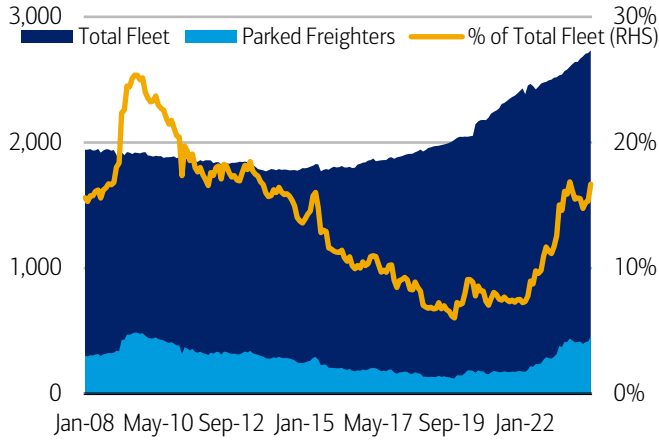
Source: BofA Global Research, Cirium

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Parked Freighters

Exhibit 17: Parked Freighters as of Total Fleet

Parked freighters fleet was 16.7% as of Feb 2024

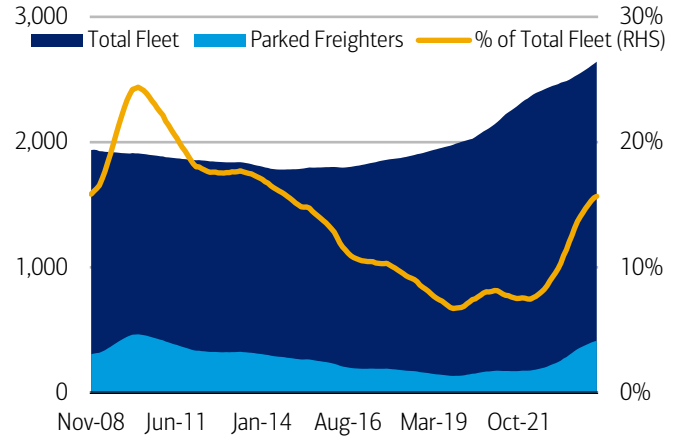


Source: BofA Global Research, Cirium

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Exhibit 18: Parked Freighters as of Total Fleet

Parked freighters fleet LTM average was 15.7% as of Feb 2024

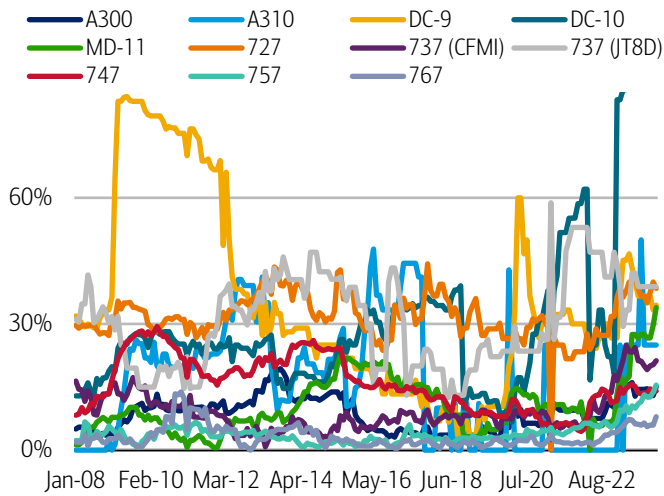


Source: BofA Global Research, Cirium

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Exhibit 19: Parked Freighters as of Total Fleet by Aircraft Type

DC-10 parked freighters increased M/M



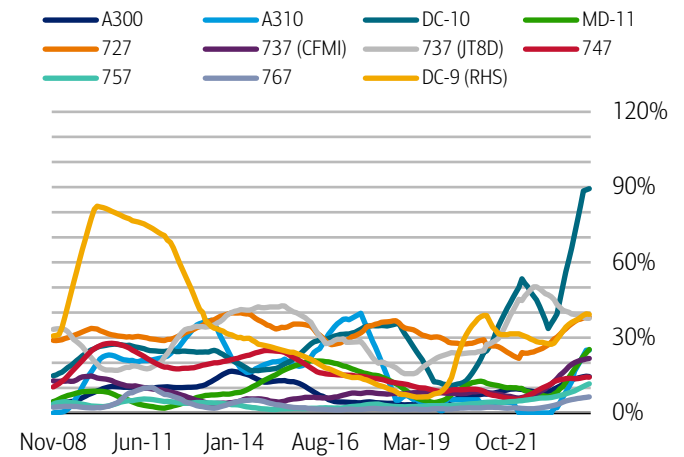
Source: BofA Global Research, Cirium

Note: Selected aircraft types

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Exhibit 20: Parked Freighters as of Total Fleet by Aircraft Type

LTM Parked DC-10 average was 89% as of Feb 24



Source: BofA Global Research, Cirium

Note: Selected aircraft types

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Parked fleet by region

Africa has the highest parked fleet levels as of Feb '24

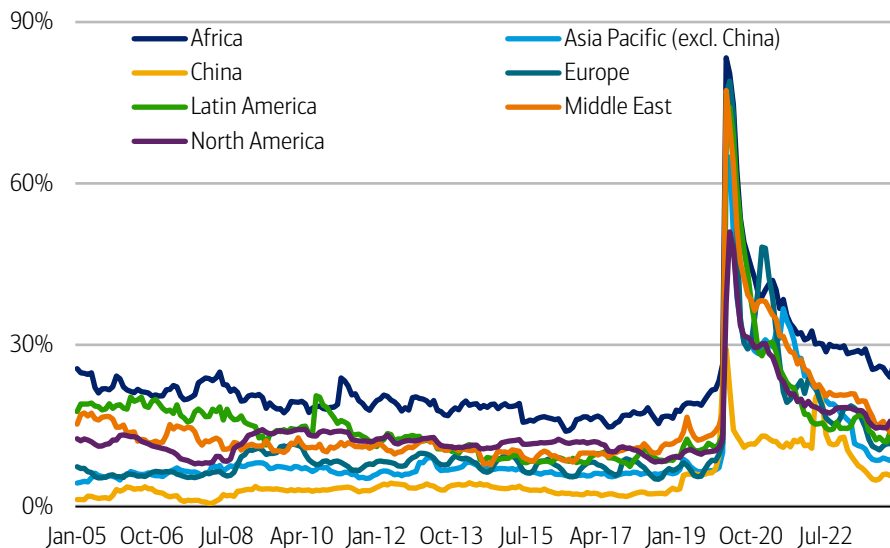
As of 14 February 2024, Africa's parked fleet was at 26.6%, the highest vs. other selected regions. Parked fleet levels in Africa peaked at 83.3% of total fleet in March 2020. According to Cirium, the least pressured region as of Feb 2024 was Asia Pacific (8.9% of total fleet).

As of February, China's parked fleet represented 5.5% of China's total fleet, down 4ppt Y/Y. Parked fleet levels in China peaked at 29.3% in March 2020 but quickly declined by May 2020 to 14.2%. As a point of comparison North America peaked at 51.0% in April 2020 and in May 2020 remained elevated at 47.6%. Every other region peaked above 65% in 2020. We note the percentage of China's fleet which is parked trailed the rest of the world by 8.6 percentage points on average from Jan 2005-Dec 2019. As of February, this was 7.4 percentage points. This is likely driven by the higher dependency on leased aircraft (i.e., lessors less likely to have parked aircraft and more likely to move aircraft around), the growth in China's economy with demand relatively outpacing supply of aircraft, and it can be also attributed to significant air traffic tailwinds from China.

Latin American parked fleet levels decreased from 14.4% at the beginning of 2023 to 12.8% in February 2024. Prior peak was in early 2021 (30.5% in April 2021) mainly due to the emergence of new virus variants. Parked aircraft levels are below the early 2020 peaks but remain well above historic levels. See Exhibit 21. As of February, North America's parked fleet as a percentage of total fleet was at 14.6% (vs. 51.0% peak in April 2020); while Europe (Excluding China) parked aircraft levels were at 12.8% (vs. 79% peak in April 2020).

Exhibit 21: Parked fleet as of total fleet by region

Africa has the highest parked fleet levels as of Feb 2024



Source: BofA Global Research, Cirium

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Aircraft retirements

2024 YTD: 26 retirements

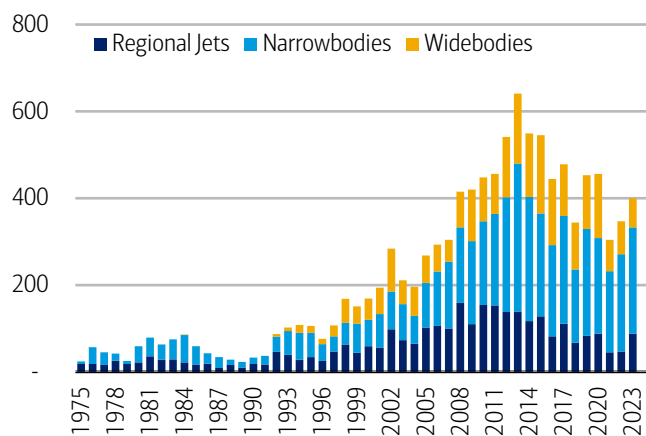
As of Feb 14, 2024, there have been 26 retirements YTD. We note that airlines expect to retire an additional 194 aircraft in 2024, according to Cirium. See Exhibit 27. Cirium accounts for retirements with a certain lag since most retirements are not reported immediately when occurred. Therefore, we would be cautious when making YTD Y/Y comparisons.

Full year 2023 aircraft retirements increased 15% Y/Y

In full year 2023, aircraft retirements increased 15% Y/Y to 400 from 347 aircraft in 2022 according to Cirium. The most significant retirements in 2023 included 125 A319/A320s, 92 737s, 29 A330/A340s, and 64 Bombardier CRJs. In the full year 2022, aircraft retirements increased 14% Y/Y to 347 from 304 aircraft in 2021.

Exhibit 22: Retirements by Aircraft Size

Aircraft retirements increased 15% Y/Y in 2023

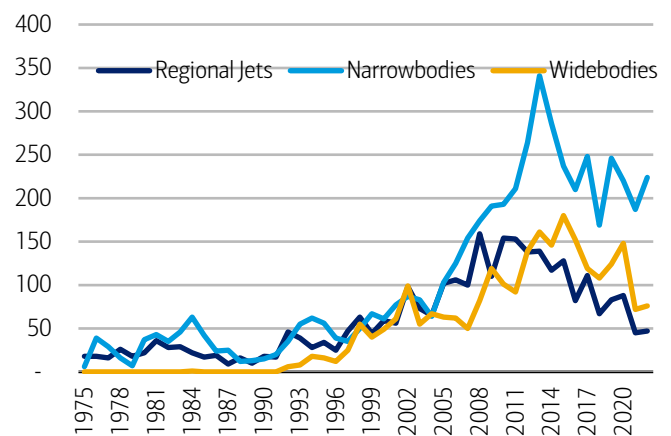


Source: BofA Global Research, Cirium

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Exhibit 23: Retirements by Aircraft Size

Retirements increased for NW and RJ, but declined for WB in '23

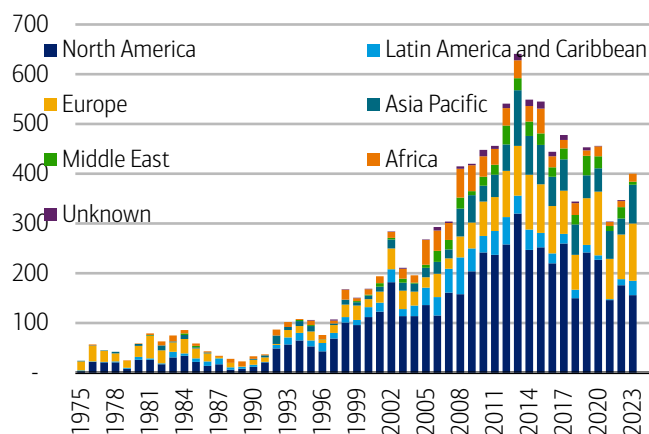


Source: BofA Global Research, Cirium

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Exhibit 24: Retirements by Region

400 aircraft were retired in 2022

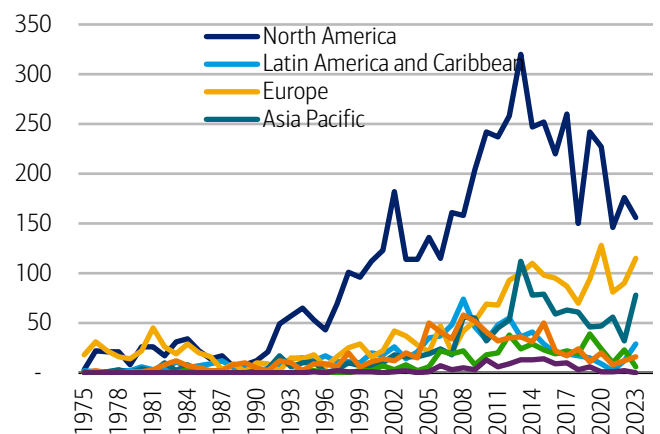


Source: BofA Global Research, Cirium

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Exhibit 25: Retirements by Region

North America had the highest retirements in 2023

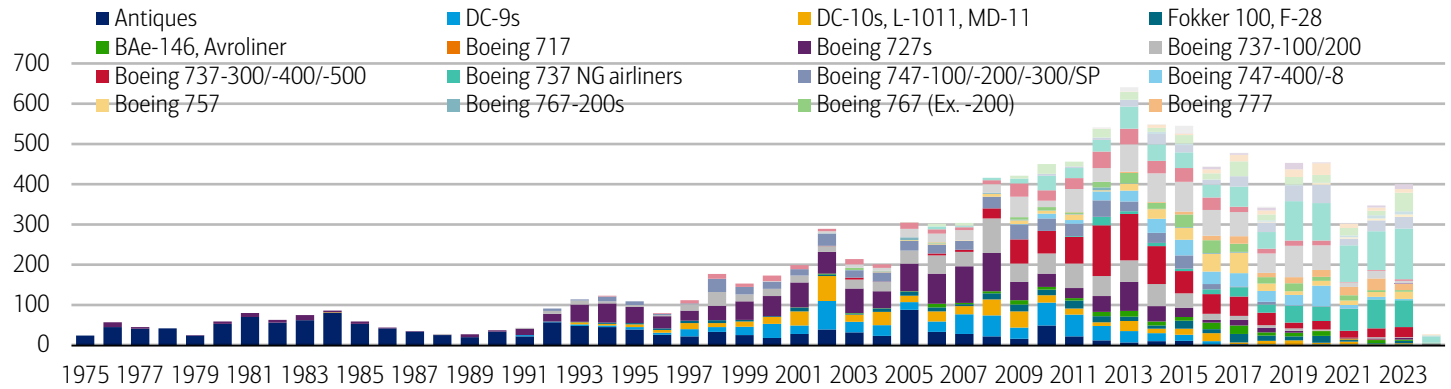


Source: BofA Global Research, Cirium

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Exhibit 26: Retirements by Aircraft Type

Retirements in 2024 YTD include 26 aircraft



Source: BofA Global Research, Cirium

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Exhibit 27: Retirements in 2024 and 2023 YTD

Operators retired 26 aircraft YTD, and plan 194 additional retirements in 2024

	Retirements 2024 YTD	Sch. to be retired in 2024	Total 2024	Retirements 2023 YTD
727		1	1	
747	1	5	6	1
757	1	4	5	9
767		6	6	
777		1	1	1
787				
737 (CFMI)	1	13	14	
737 (JT8D)				
737 NG	2	29	31	6
A300		1	1	
A310				
A318		2	2	1
A319	9	22	31	9
A320	5	41	46	8
A321	1	2	3	2
A330	2	9	11	
A340		4	4	2
A350				
A380				
Bae 146		2	2	
CRJ100/200	1	9	10	3
CRJ900/1000		4	4	
DC-9/10		2	2	
Dornier 328JET		4	4	
E170/190		5	5	
E-135		1	1	
ERJ-140	1	1	2	
ERJ-145	1		1	
Fokker F.28				
Fokker 100	1	3	4	
MD-11		11	11	
MD-80		11	11	2
MD-90				
RJ		1	1	1
Grand Total	26	194	220	45

Source: BofA Global Research, Cirium

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Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R1} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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