

**IBA**

# Global Market Outlook

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# Introduction – Market Outlook

- ▶ Narrowbody Outlook
- ▶ Retirements and Redeliveries
- ▶ Utilisation Trends
- ▶ Widebody Outlook

# Single Aisle Market

- ▶ Values expected to remain strong for newer types – strong demand remains for sale leaseback transactions supporting new delivery values
- ▶ Oil prices remain suppressed for now but how much longer will this remain the case? We are starting to see prices creeping up through this year.
- ▶ Lease rate factors continue to be squeezed, particularly at the newer end of the narrowbody market.
- ▶ Big year for retirements – over 100 American Airlines 737-300 and Southwest MD80s to exit through year end.
- ▶ Little premium in terms of lease rates for new generation single aisles compared with outgoing generation.
- ▶ We are seeing a greater push from Boeing to equalise the neo/MAX variance, which is manifesting through the first four months.
- ▶ Orders overall continue to show signs of slowdown - popular neo and MAX models have received orders, however not at the pace of recent years. MAX leads neo YTD 2017.
- ▶ Big year for new service entries; Boeing 737 MAX 8 and Airbus A321neo
- ▶ Opportunities for freight conversion of Boeing 737-800

## Trends

Sale & Leaseback Pricing

Sales with leases attached

Lease Rate Factors

Lease rates

OEM pricing

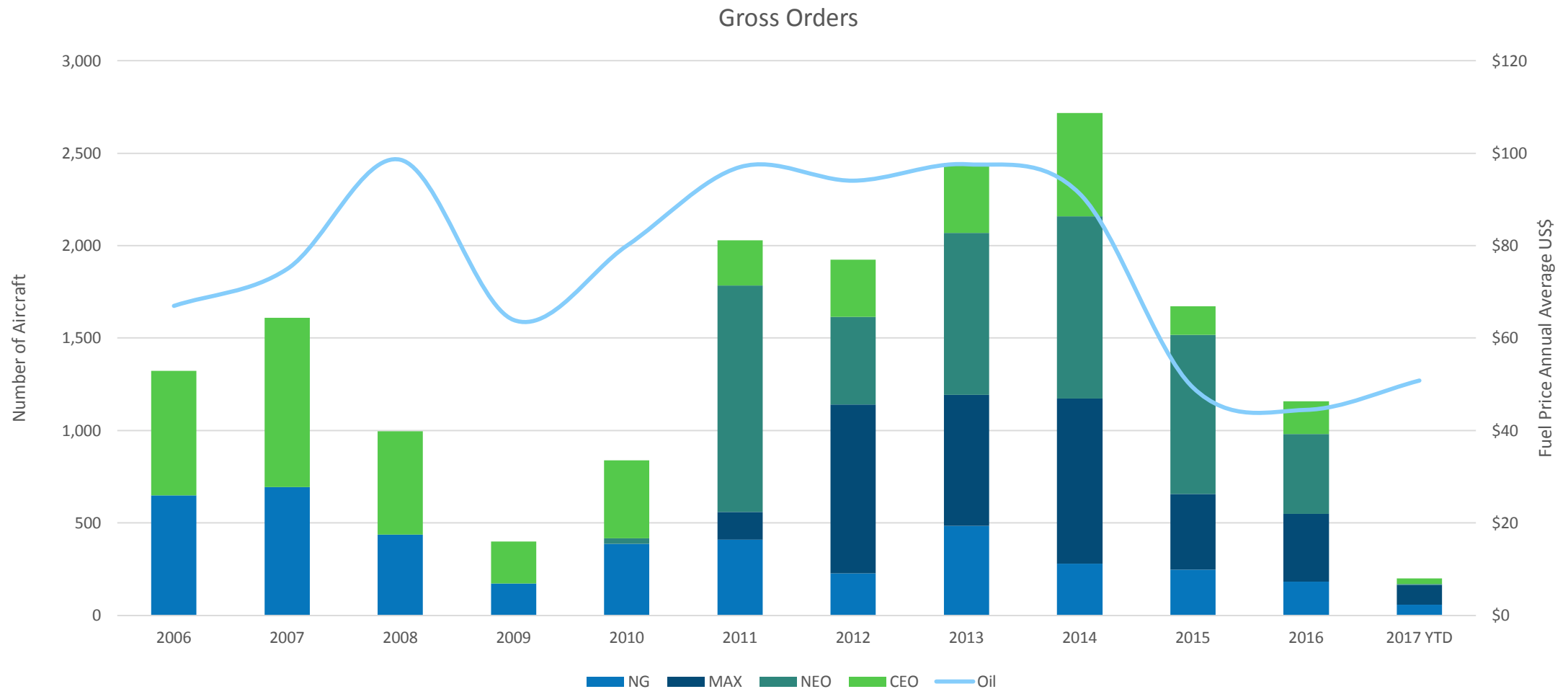
Lease Term Lengths

Extension opportunities

LR premiums for new generation



# Demand: where are we? Orders: Airbus A320 & Boeing 737



## Orders & Production – Demand where are we?

- ▶ 2016 orders are down significantly compared to any of the years 2011 to 2015 inclusive –

Is this a problem ?

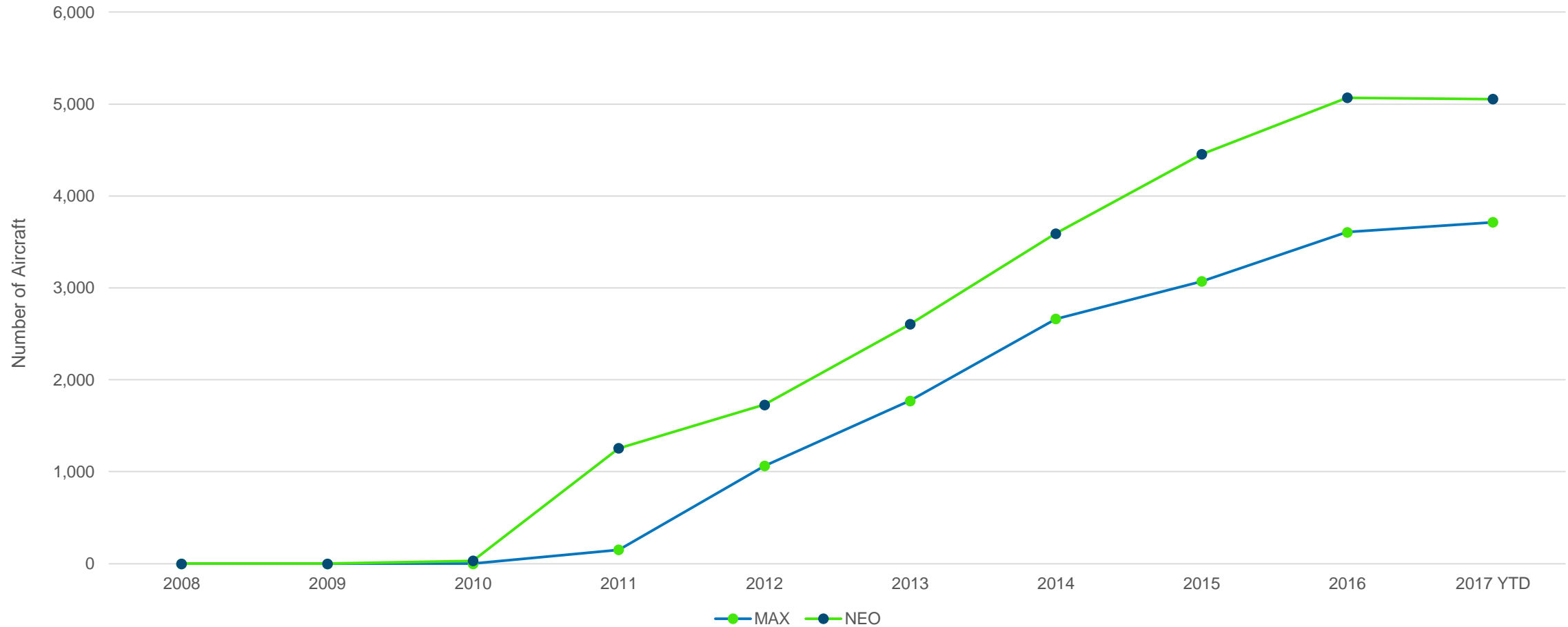
- ▶ In IBA's view – Not in the near term
- ▶ Airbus has a backlog of approximately 5,000 A320neo family and Boeing – as near as 3,700 B737 MAX, let alone the remaining production of CEOs and NGs to deliver
- ▶ Airbus plans to ramp A320 production to 60 in 2019 and Boeing want to go to 57 B737s in same year: Both well above 30% of today's production levels.

## The Airbus A320neo vs Boeing 737 MAX – Update

- ▶ Airbus is ahead with the neo in terms of cumulative orders, regardless of the fact that the neo was launched 7-8 months earlier.
- ▶ In terms of firm orders Airbus have circa 5,000 neo while Boeing have around 3,700 MAX.
- ▶ Both the A319neo and 737 MAX 7 have hardly set the sales stats on fire with sub 100 units each to date.
- ▶ The A320neo and MAX 8 are very closely matched with the neo slightly ahead.
- ▶ The A321neo is doing very well while sales of the MAX 9 are a little slow, although we have seen a recent announcement that Icelandic Leisure Carrier, Primera Air has just ordered eight examples.
- ▶ No figures supplied as it is difficult to determine which MAX orders are actually confirmed as the MAX 9, but it appears the MAX 9 is lagging significantly behind the A321neo.
- ▶ Will Boeing do a MAX? Looking almost inevitable now. 66 inch stretch (meaning it will still be slightly smaller than the A321neo).
- ▶ The 737 MAX 9 has now rolled out of the factory and will soon begin flight testing.
- ▶ **Both neo & MAX have been very successful when looked at on a programme basis.**
- ▶ Boeing 737 MAX 8 should enter service with Norwegian / Lion Air circa June this year, Southwest circa September.
- ▶ A321neo should enter service later this year also.

# The Airbus A320 vs Boeing 737 MAX – Latest

Cumulative neo/MAX orders



# Narrowbody Engine Issues

- ▶ PW – Rotor bow still an issue, combustor lining degradation also an issue
  - ▶ Combustor lining degradation should be solved by the end of the year according to the OEM and all engines delivered thereafter should have longer durability on the combustor liner. More deferrals before the end of the year then?
  - ▶ Oil debris over limit issue on IndiGo in-service aircraft.
  - ▶ DGCA ordered repeat 500 hours engine inspection on engines with over 1,000 hours.
  - ▶ JetBlue defer deliveries of A320neo with PW engines.
  - ▶ Qatar cancellation, potential switch to larger A321neo aircraft, planning LEAP-1A switch. Boeing 737 MAX order is not perceived as threat to neo order as it is earmarked for LCC subsidiary.





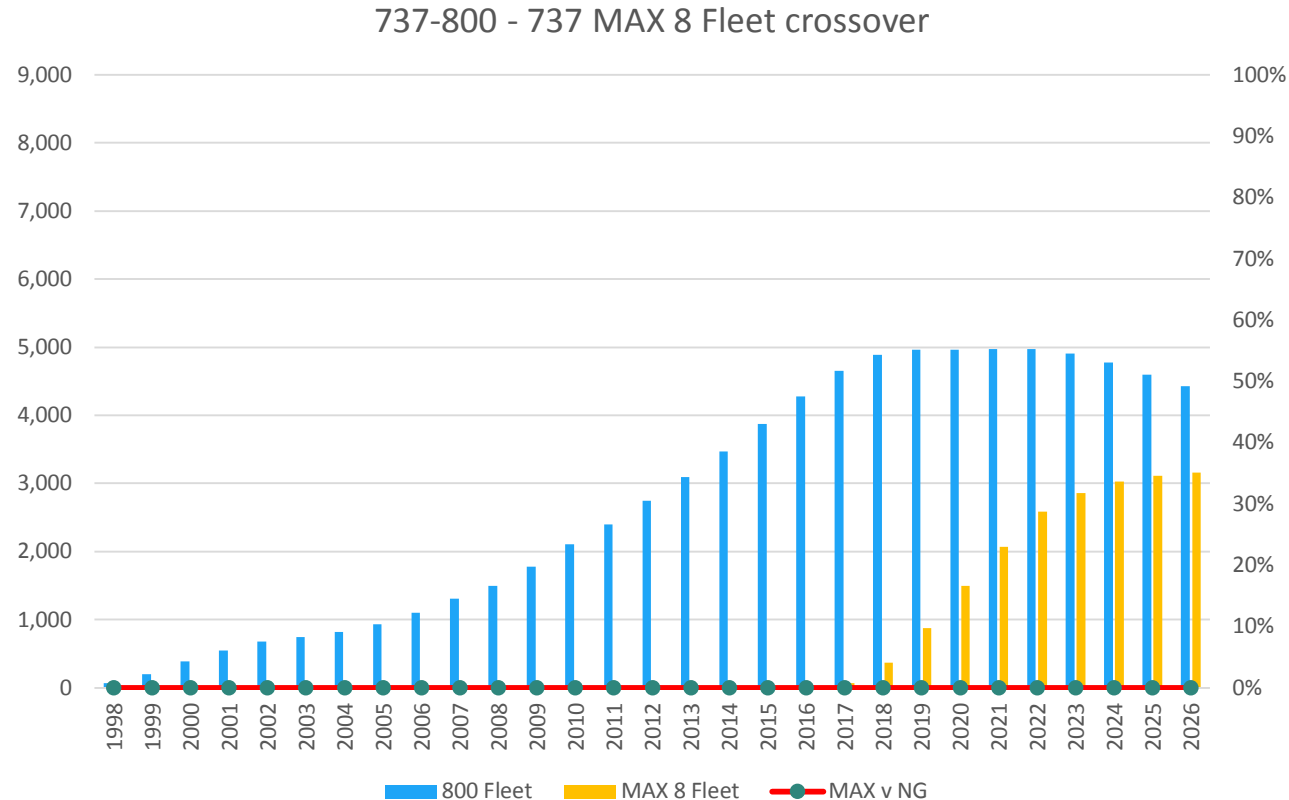
# Narrowbody Engine Issues

- ▶ CFM – Boeing has suspended flights of the Boeing 737 MAX
  - ▶ Potential issues with Low Pressure Turbine (LPT) discs.
  - ▶ Flights suspended temporarily, but have now resumed
  - ▶ Boeing remains committed to delivery schedule.
  - ▶ Reportedly one of two parts suppliers may have a manufacturing flaw on affected part.
  - ▶ Will we see any entry into service issues, impact to deliveries or any deferrals resulting from this?
  
- ▶ Large focus on the PW 1100G and CFM-LEAP engines, but as the trouble appears to be arising from parts suppliers, we could see similar issues for other engine programmes – RR Trent, XWB, GEnx / all.



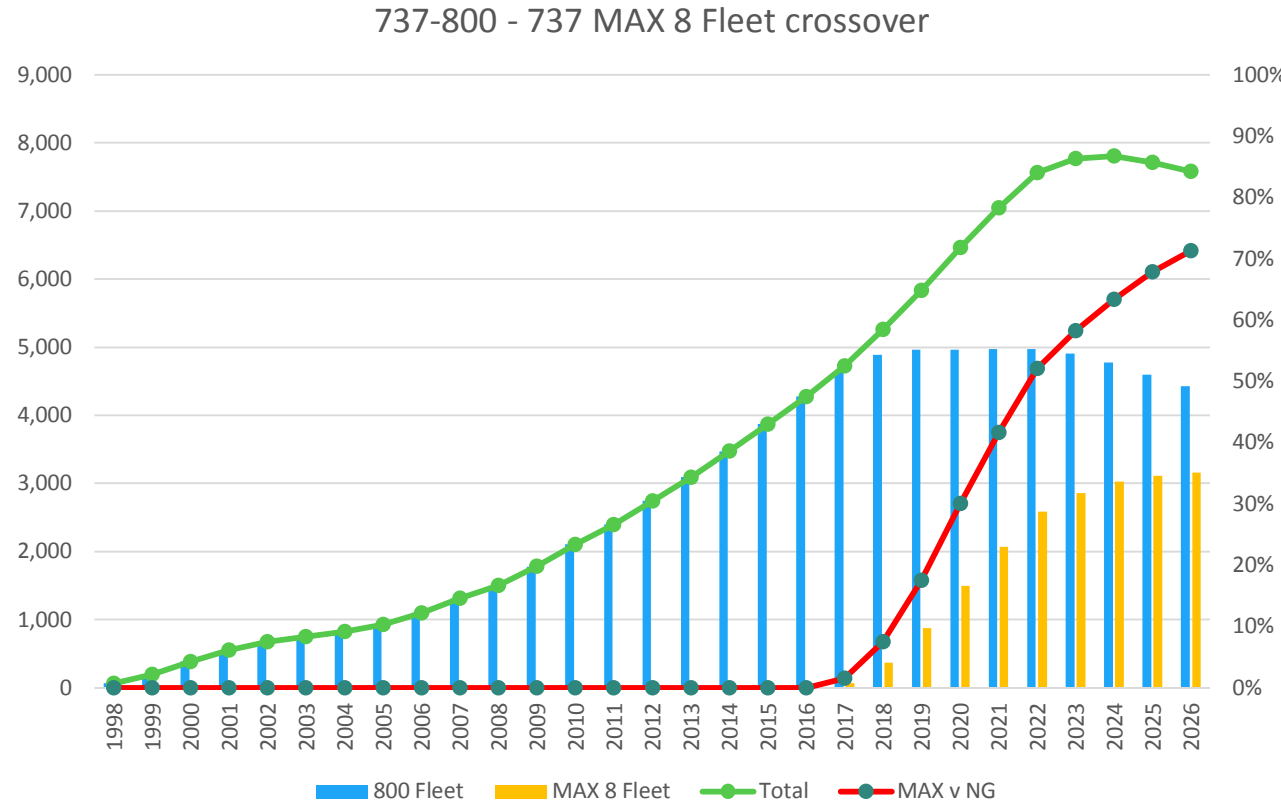
# NG – MAX Crossover – Impact on NG Residuals

- ▶ Identifying if and when a problem may occur is important
- ▶ With the MAX 8 going live in 2017 and the expected retirements and conversions of 800s, it is useful to see when the MAX fleet gets big enough to cause a problem



# NG – MAX Crossover – Impact on NG Residuals

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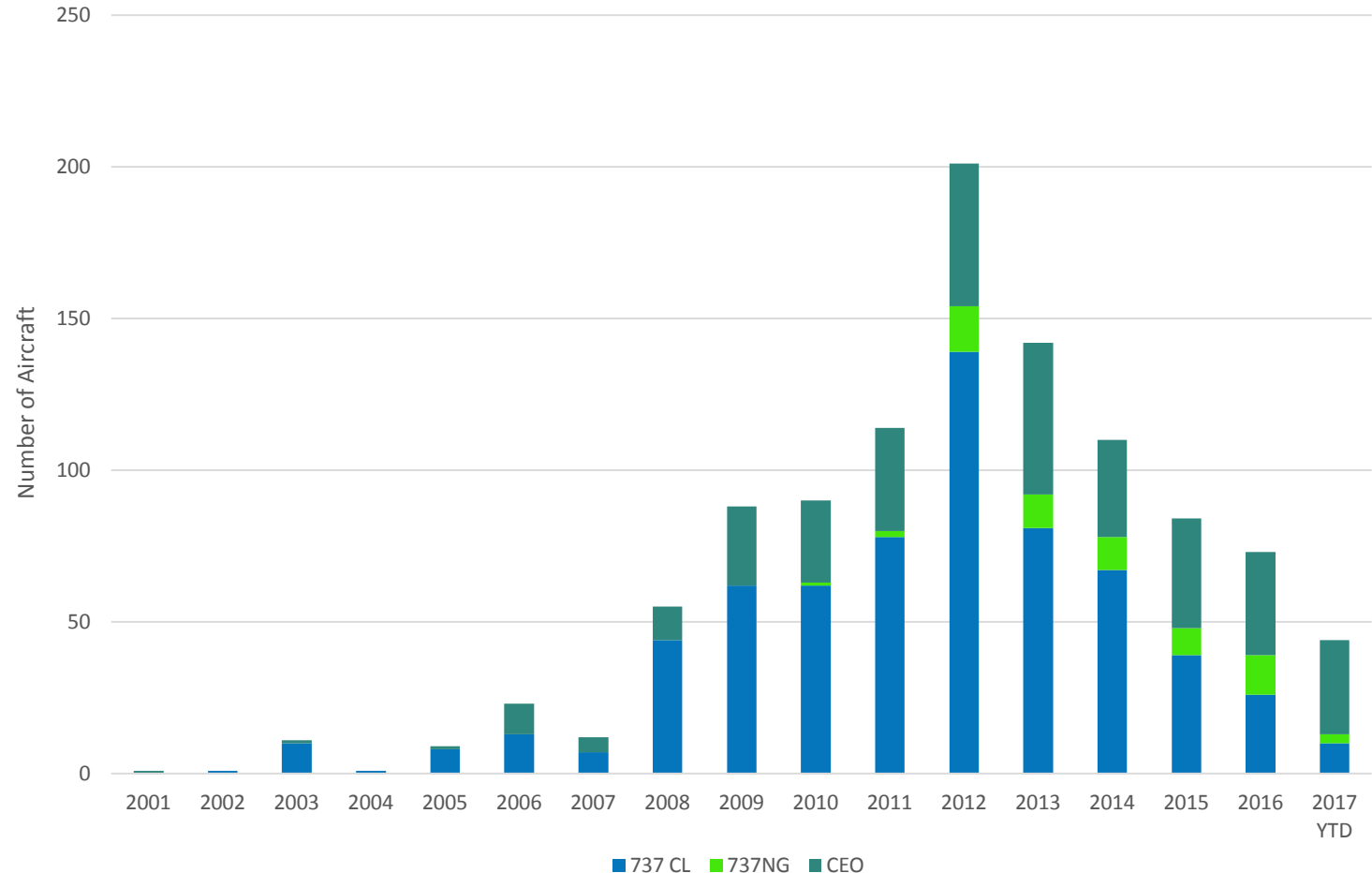


- ▶ Based on Boeing predictions of ramp-up, 50% is expected end of 2021
- ▶ Fleet growth based on order backlog and expected retirement plan is in decline from 2022
- ▶ Unless we have a damaging market effect, Boeing must sell a lot more, or retire less, or lose market share

# Retirements have reduced

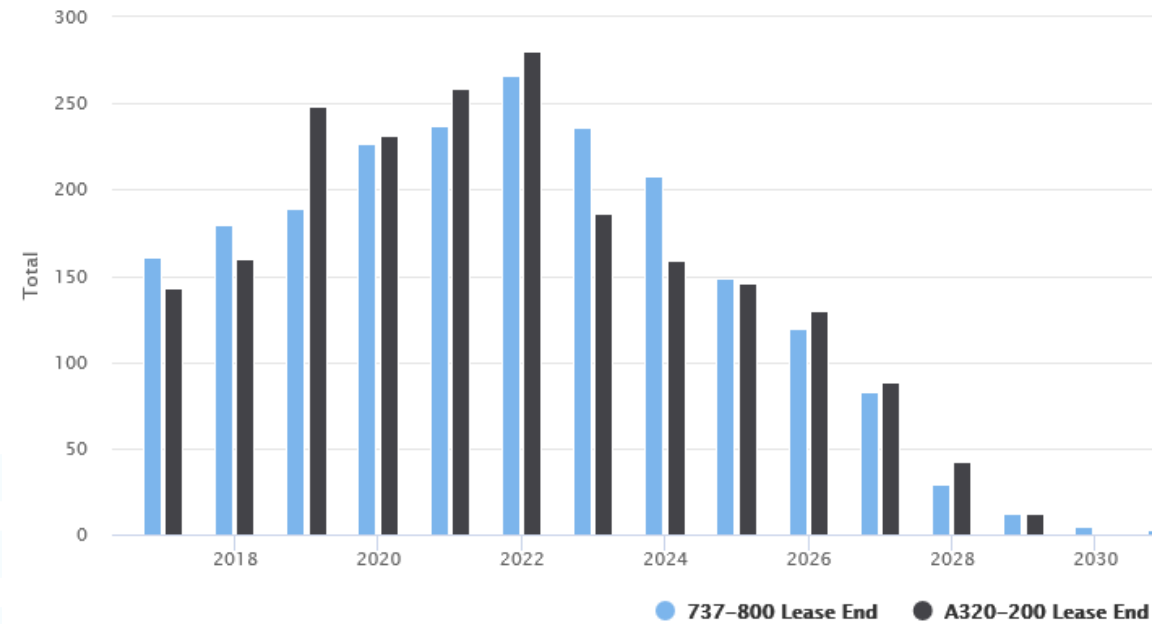
- ▶ Low Oil has kept many aircraft in service for longer.
- ▶ Deferrals of A320neo due to engine issues could see current generation aircraft remain in service for longer.
- ▶ Rise in fuel could see the pace of retirements increase.
- ▶ Large number of redeliveries in the coming years alongside neo and MAX ramp-up likely to increase the number of retirements.
- ▶ Freight conversion is a viable alternative

Narrowbody Retirements - 737 Classics, 737 NGs & A320ceos

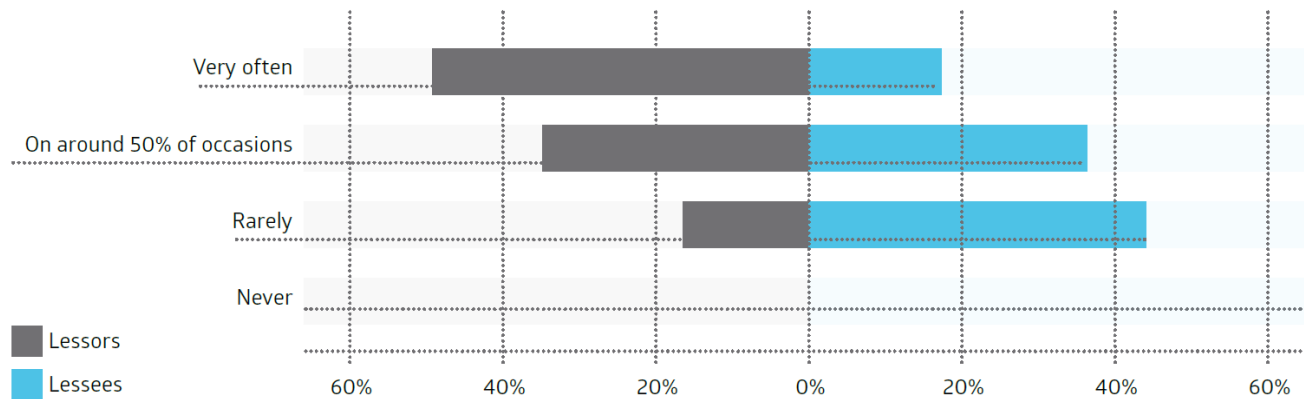


# Will retirements stay low in the near term? - The redelivery bow wave

- ▶ Over 2,000 Airbus A320-200 and Boeing 737-800 aircraft are scheduled to redeliver in the next 5 years (2017-2021).
- ▶ Within these numbers are plenty of inexperienced lessors and operators.
- ▶ An opportunity for the right MRO to gear up or partner
- ▶ And a risk in terms of disputes and independence
- ▶ Disputes increasing despite more focus. Costs easily hit \$ms

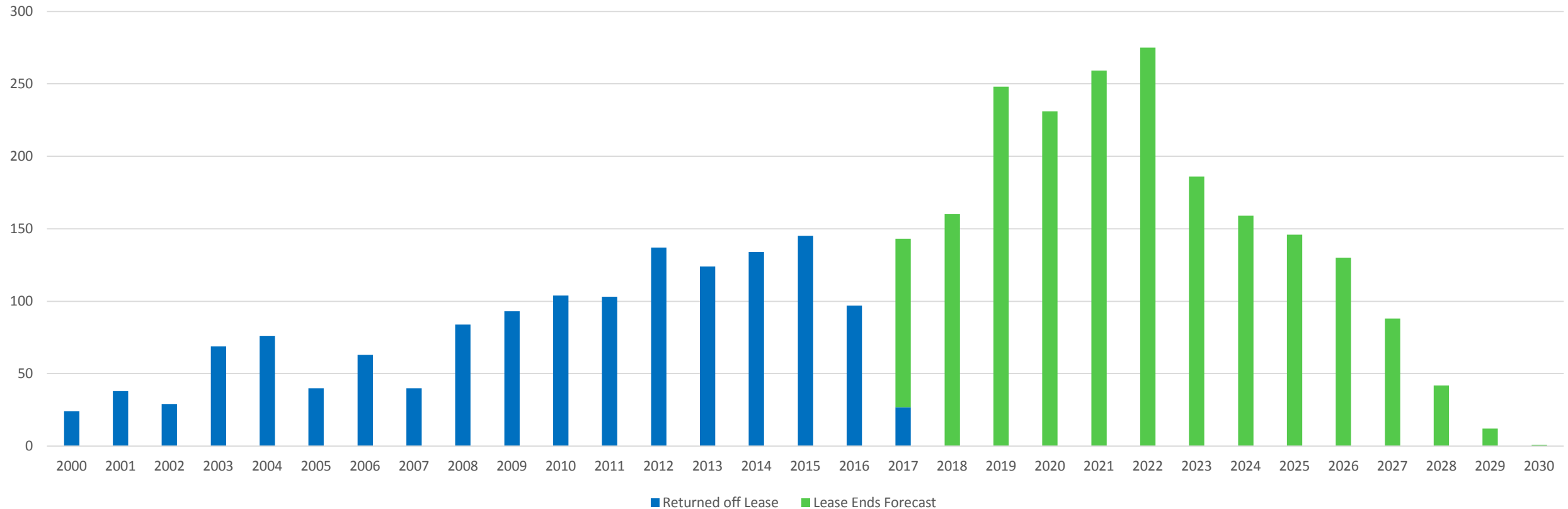


How often do you feel lessees/lessors engage too late?



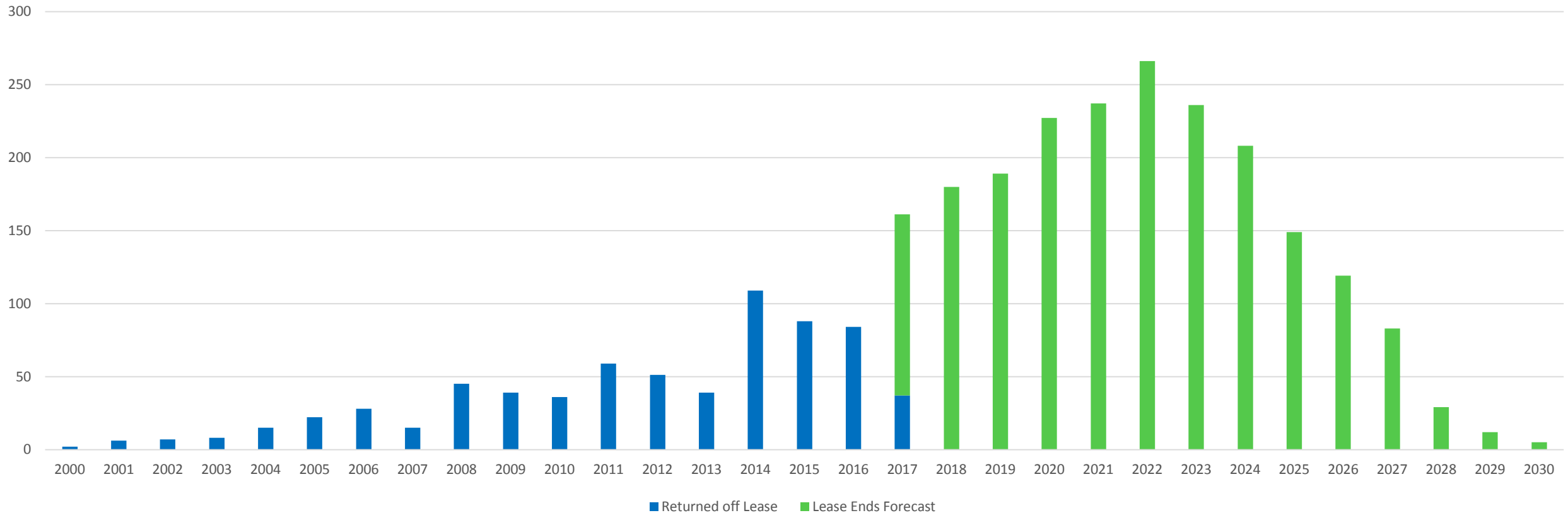
# Airbus A320-200 Redeliveries

Airbus A320-200 Lease Returns and Lease Ends



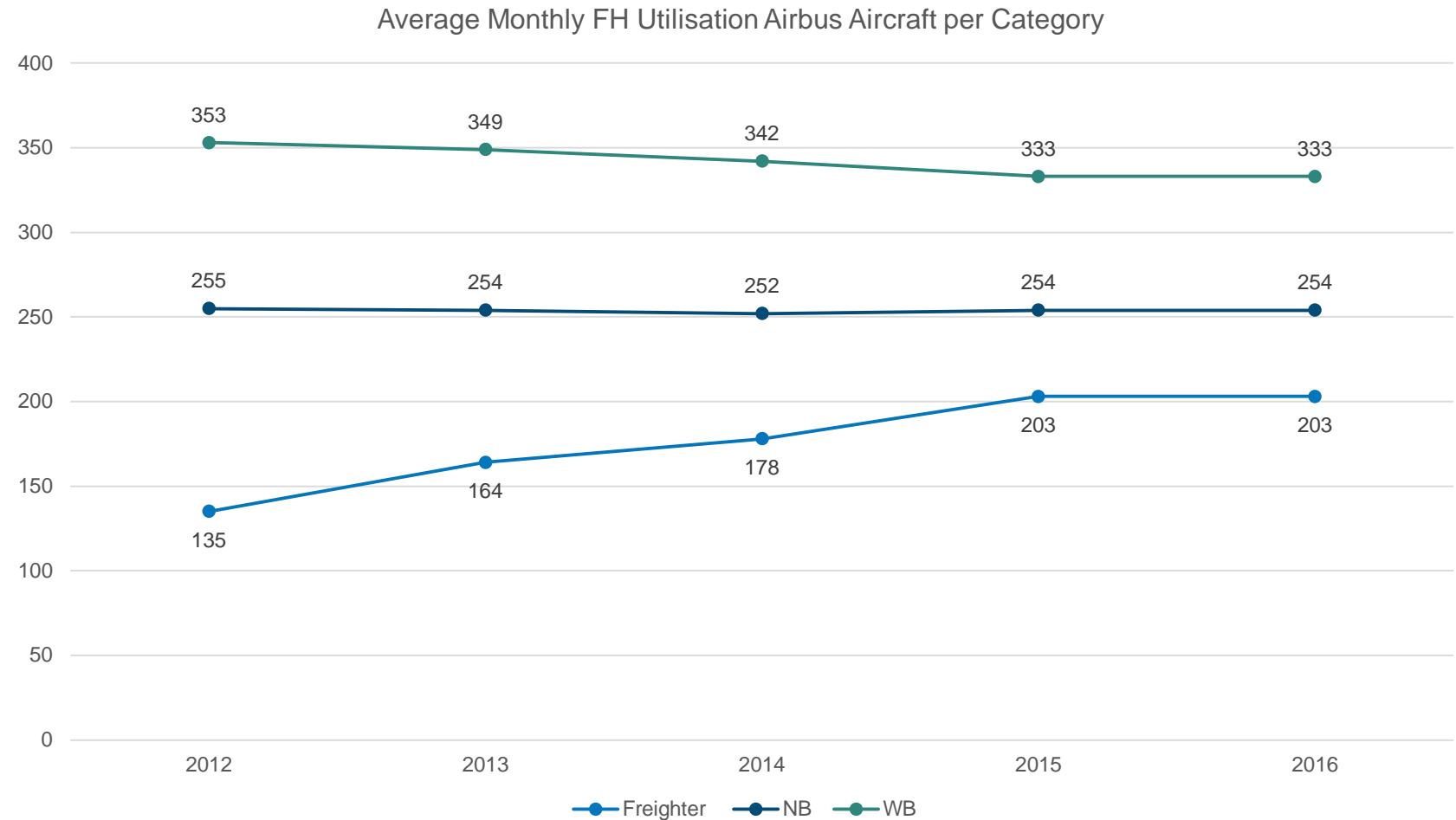
# Boeing 737-800 Redeliveries

Boeing 737-800 Lease Returns and lease ends



# Changing Utilisation Patterns

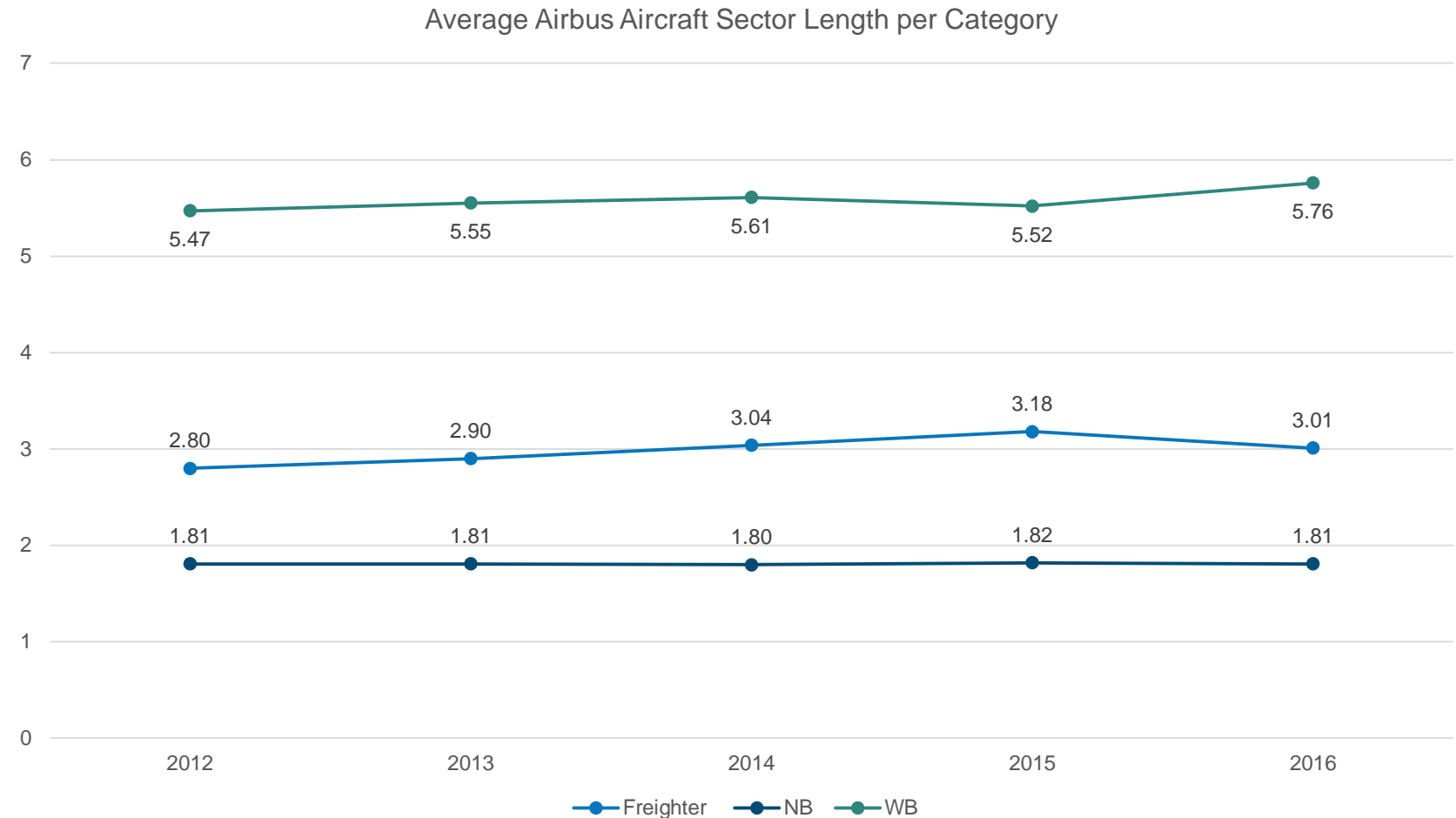
- ▶ Widebody average monthly utilisation has shown a slow decline
- ▶ Narrowbody utilisation is very consistent
- ▶ Freighter monthly utilisation has shown steady growth – good opportunities for conversions





# Utilisation Patterns

- ▶ Narrowbody sectors remain fairly stable
- ▶ Some increases are expected for the narrowbodies as the longer range capable neo and MAX variants become established.
- ▶ Widebody average sectors have increased, new generation long range aircraft opening new routes
- ▶ Freighter sector length increase over past five years, alongside overall monthly utilisation is encouraging



# Twin Aisle Market

- ▶ Airbus A350-900 and Boeing 787-9 are expected to perform well – Boeing 787-8 backlog is shrinking.
- ▶ Some recent delivery deferrals by American and Delta of A350 and 787 deliveries.
- ▶ A350-1000 to enter service this year.
- ▶ Test for the Boeing 777-300ER – where will the opportunities be in the second-hand market?
- ▶ Increased A350-900 deliveries in the coming years - likely to push more used A330s into the market.
- ▶ Some retirements and part-outs are expected for older A330s and 777 classics, 10 777s have been retired so far this year. One A330 retired and three parted out YTD 2017.
- ▶ Will we see a new product launch in the near term? Middle of the market aircraft?
- ▶ Expect to see continued investor appetite through sale leaseback transactions to top tier credits.

## Trends

Sale & Leasebacks

Boeing 777 and Airbus A330 storage and availability

Part-Outs of mature aircraft

A350 deliveries

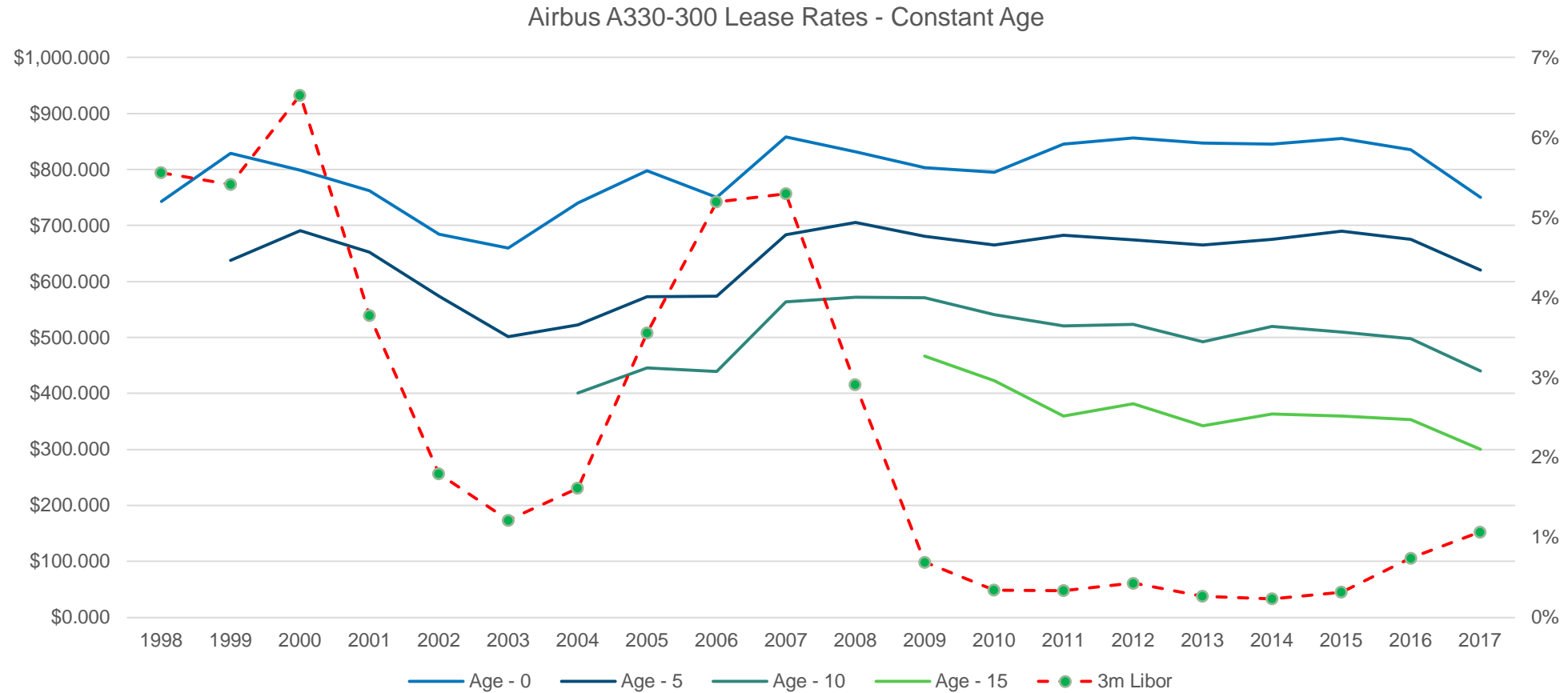
Boeing 777-300ER Availability

Lease terms for older generation widebodies

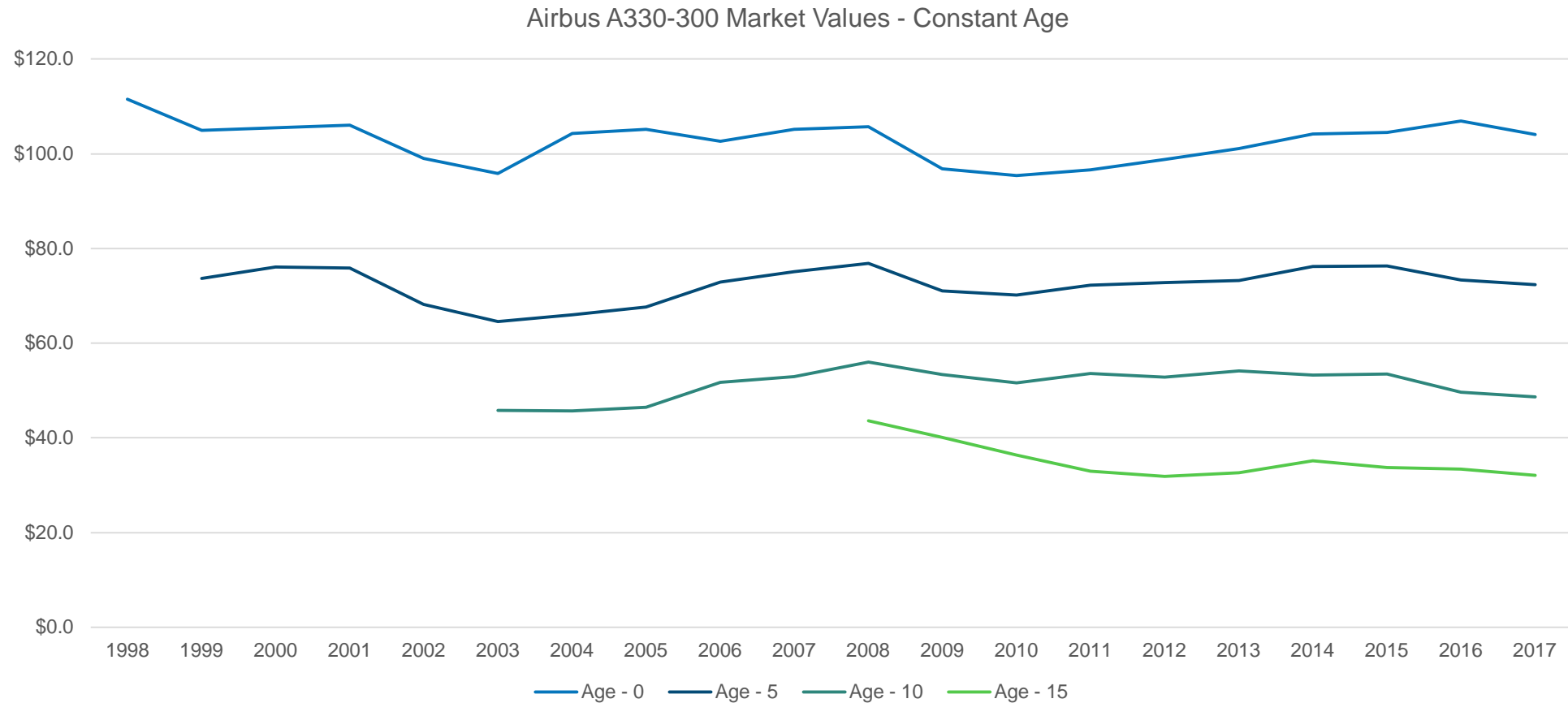
Mature widebody values and lease rates



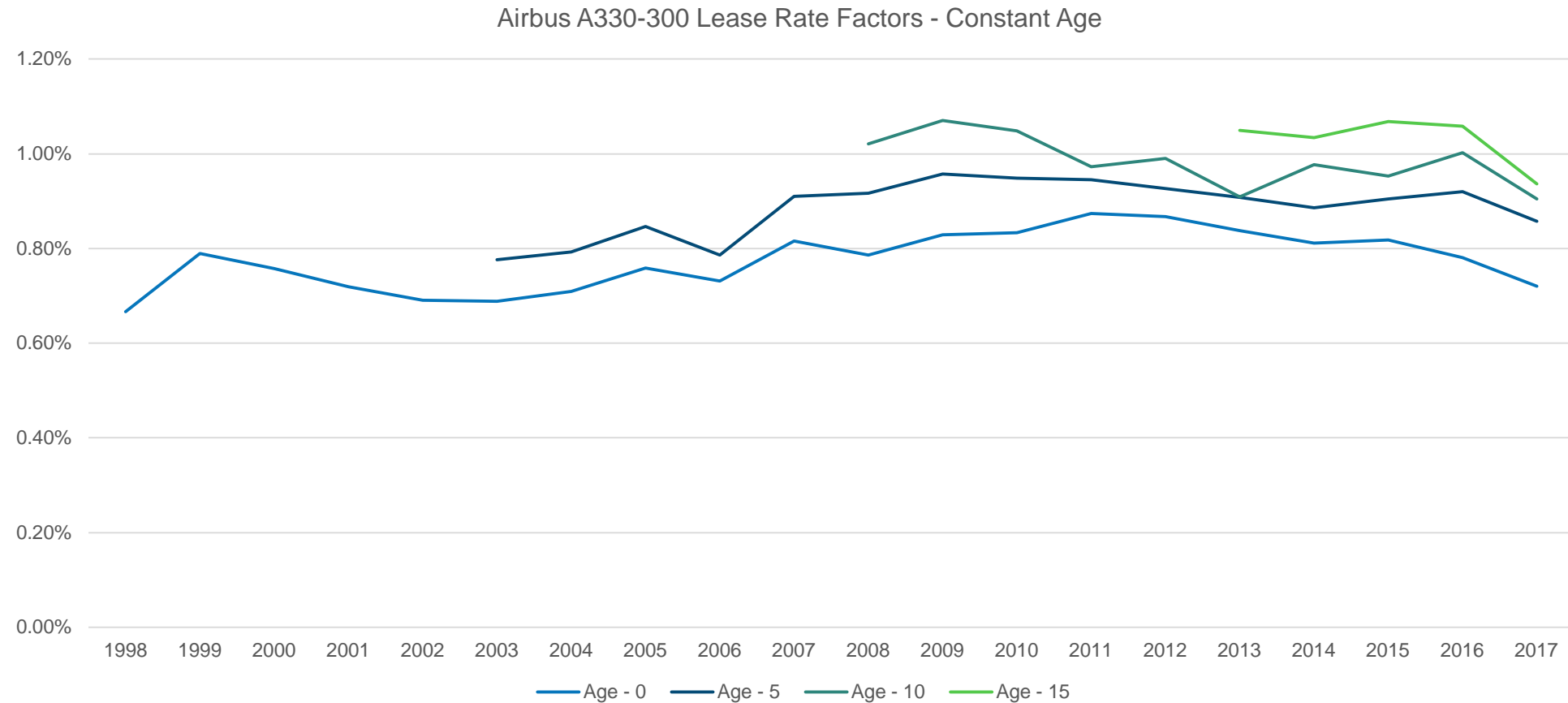
# Widebody Aircraft – Lease Rates – Airbus A330-300



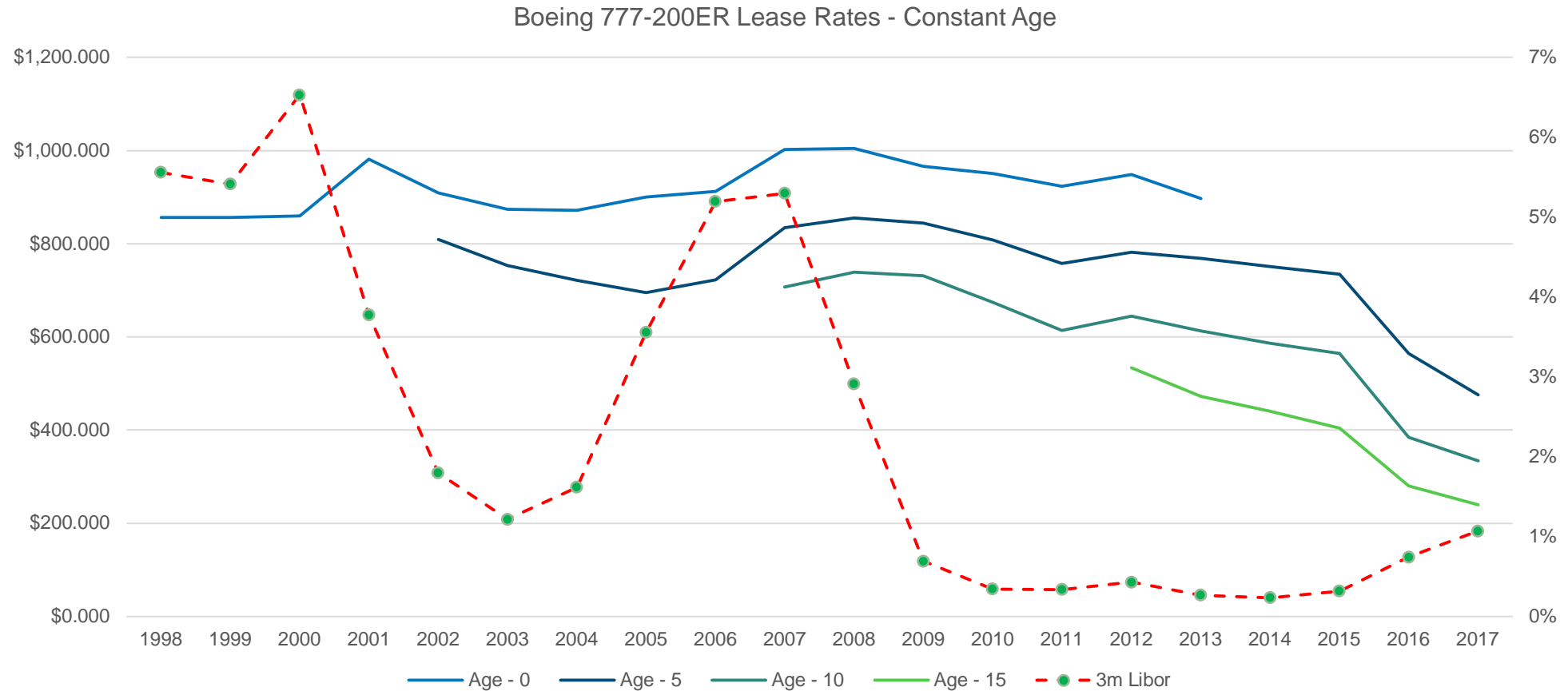
# Widebody Aircraft – Values – Airbus A330-300



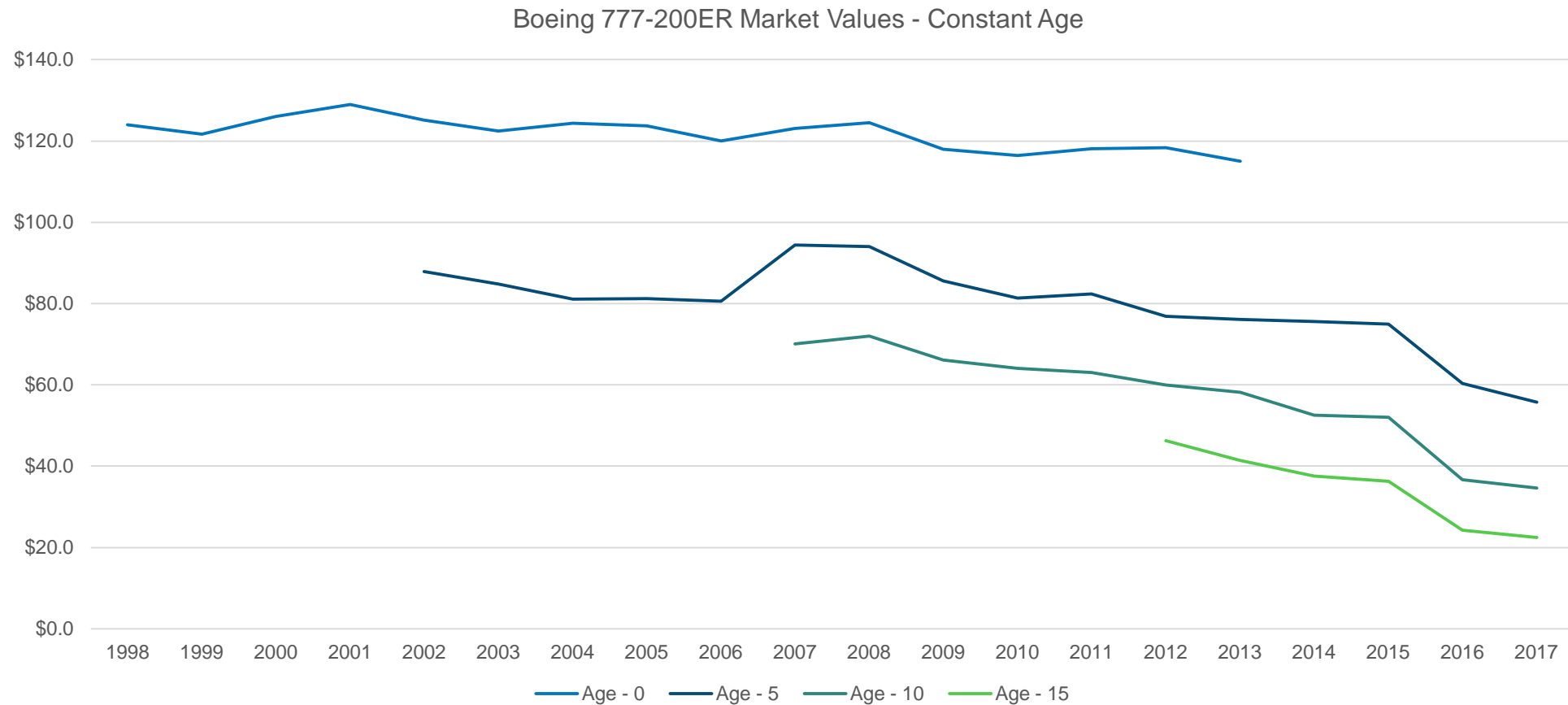
# Widebody Aircraft – Lease Rate Factors – A330-300



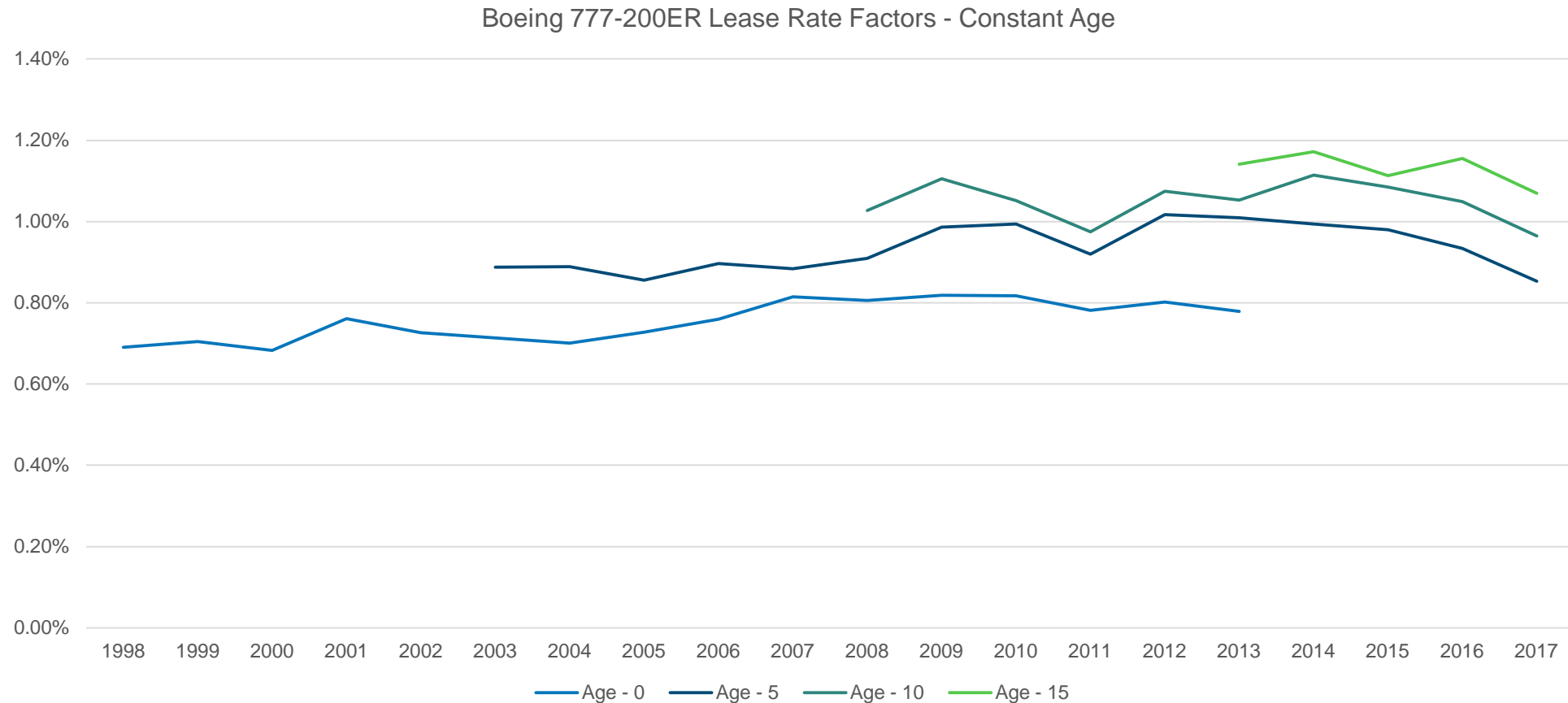
# Passenger Aircraft – Lease Rates – Boeing 777-200ER



# Passenger Aircraft – Values – Boeing 777-200ER



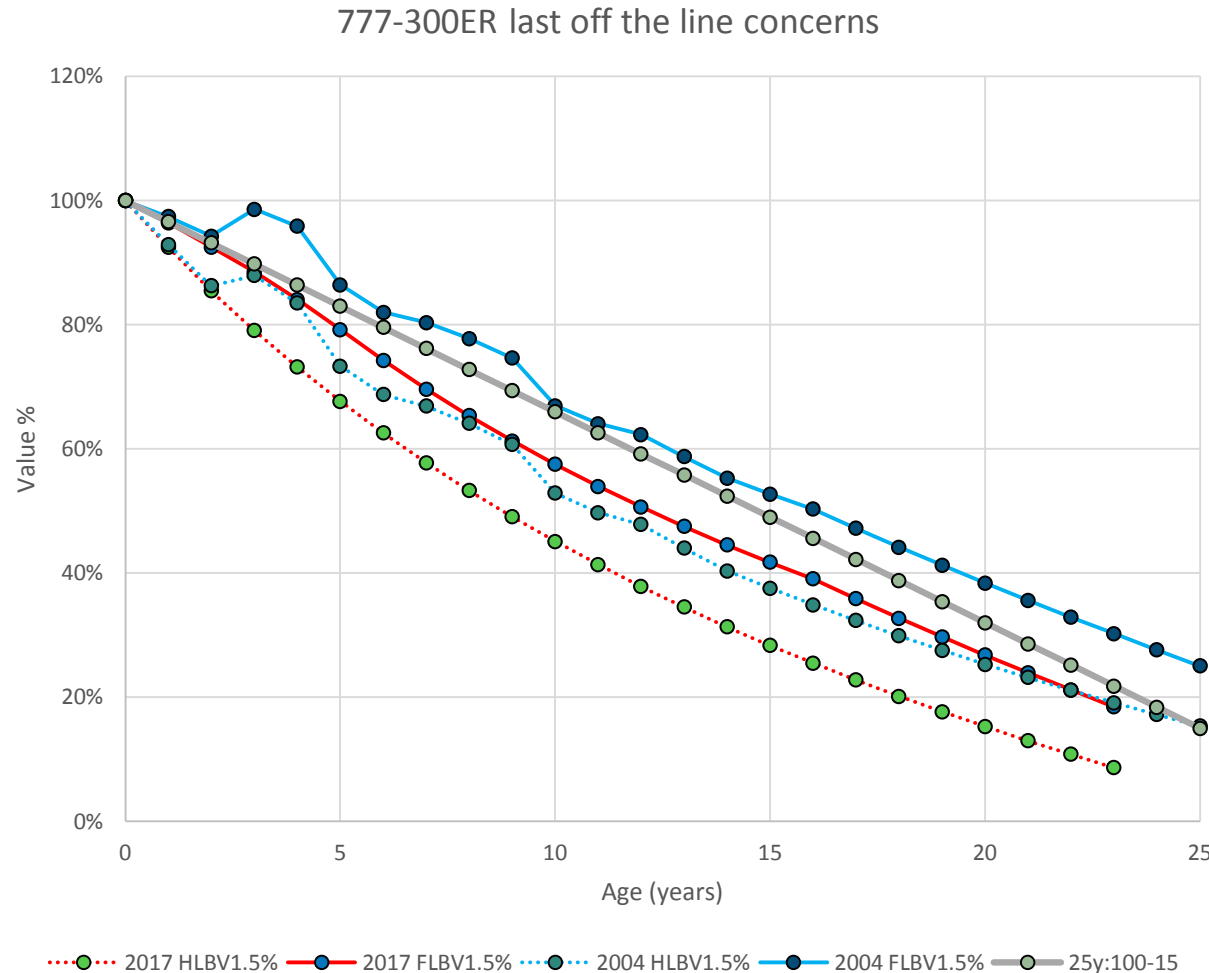
# Passenger Aircraft – Lease Rate Factors – Boeing 777-200ER





# 777-300ER: Widebody Shorter economic life but less 777X pressure

- ▶ The 777 has some concerns as widebodies in general show poorer performance and there is a replacement in the wings as well as A350-1000 competition
- ▶ Early builds are expected to perform in Full-Life condition, but Half-Life aircraft show strong deviation until year 25
- ▶ High cost of configuration prevent significant lease turns



- ▶ Current builds are more worrying as neither condition appears to stay close by shortening life by 5 years
- ▶ Whilst 2004 builds will be ~20 years old by the time 777X deliveries escalate
- ▶ Soaring LLP costs and possible freight conversion programmes may help

# Summary

- ▶ Good prospects for neo and MAX long-term, although there are ongoing issues to overcome with new generation engine technology. IBA's view is that these will be overcome but that there may be more delivery deferrals in the near term.
- ▶ While fuel and interest rates remain stable and relatively low, we expect to see narrow premiums for the new generation narrowbodies.
- ▶ Orders remain slow across all types and are expected to remain so through the rest of the year.
- ▶ Lots of narrowbody redeliveries coming in the next few years, increasing opportunities in the aftermarket.
- ▶ Some changes in utilisation patterns, freighter utilisation is increasing and opportunities are forecast in the freighter conversion sector.
- ▶ Mature widebodies such as the A330 and 777 classics continue to feel the pressure, 767 has benefitted from strong freight conversion demand.
- ▶ Lease rates have declined for most new types and LRFs continue to get squeezed.
- ▶ The last off the line effect will play a part that for some will be relatively minor compared to the effects seen for the more classic aircraft – particularly under current fuel cost rules. Widebodies in general have exhibited a weaker value performance beyond 18-20 years which tends to fit well with their production cycle.
- ▶ Going forward, we expect current generation narrowbodies will perform when associated with maintenance cash, but will not stand up to long-term half-life performance. Cannot ignore the reserves or compensation.
- ▶ we expect A320neo & 737MAX aircraft to perform well, alongside other new types like the 787 and A350 for the coming years. We have more concerns over the 777-300ER if configuration costs don't come down, and Emirates re-fleet over a shorter period.

# Thank you! Questions?

## Contact Info

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