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Presentation to Aviation Working Group General Meeting – Aircraft Trading

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CIRIUM

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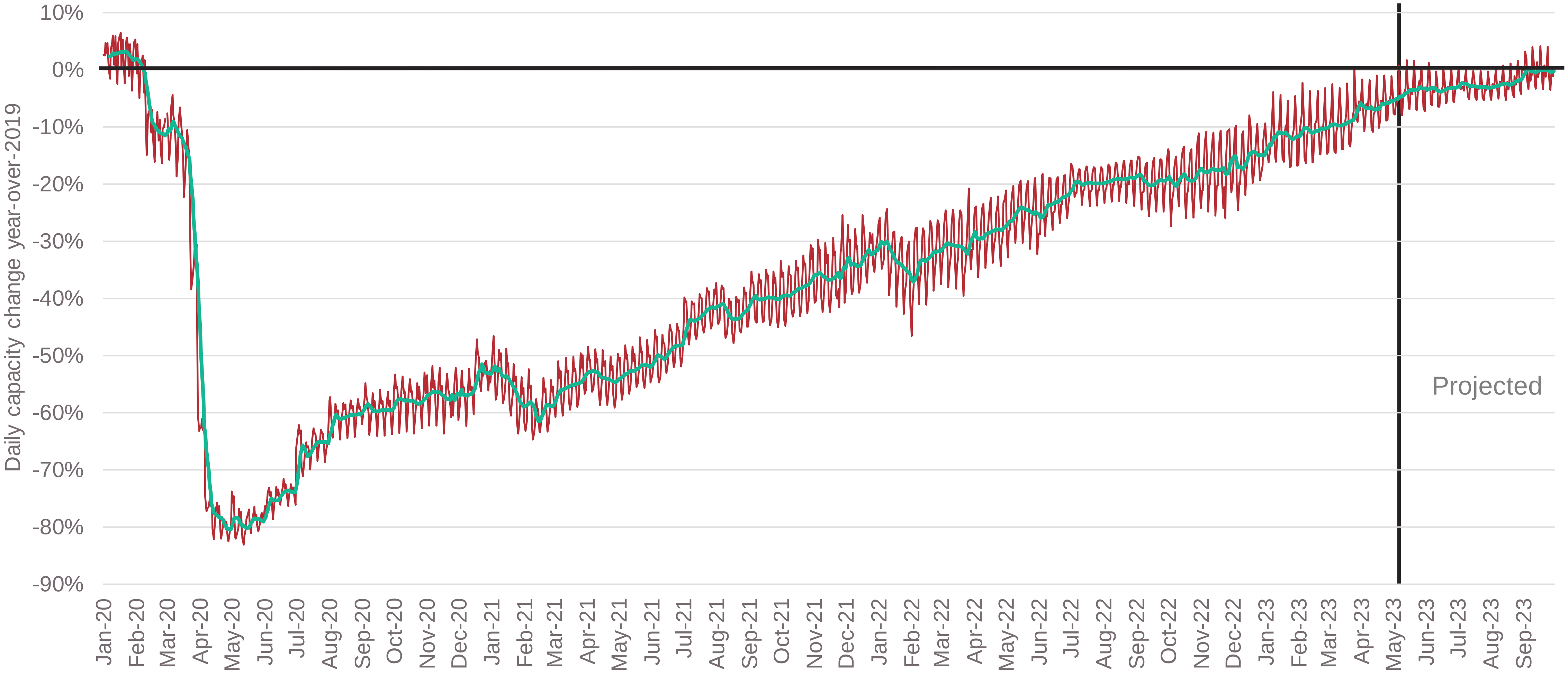
Demand recovery is almost complete and another growth cycle is about to commence



Source: Cirium Schedules, data filed 7 May 2023, 2021-2023 change is over 2019 equivalent

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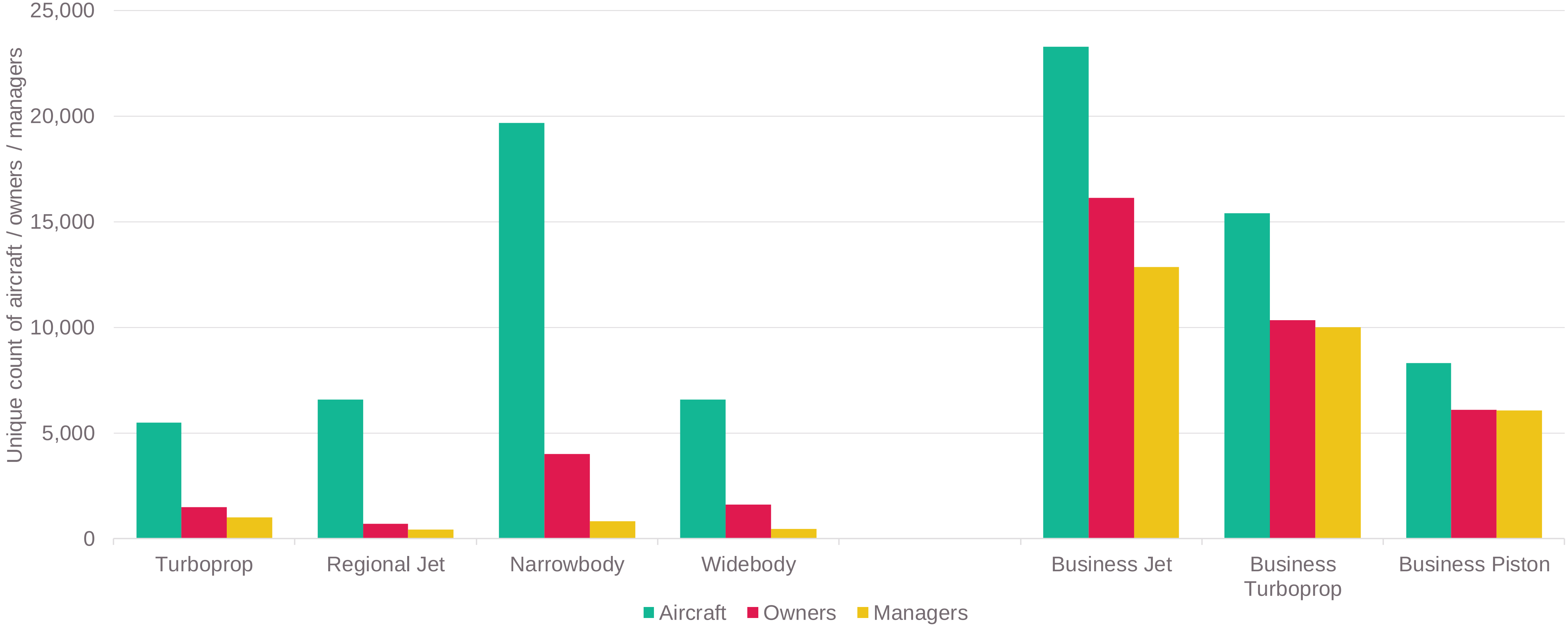
Presentation scope and definition

- Analysis is based upon data extracted from Cirium's Fleets Analyzer platform, May 2023
- A transaction is assumed to have occurred on an aircraft as a consequence of the following event
  - Sales – OEM delivery, sale, sale & leaseback, sale with lease attached, sale at lease end, finance term completed, securitised
  - Lease – new lease following OEM delivery, new secondary lease, lease extended
- Cirium's data includes operator, manager and owner
  - for the purpose of this analysis a transaction is typically classified as having a change of owner (equivalent to a title transfer)
- Focus is on large commercial aircraft only (narrowbody, widebody)
- Outlook data leverage's Cirium's Fleet Forecast, which includes in-service aircraft only
  - Analysis makes assumptions about future stored fleet

There are currently >85,000 commercial and business aircraft globally with almost 37,600 unique owners



Source: Cirium Fleets Analyzer

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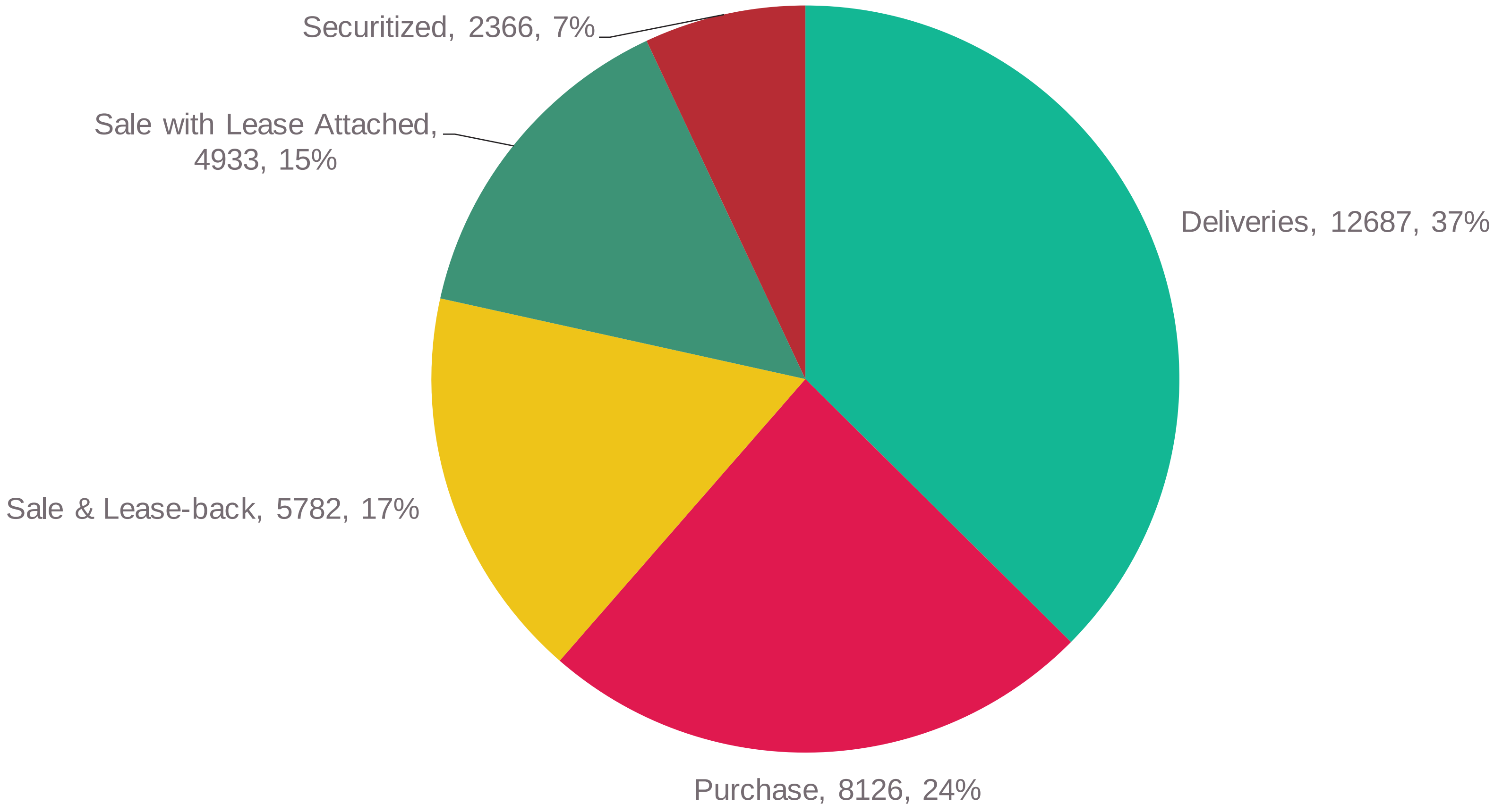
OEM deliveries represent majority of “transactions”



Source: Cirium Fleets Analyzer, narrowbody and widebody aircraft only, **2010-2019 transactions**

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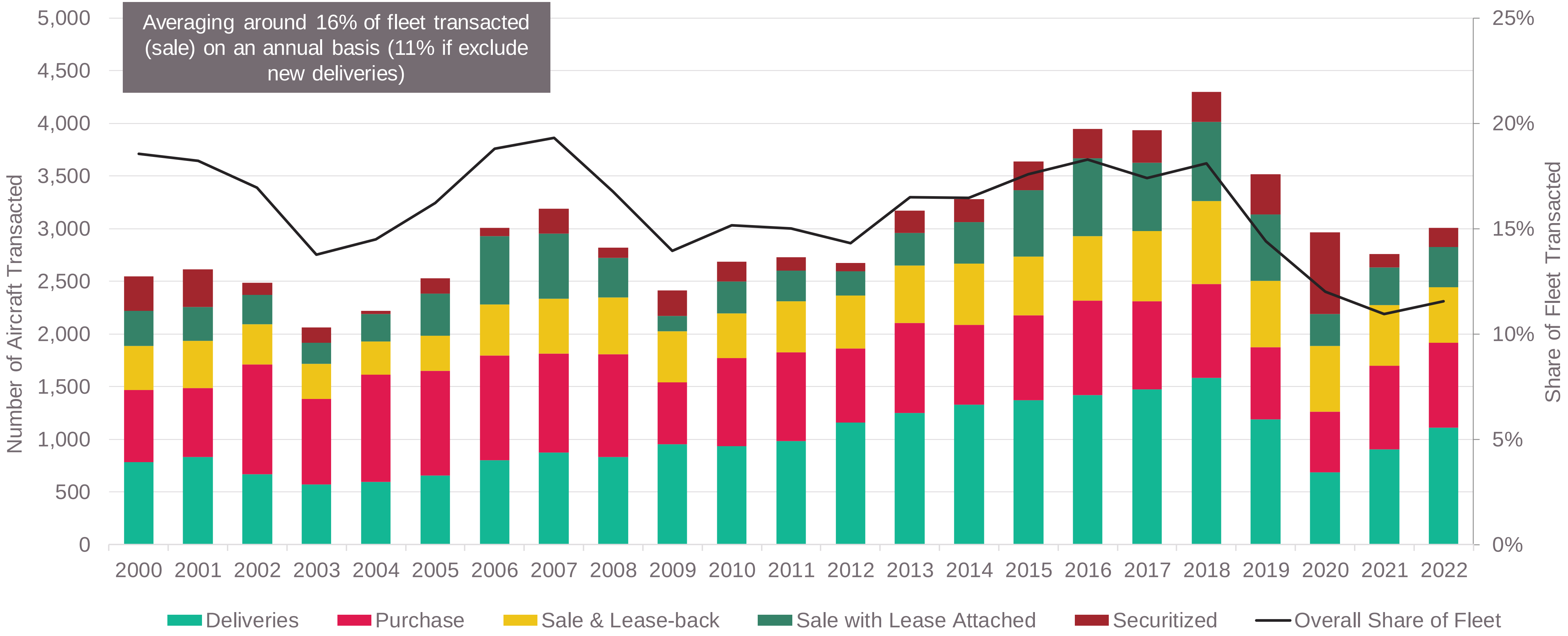
Average of almost 3,000 large commercial aircraft transactions recorded annually since 2000



Source: Cirium Fleets Analyzer, narrowbody and widebody aircraft only

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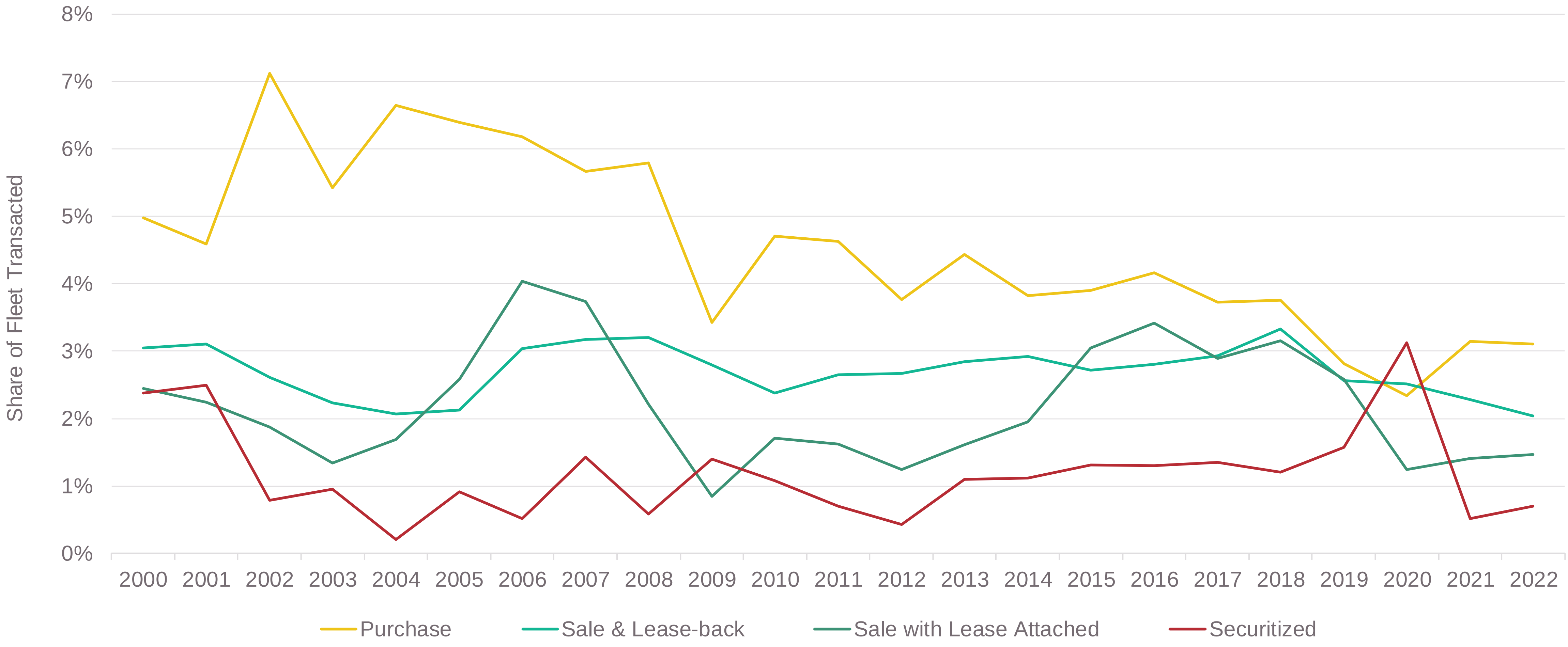
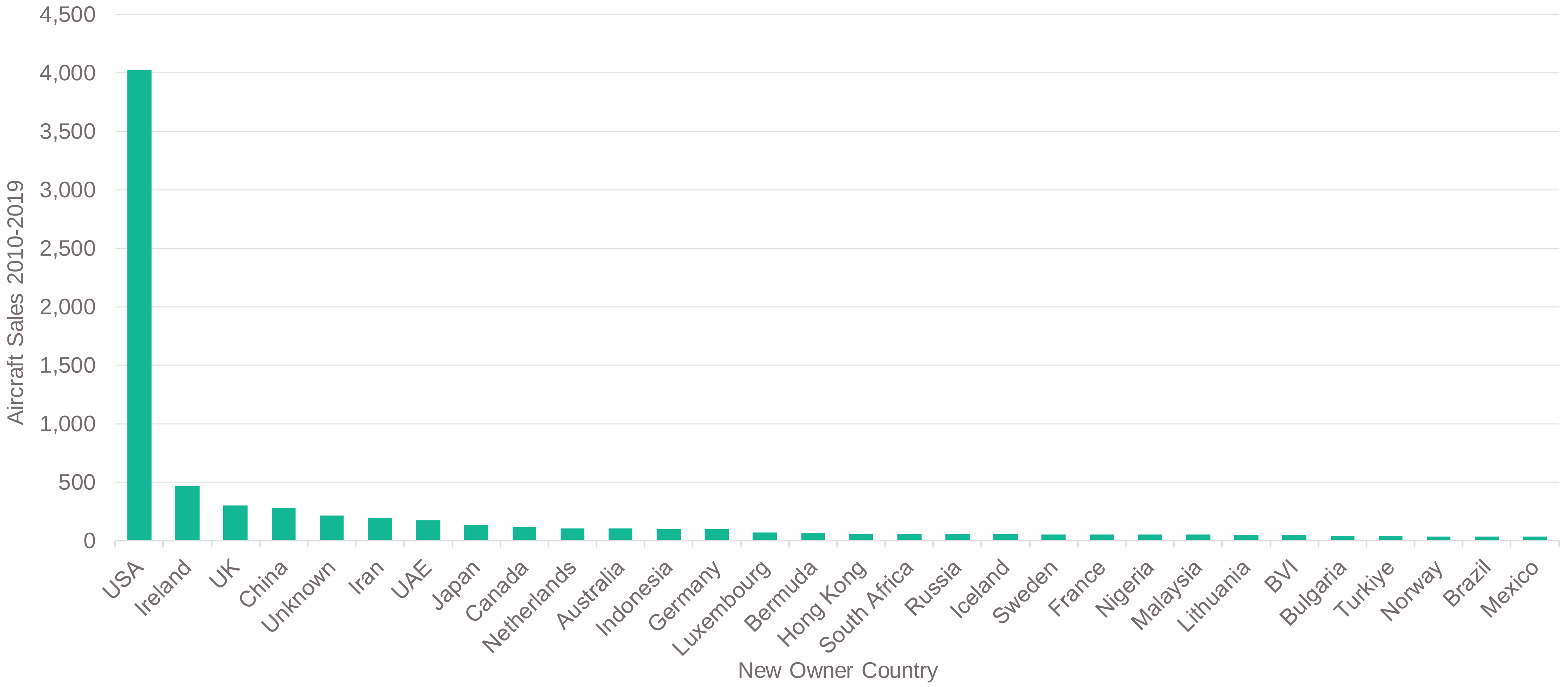
Transaction volume is cyclical, has fundamentally declined through “pandemic years”



Source: Cirium Fleets Analyzer, narrowbody and widebody aircraft only

“Sales” more concentrated in United States, with longer tail of 150 countries of destination



Source: Cirium Fleets Analyzer, narrowbody and widebody aircraft only

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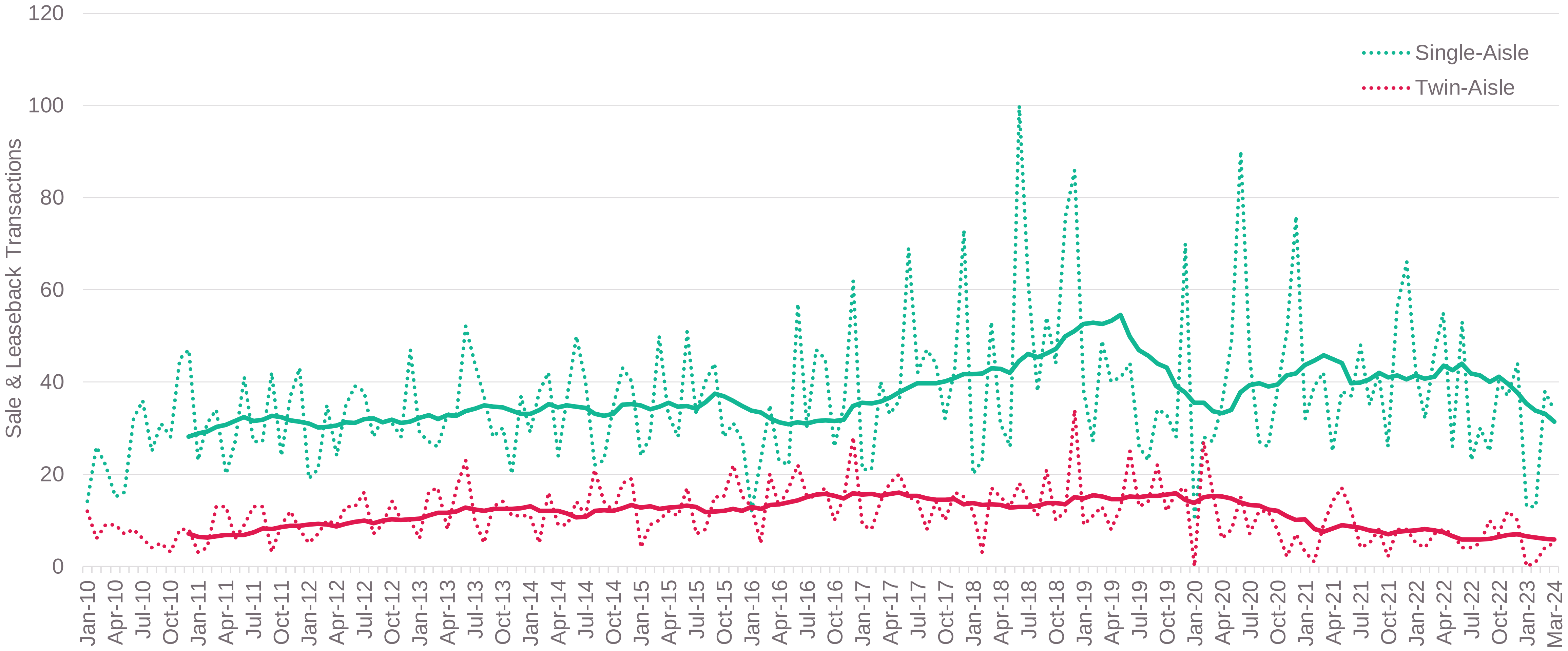
Sale & Leaseback volumes have remained robust for single-aisle but reduced for twin-aisle



Source: Cirium Fleets Analyzer, passenger single-aisle and twin-aisle jets only

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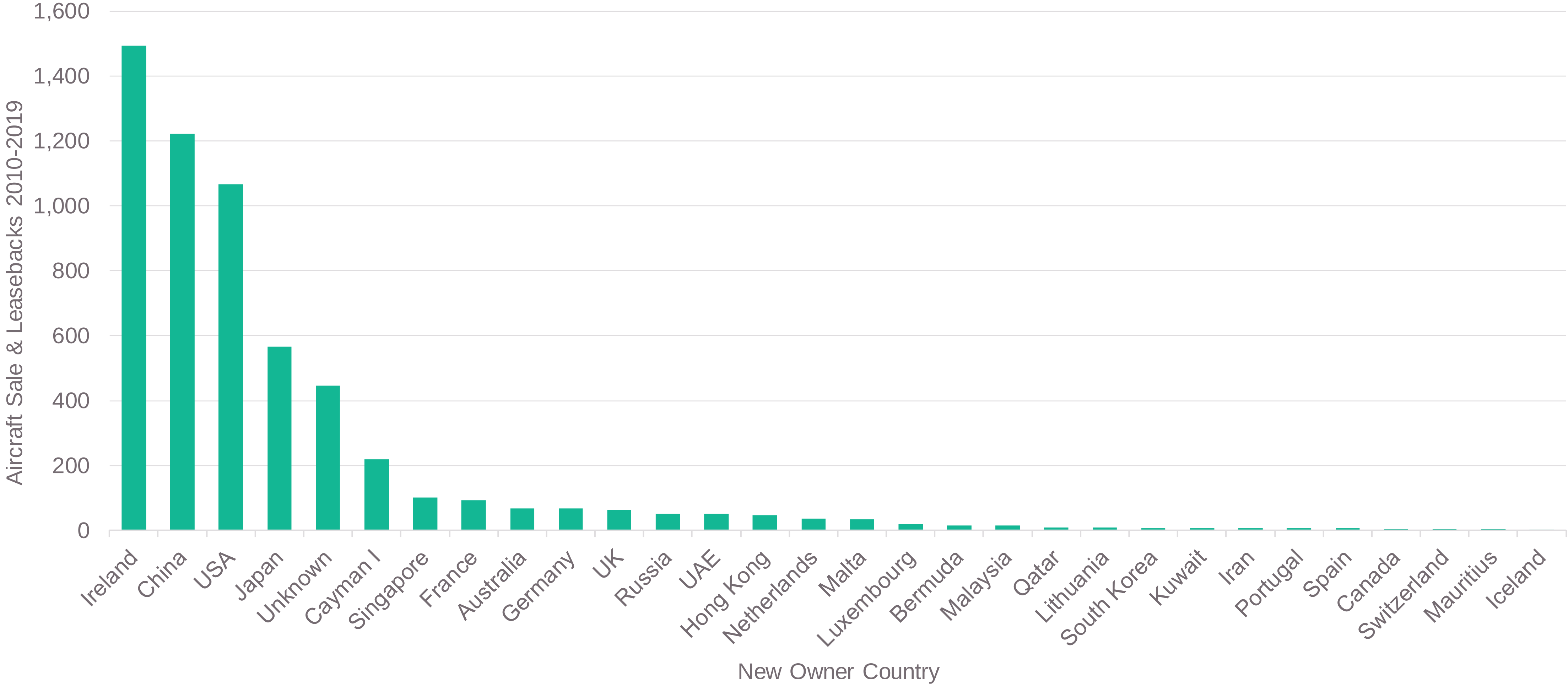
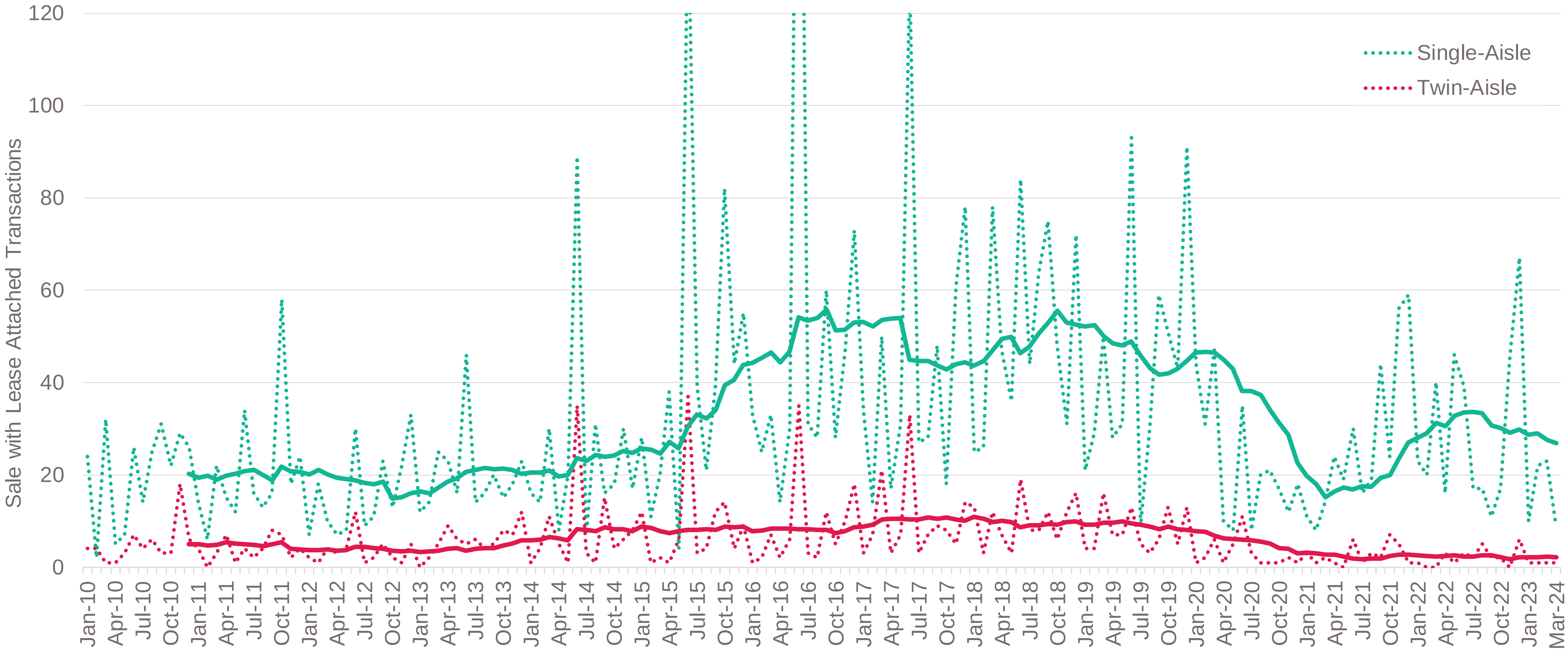
SLB destination highly correlated to lessor jurisdictions



Source: Cirium Fleets Analyzer, narrowbody and widebody aircraft only

Sales with lease attached have recovered, but not to volumes seen in latter part of the last growth cycle



Source: Cirium Fleets Analyzer, passenger single-aisle and twin-aisle jets only

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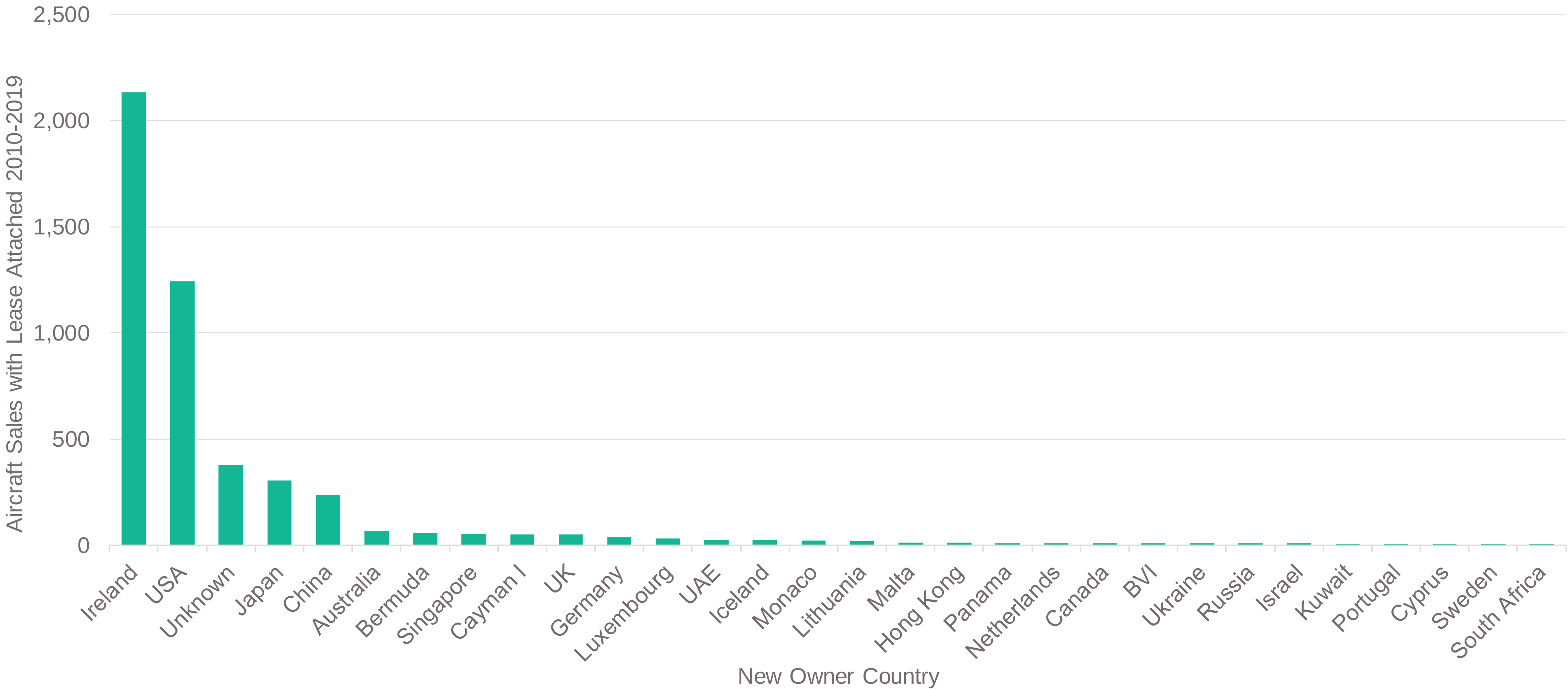
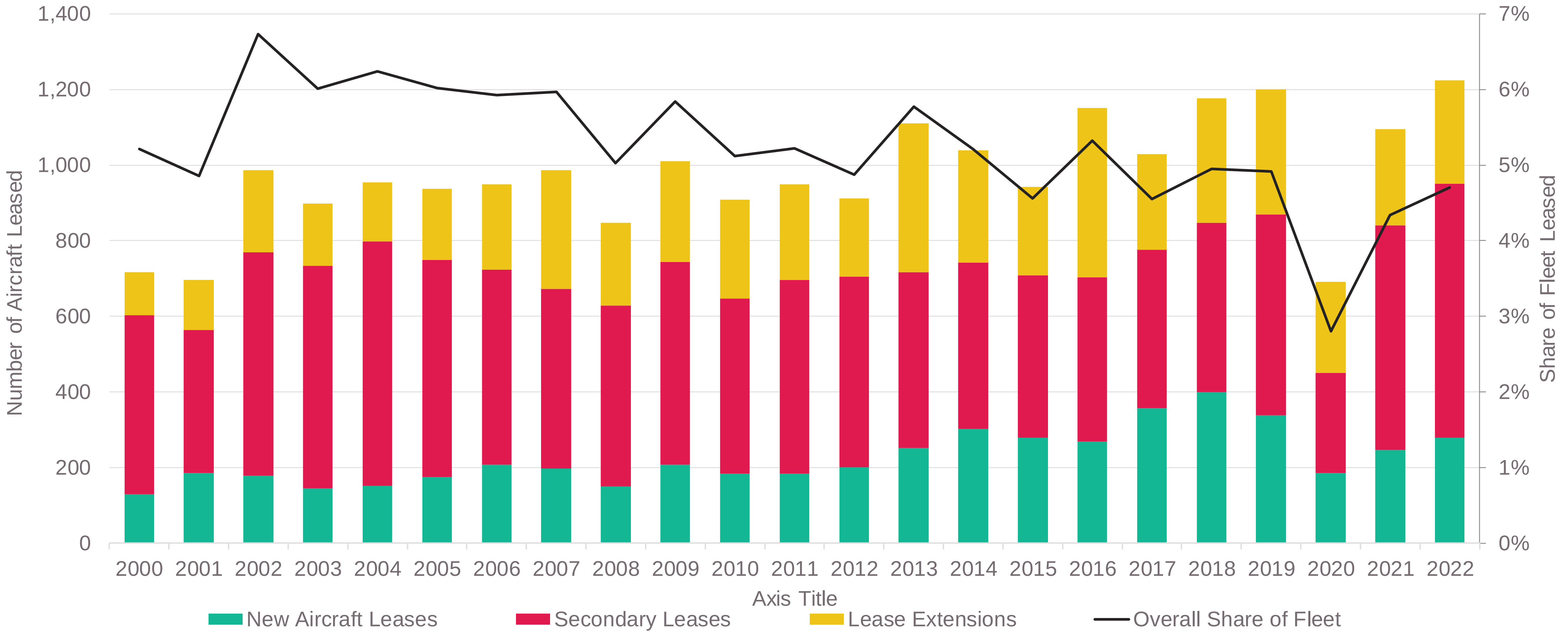
Sale with Lease attached is similar although note relatively high number where new owner is not known at time of transaction



Source: Cirium Fleets Analyzer, narrowbody and widebody aircraft only

Lease volume remarkably consistent at around 5% of overall fleet, averaging almost 1,000 leases per annum but growing in line with fleet growth



Source: Cirium Fleets Analyzer, narrowbody and widebody aircraft only

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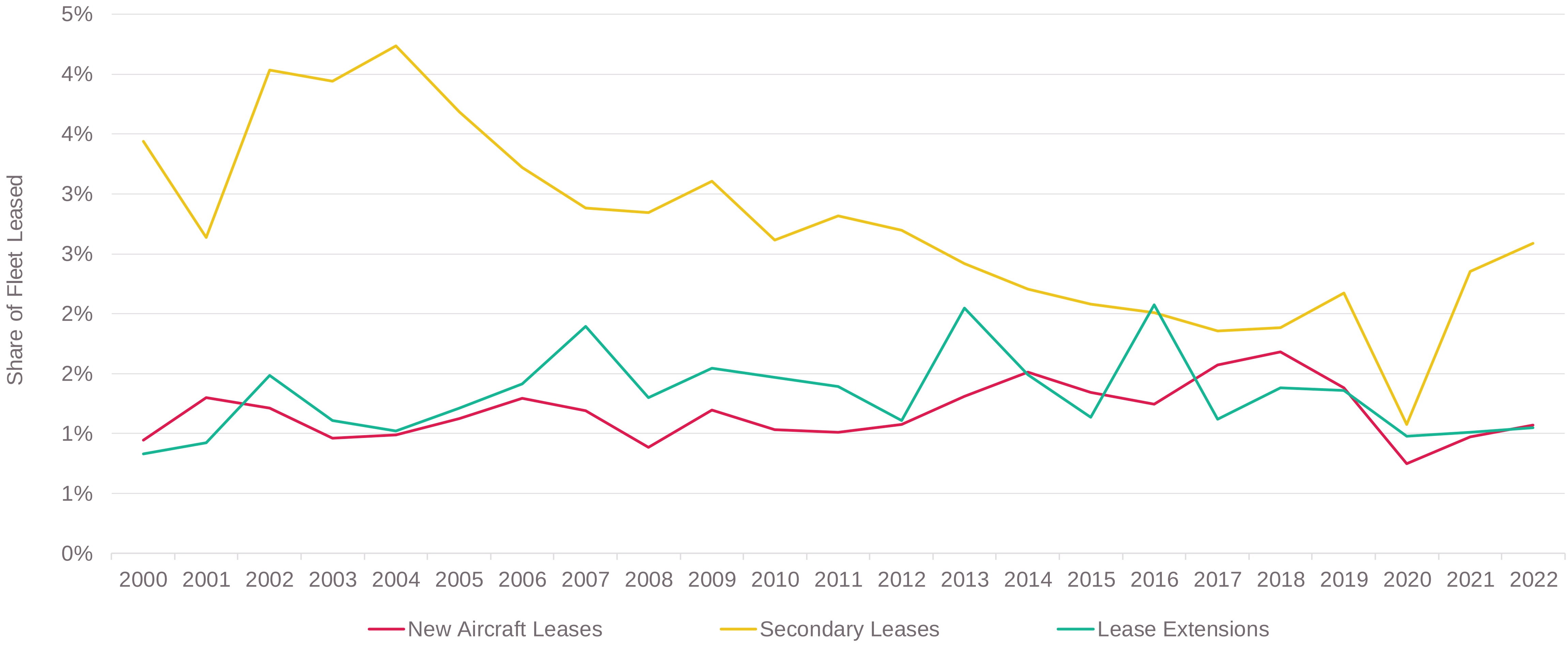
Lease volume has recovered very quickly through "pandemic years"; lease extension data likely under-reported



Source: Cirium Fleets Analyzer, narrowbody and widebody aircraft only

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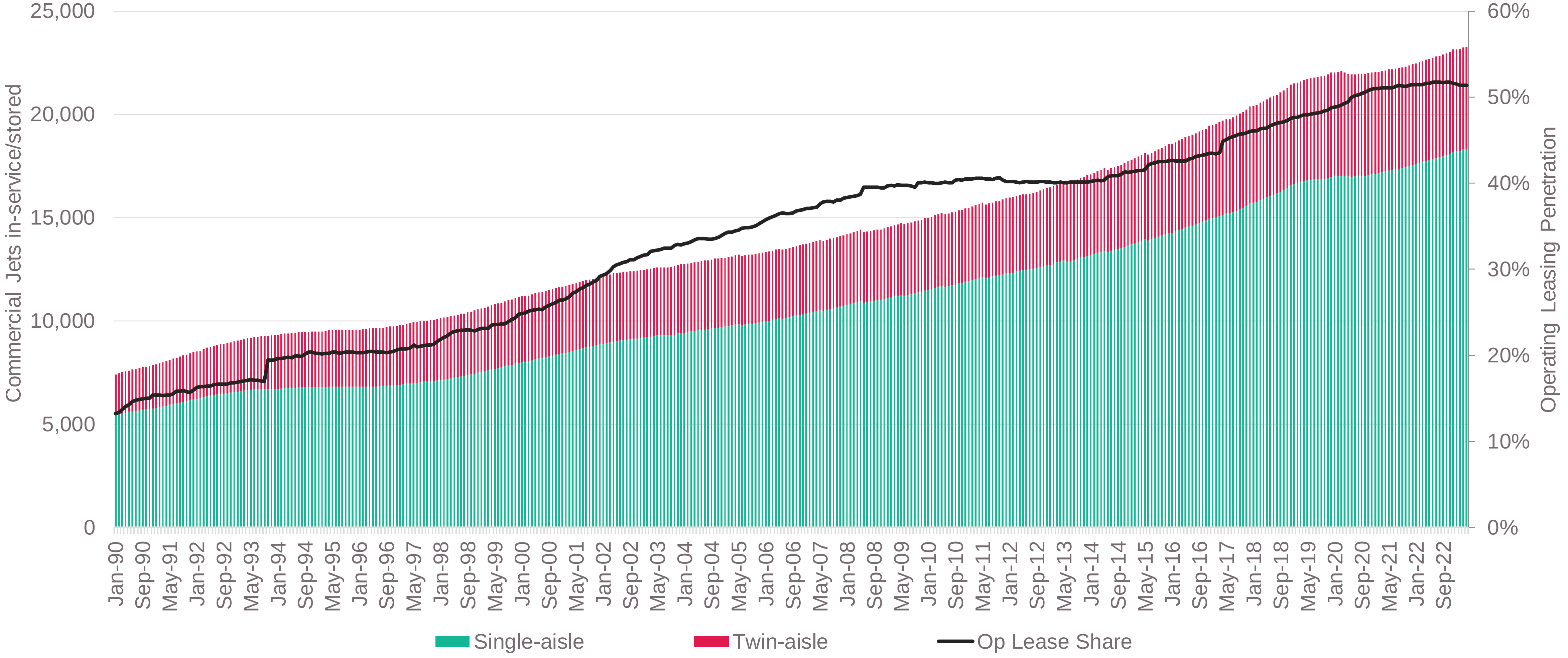
Leasing market share growth is slowing – in 2020 it gained 2.2% points, then 0.5% points in 2021, only 0.1% point in 2022, lost 0.2% points in 2023 to date



Source: Cirium Fleets Analyzer, passenger single-aisle and twin-aisle jets only

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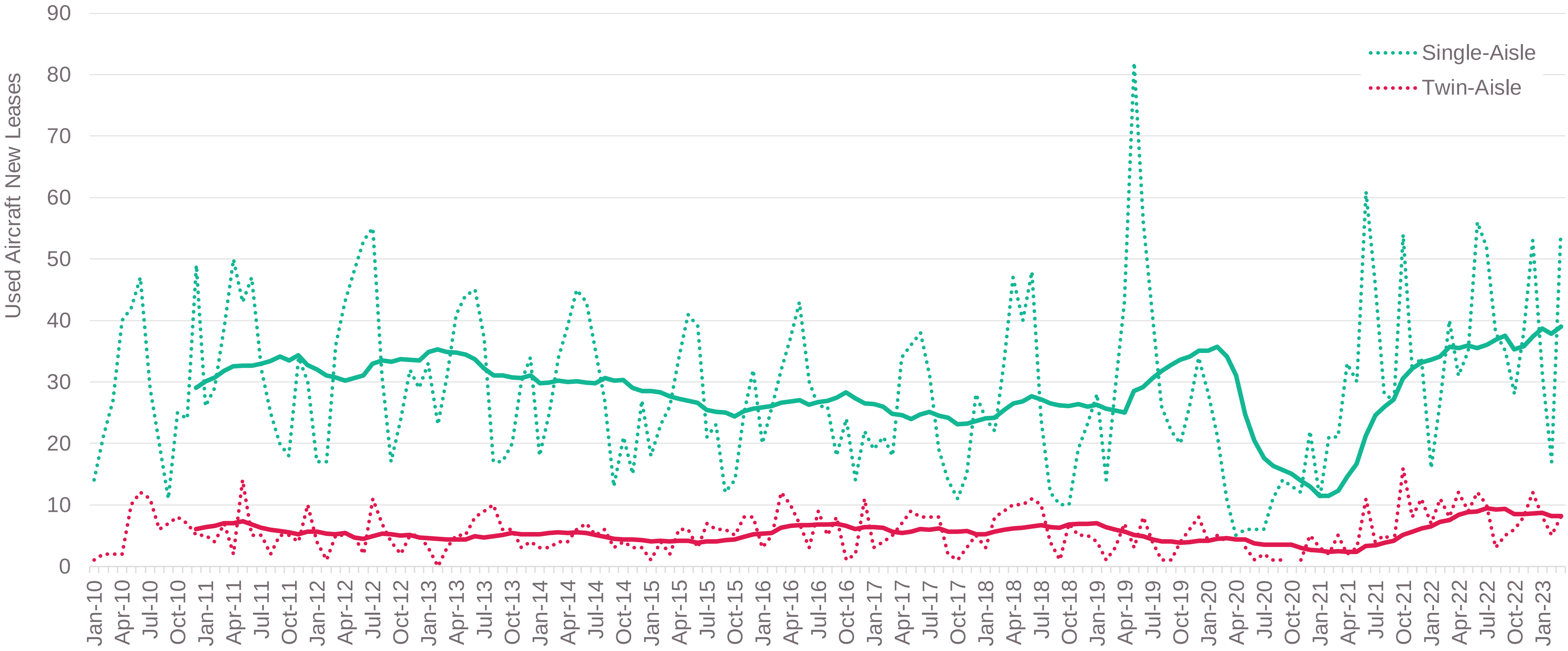
Volume of new leases for used aircraft actually above levels seen at any time in last cycle



Source: Cirium Fleets Analyzer, passenger single-aisle and twin-aisle jets only

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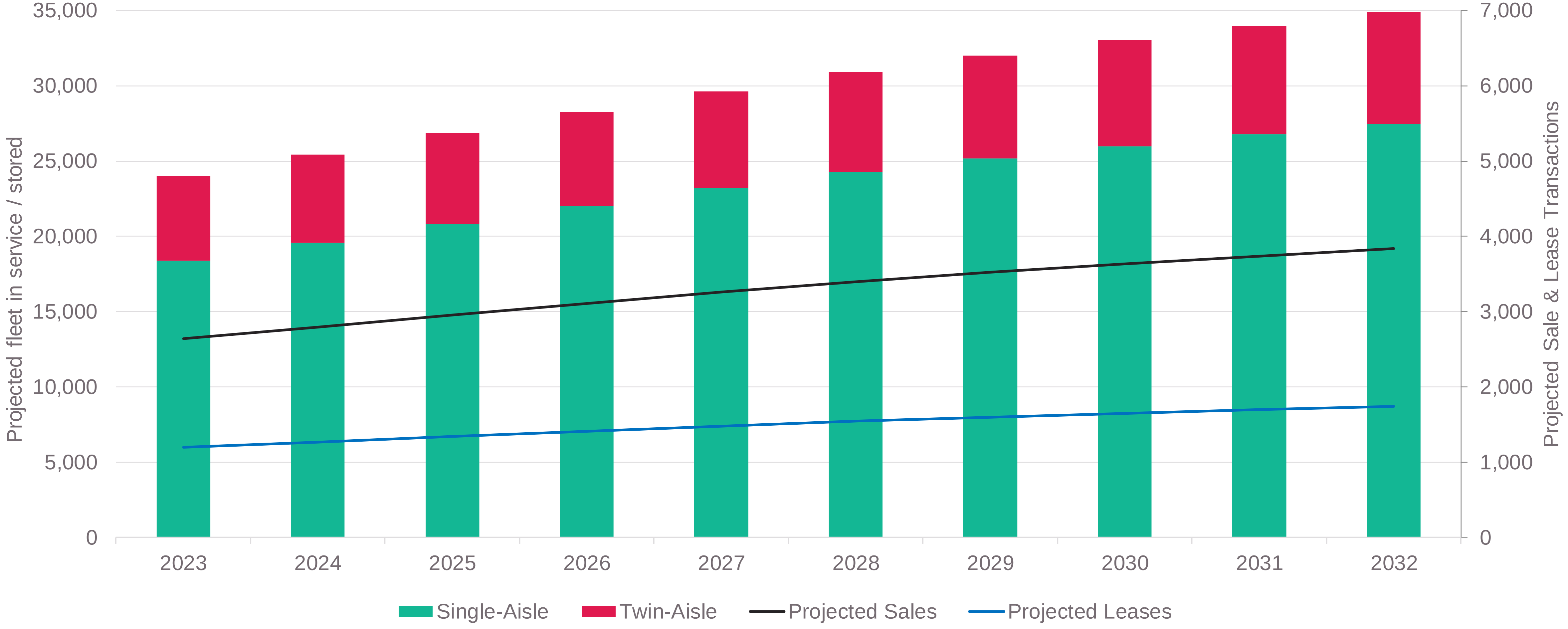
With fleet growth expected to resume in 2023, simple projections indicate >30,000 sales and >15,000 lease transactions in next ten years



Source: Cirium Fleet Forecast, Ascend analysis

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Summary & conclusions

- In the past 20 years around 11% of the commercial aircraft fleet is transacted for sale in one form or another on an annual basis (excluding new deliveries), around 5% for lease
- Annual volume is cyclical and correlated to the demand cycle
- Sale transactions dominate but there is a very broad cross-section of types of sale
- There is also a very broad cross-section of purchaser destinations and also aircraft types and variants (albeit not covered in this analysis)
- SLB volume has held up through the pandemic but there are potential signs of a slowing for now
- Sales with lease attached have recovered, but not to volumes seen in latter part of the last growth cycle
- As fleet growth consolidates in 2023 and continues thereafter, projections suggest there could be more than 30,000 commercial aircraft transactions globally through 2032

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