



Aviation Finance - Market outlook & potential opportunity

October 2020



Key messages



Aviation industry was experiencing a 10-year supercycle into 2020



Covid-19 impact on air travel has been unprecedented, however the sector has demonstrated its robust nature historically and there are reasons for optimism



Aviation finance is innovative and continually evolving, providing significant opportunity for investors with long term record of strong returns



While a globally diversified sector, Ireland is the centre of aviation financing expertise



KPMG Ireland has unparalleled experience in the sector, with deep relationships with key lessors and aviation investors

Aviation financing - market overview pre-COVID

The aviation financing market was experiencing a 10-year supercycle into 2020



60%

GROWTH IN
COMMERCIAL
AVIATION OVER LAST
10 YEARS

6.9x

GLOBAL LEASED
FLEET HAD GROWN
IN PRIOR 20 YEARS

2x

RPK BROADLY
DOUBLED
EVERY 15
YEARS

50%

OF THE COMMERCIAL
AVIATION FLEET WAS
LEASED BY 2019

>37,000

PRE-COVID REDUCTIONS FOR NEW AIRCRAFT
ORDER BOOKS TO MEET 2019 EXPECTED DEMAND
THROUGH 2037

Aviation financing - market overview pre-COVID

Positive Factors

1

**Record profitability
run for airlines**

2

**Air travel growth
forecasts**

3

**Expected capital
requirements**

4

**Investor appetite for
lessor debt & equity**

5

**Continued popularity
of leasing**

Potential Challenges

1

**Macro economic
outlook and cooling
of passenger growth**

2

Manufacturer issues

3

**Ultracompetitive
leasing market**

4

**Sustainability
agenda**

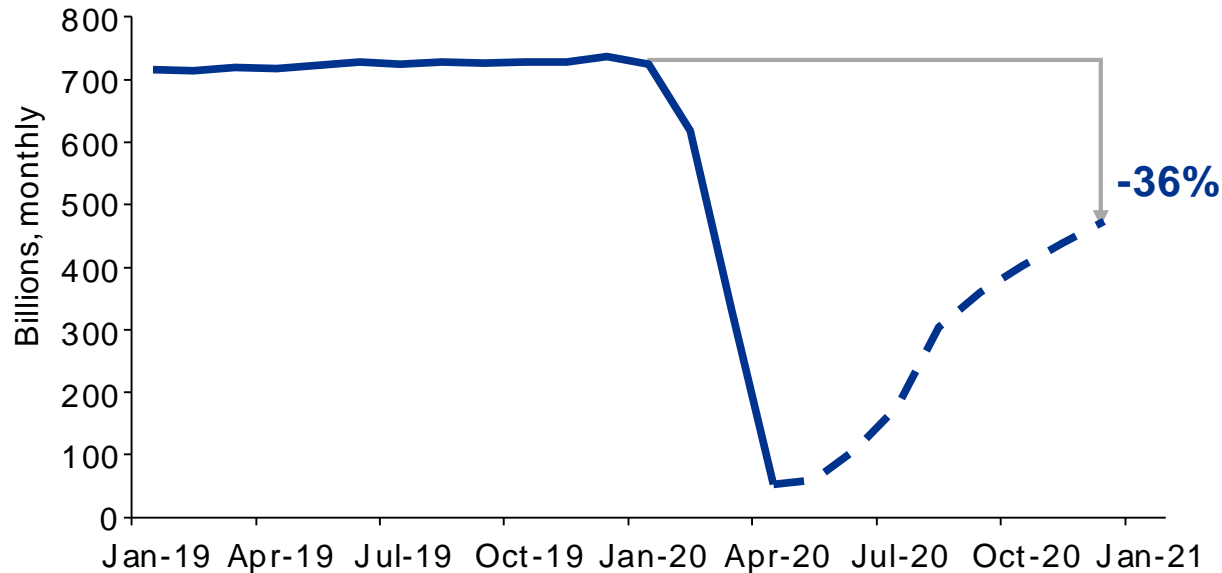
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**Oil prices & interest
rate volatility**

Aviation financing - Covid-19 impact

Global RPK initially declined by c. 95% due to Covid-19. However, IATA predicts a meaningful recovery by January 2021.

Global RPKs



- Air travel very severely impacted:
 - RPKs initially fell by >95%;
 - forecast \$84bn loss during 2020;
 - c.17,000 commercial jets in storage in May 2020.
- Mass deferrals in lease rentals
- Airline failure risk significantly increased
- Focus on liquidity for lessors paramount
- Newer entrants to lessor market likely to suffer medium term losses
- Increased airline failures, depressed demand and aircraft repossessions will have negative impact on asset values
- Current aircraft trading market virtually non-existent

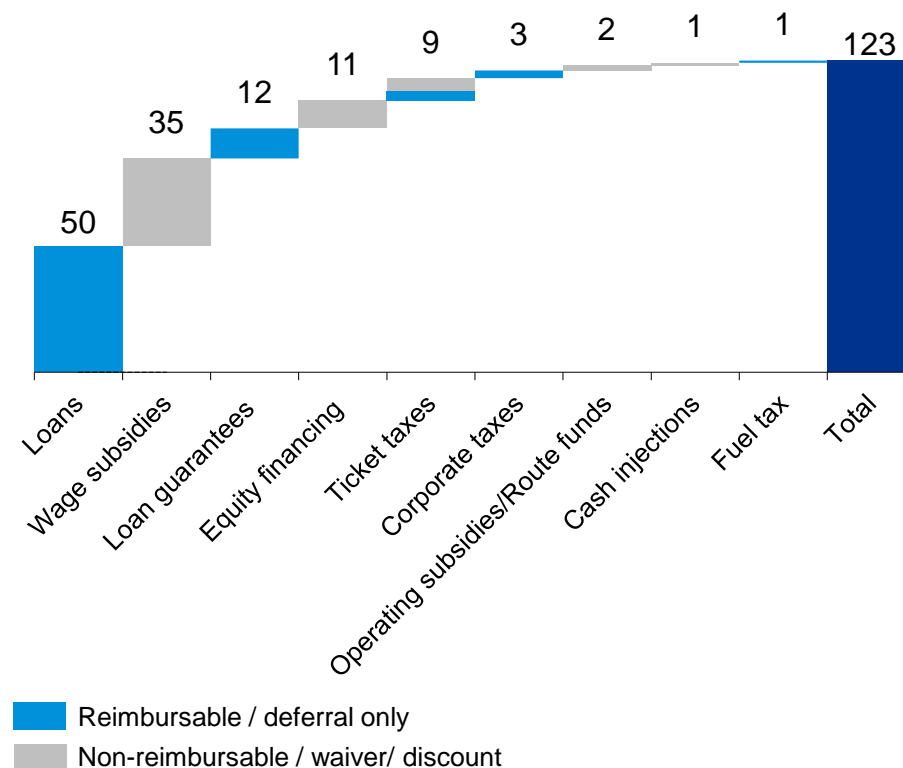
Source: IATA

Aviation financing - reasons for optimism post- Covid-19

Consumer confidence in travel safety and access to capital is critical to recovery of the aviation sector

- Significant volume of government led support for airlines should ensure survival of significant operators
- Broad expectation for recovery to 2019 levels by 2022/23:
 - Domestic/short haul first, leading long haul recovery in Q4
 - Development of “Air Bridges”
- Market sentiment towards large scale lessors has remained resilient:
 - Recent senior unsecured debt issuances by ALC, AerCap, BOC Aviation & ACG
 - Initial increase in lessor unsecured bond yields on secondary market have substantially recovered
 - Large scale lessors initial liquidity concerns proven mostly unfounded
- Strong likelihood of market consolidation of airlines and lessors through M&A activity into Q4 2020 / Q1 2021
- Longer term, airlines stated aim is to increase proportion of leased fleet
- Already significant level of SLB activity, particularly in the US

Government aid made available to airlines due to COVID-19, by type (USD bn)



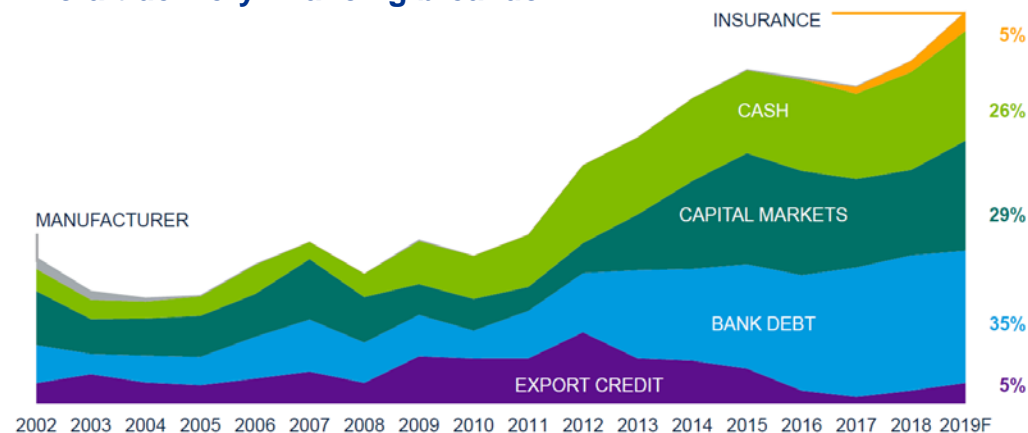
Sources: IATA, ATAG, Oxford Economics, ICAO, UNWTO, WTO, public information and data from SRS Analyser, DDS, FlightRadar 24, TTBS, ACIC, Platts, Airline Analyst, annual reports. In the gvt. aid chart, measures included up to 15 May 2020.

Aviation financing - what makes the market attractive for new investors?

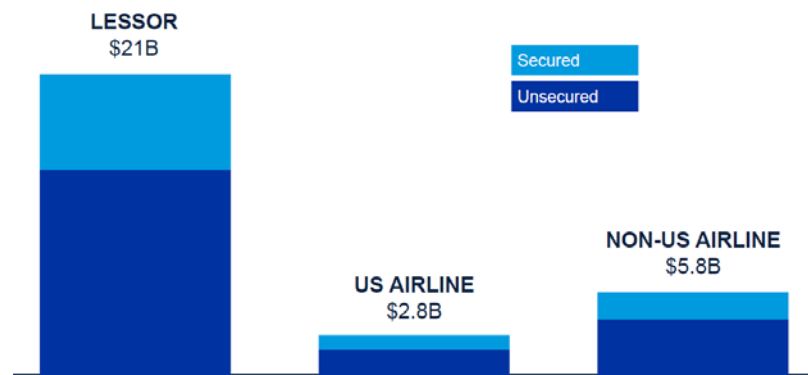
What makes it attractive?

- Consistent history of strong returns
- An innovative market; continuously creating efficient and suitable funding opportunities to meet market needs
- Extremely diverse and evolving financing environment
- Aviation has become a much more mainstream and attractive asset class for investment
- Debt pricing for lessors has significantly reduced (passing airlines) and many lessors have obtained investment grade status in recent years
- Lessors dominate other aviation finance players in accessing capital markets – unsecured debt and ABS issuances reached record levels in 2019
- Attractive for lenders – provides access to increasingly profitable industry whilst maintaining geographical diversity

Aircraft delivery financing breakdown



Lessor domination of capital markets

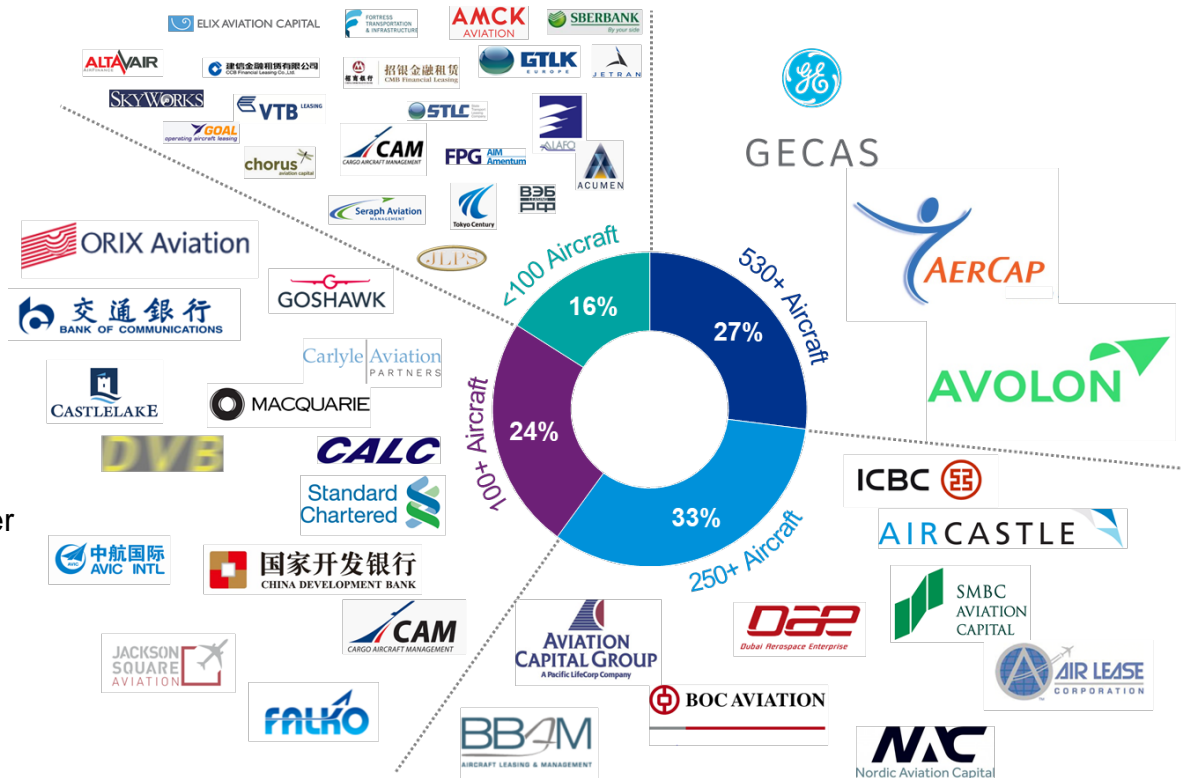


Source: Current Aircraft Finance Market Outlook Boeing Capital Corporation, 2019.

Aircraft lessors - market overview and opportunity

The top three lessors control significantly less of the global leased fleet compared to 2009, presenting an opportunity for consolidation and the entry of new capital into the sector.

- Increased market demand for leased aircraft and readily available finance has facilitated the entry of new players and enabled the mid-tier lessors to close the gap on the larger players.
- However the negative impact on aircraft asset valuations and cash flows is likely to disproportionately impact lessors who:
 - operate a less diversified lessee profile
 - have historically been more aggressive on pricing
 - are constrained in their ability to raise further funding and manage liquidity
 - have limited management bandwidth to proactively manage lessee interactions and remarketing activities

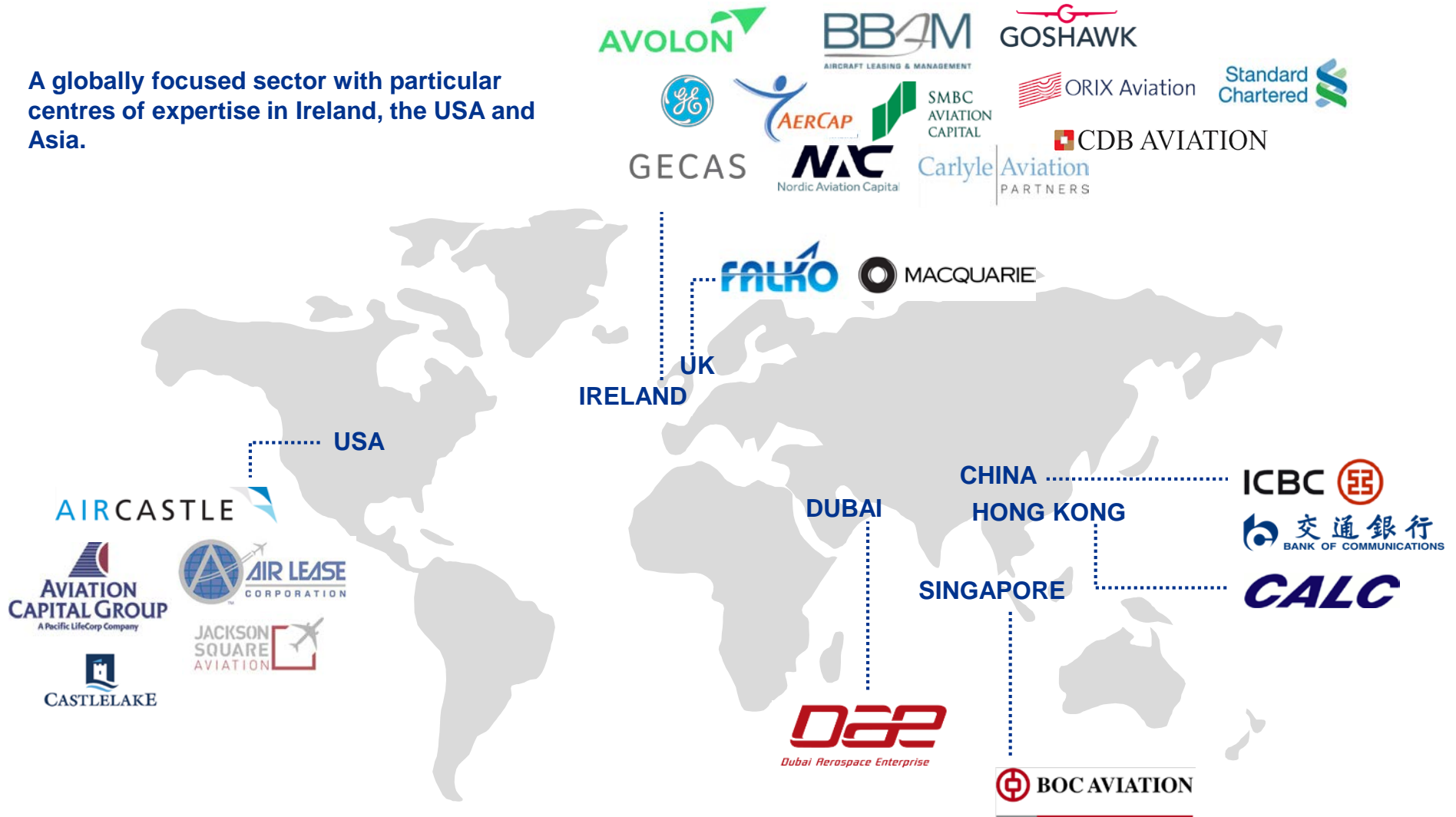


Source: AirFinance Journal Leasing Top 50 July 2019
 Note: Percentage as a proportion of Top 50 lessors by number of managed aircraft.

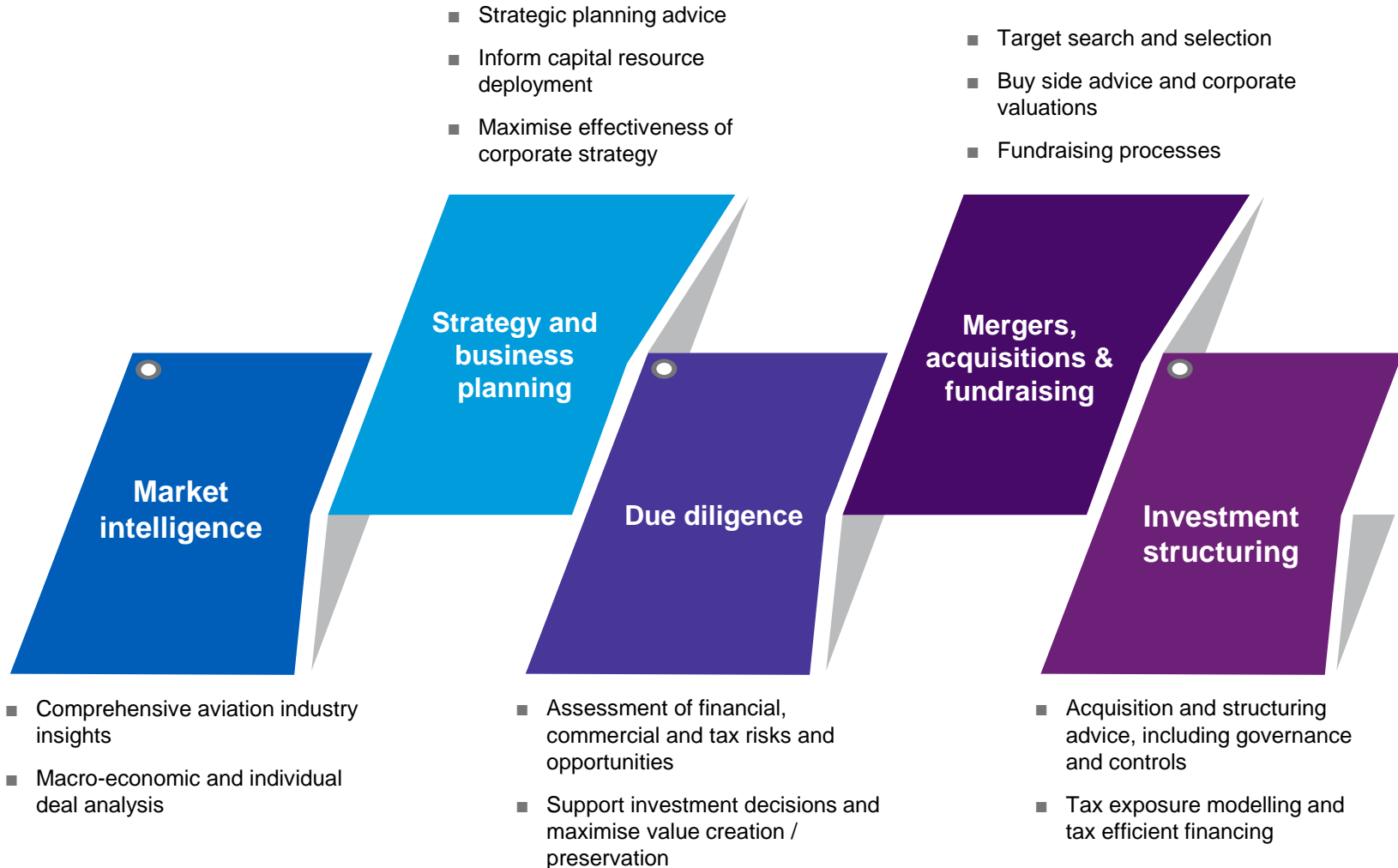
Growth in demand for leased aircraft is expected to continue however it is likely to be supported by a smaller number of well capitalised lessors led by experienced management teams.

Significant lessors by head office location

A globally focused sector with particular centres of expertise in Ireland, the USA and Asia.



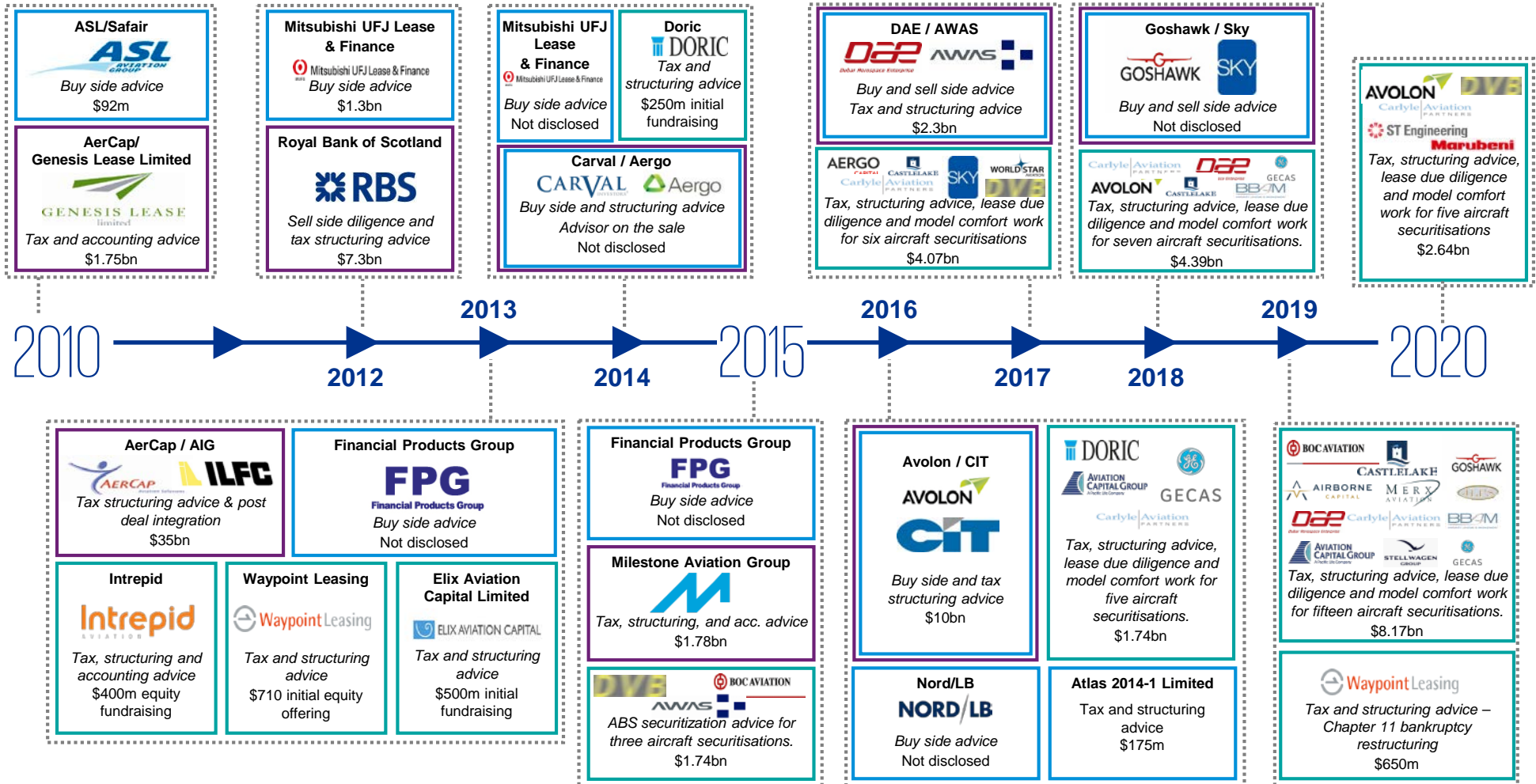
KPMG Ireland's expertise in the sector



Credentials timeline

- Buy side advice
- Sell side advice
- Equity and debt capital markets

We are the only professional services firm identified in the “AirFinance Power 30” list of companies which lists those firms noted as making an essential contribution to aviation finance. We have the biggest concentration of aircraft leasing clients of any firm in the world, including the major deal-makers in the global aviation finance market, and have advised on practically all aviation leasing M&A and capital markets activity over the last decade.



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Appendices

1. Why Ireland?
2. Top 50 lessors by managed portfolio

Why Ireland? Tax factors



12.5% rate of **corporation tax** on trading profits – one of lowest in Europe



12.5% p.a. tax **depreciation rate** (irrespective of the economic life of the asset) or accounting depreciation (on election)



An extensive **tax treaty network** (74 signed with 73 in effect, beneficial provisions for aircraft leasing)



Stamp duty exemption for aircraft.



Unused losses can be carried forward indefinitely



Enhanced tax incentives for **foreign employees/directors**



Income tax relief for time spent working in BRICS, Middle East and certain African countries



Withholding tax exemptions for interest and dividends



An attractive **securitisation regime** for leasing



No outbound withholding taxes on lease rentals



No thin capitalisation rules currently (probable change in coming years)



0% tax in **regulated investment vehicles**
























Why Ireland? Non-tax factors






















 <p>Global Centre for Aviation Finance & Leasing since mid-1970's</p>	 <p>All major lessors have operations in Ireland.</p>	 <p>Almost all ABS are centred in Ireland.</p>	 <p>Deep pool of local expertise – 5,000+ employees</p>	 <p>Young, well educated work force</p>	 <p>Politically stable</p>
 <p>Member of Cape Town convention Maintain Cape Town register</p>	 <p>Over 4,000 of the world's leased aircraft/ engines in Ireland.</p>	 <p>Over \$140bn of assets under management. Over \$65bn on order</p>	 <p>Dedicated specialist aviation debt platform on Irish Stock Exchange</p>	 <p>English language</p>	 <p>Favourable time zone for dealing with East & West</p>
 <p>Chapter 11-10 type protection for creditors lending against aviation assets</p>	 <p>Highly developed professional services infrastructure</p>	 <p>Cluster of support businesses – MRO's, Transitioning, CSP's</p>	 <p>Facilitates ECA backed & other orphan financings</p>	 <p>Aircraft registrations – highly regarded Irish Aviation Authority</p>	 <p>Common law system</p>

Appendix 2

Top 50 lessors by managed portfolio

Top 50 lessors by managed portfolio		No. of aircraft	% of Top 50	HQ
1	GECAS	 1,201	12%	Ireland
2	Aercap	 1,042	10%	Ireland
3	Avolon	 530	5%	Ireland
4	BBAM	 510	5%	Ireland
5	Nordic Aviation Capital	 480	5%	Ireland
6	SMBC Aviation Capital	 421	4%	Ireland
7	Air Lease Corporation	 361	4%	USA
8	DAE Capital	 350	3%	UAE
9	BOC Aviation	 337	3%	Singapore
10	ICBC Leasing	 329	3%	China
11	Aviation Capital Group	 316	3%	USA
12	Aircastle	 283	3%	USA
13	Carlyle Aviation Partners	 240	2%	Ireland
14	Castlelake	 223	2%	USA
15	BoComm	 217	2%	China
15=	Orix Aviation	 217	2%	Ireland
17	CDB Aviation	 215	2%	Ireland
18	Macquarie Airfinance	 194	2%	Ireland
19	Goshawk	 171	2%	Ireland
20	Jackson Square Aviation	 158	2%	USA
21	Avmax	150	1%	Canada
22	China Aircraft Leasing Company	 137	1%	Hong Kong
23	Standard Chartered Bank	 133	1%	Ireland
24	DVB AAM	 121	1%	Germany
25	Falko	115	1%	UK

Top 50 lessors by managed portfolio		No. of aircraft	% of Top 50	HQ
26	Cargo Aircraft Management	103	1%	USA
27	CMB Financial Leasing	 94	1%	China
28	Aircraft Leasing & Management	86	1%	UK
29	Chorus Aviation	 80	1%	Canada
30	Accipiter*	 77	1%	Ireland
31	CCB Leasing	 75	1%	China
32	VTB Leasing	 74	1%	Russia
32=	Elix Aviation Capital	 73	1%	Ireland
32=	JP Lease Products & Services	 72	1%	Japan
35	VEB Leasing	 71	1%	Russia
36	Fortress Transportation	 70	1%	USA
36=	ALAFCO	 70	1%	Kuwait
38	State Transport Leasing Company	69	1%	Russia
38	FPG Amentum	 69	1%	Ireland
40	MC Aviation Partners*	 66	1%	Japan
41	Aviation Finance & Leasing	65	1%	
42	Tokyo Century Leasing	 61	1%	Japan
42=	Jetran International	61	1%	USA
44	Altavair Airfinance	 60	1%	USA
45	Seraph Aviation Management	 59	1%	Ireland
46	GTLK Europe	 58	1%	Ireland
46=	Skyworks Leasing	 58	1%	USA
48	Acumen Aviation	57	1%	Ireland
49	GOAL	 56	1%	Germany
49=	Sberbank Leasing	56	1%	Russian

 Denotes clients of KPMG

Source: AirFinance Journal Leasing Top 50 July 2019

Note: Accipiter and MCAP merged to create AMCK in Q4 2019



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