Operating leasing has grown fast, and reached 3,100 mainline jet aircraft; 27% of the global fleet. The portion is expected to grow to 30% and about 9,500 aircraft in 20 years. A survey of the top lessors indicates which are in the best position to take advantage of this increase.

Top 20 operating lessor survey

Operating leasing is becoming an important financing technique for mainline jets, and is expected to increase from about 3,100 units (about 27% of the current fleet of 14,700) to more than 9,500 aircraft by 2020 (30% of the fleet of 33,000). This represents a net increase in lessors' portfolios of $300 billion at a current average purchase price of $50 million per unit. Many lessors are gearing up for this projected growth, but taking advantage of this depends on the ability to finance larger portfolios and consistently making the right lessee and aircraft selections.

The global fleet of 3,100 leased western jetliner aircraft includes used aircraft. This survey provides a guide to the world's top 20 lessors, in terms of size of mainline jet aircraft portfolios.

Current level

International Lease Finance Corporation (ILFC), GECAS, Boeing Capital, CIT, Ansett and debis Air Finance have the six largest portfolios *(see table, page 8)*.

Lessors can broadly be categorised in groups or tiers. The first contains the two mega lessors, GECAS and ILFC. Both portfolios and outstanding orders show that these will maintain their top position *(see table, page 8)*. GECAS and ILFC have been placing speculative orders for longer than other lessors, and have grown by placing aircraft with lessees that had few other options for acquiring aircraft. They were also the first lessors to be acquired by financially powerful parent companies, which provided them with low-cost internal financing and the ability to expand their portfolios faster than the growth of operating leasing.

The second tier includes lessors with portfolios of 50-200 aircraft *(see table, page 8)*, not including regional jets, turboprops or business jets. These include CIT Aerospace, Ansett Worldwide, debis AirFinance, Babcock & Brown, Boullioun and ORIX. These have all followed the mega lessors' strategy of being acquired by financially powerful parent companies. This has allowed them to increase their portfolios, by changing from ownership of used aircraft to placing speculative orders. The outstanding orders for some of these lessors indicates *(see table, page 8)* that, while being cautious, they may increase their portfolios faster than the growth in operating leasing and so aim to gain market share.

The third tier includes lessors with portfolios smaller than 50 jetliner aircraft. These include SALE, Tombo Aviation, IEM and Deutsche Structured Finance *(see table, page 8)*.

Like larger lessors, these third tier companies have been acquired by more powerful parent companies in recent years, and aim to take advantage of the predicted growth in operating leasing and increase their portfolios. Some have placed speculative orders.

Leasing growth

Because of weakened airline profits, diminished cash reserves and a tight supply of commercial debt, airlines have increasingly looked towards operating lessors to finance aircraft in 2002. This may temporarily cause a 'spike' in the number of aircraft acquired on operating lease, but this is expected to increase annually. It is estimated to reach about 30% by 2012-2020, but some expect that it could climb to 40%.

The growth in operating leasing has been triggered by several factors. These include the purchase of many lessors by large parent companies with substantial financial resources. This was started with the mega lessors. ILFC, for example, is owned by American International Group (AIG), and GECAS is owned by GE Capital. Ownership by powerful parent companies provides internal funding to lessors at rates below the cost of externally sourced debt.

Lease rates offered by these lessors have been lowered as a consequence, spurring growth from all levels of airline creditworthiness across the industry. A broad indication of the fall in lease rates since lessors have been acquired by parent companies is that in the early 1990s the market rate for a 737-300 was $325,000-350,000 while rates for new 737-700s prior to 11th September 2001 were in the region of $250,000-270,000.

This fall in rates has allowed airlines that have rarely been able to acquire new aircraft to take the latest generation aircraft, in particular narrowbodies, from the major lessors. The biggest consequence of this has been to push used aircraft aside and disrupt the traditional chain of used aircraft being sold or leased to weak credit second and third tier carriers.

The availability of other finance techniques has also diminished. This is particularly the case in 2002, with terms for commercial debt being more stringent than in recent years. The net present value of many finance lease types has also been diminished by the reduction of tax allowances.

Operating leasing adds flexibility to fleet planning, provides off-balance sheet financing, and preserves airlines' limited cash reserves. Another factor has been the growth of sale and leaseback transactions. The main benefits to airlines are cash generation and transfer of residual value (RV) risk to lessors. Sale and leasebacks have increased for used, young and new aircraft. Lessors have been asked to take assignment of aircraft orders by airlines and then lease them back to the carriers. This activity has increased since 11th September 2001.

Lessor portfolios

Operating leasing began with lessors leasing used aircraft to weak credit airlines. Lessors' portfolios have evolved

The growth in operating leasing in recent years, spurred by low interest rates and financing costs, has allowed a wider range of airlines with poor credit status to acquire latest technology aircraft at competitive lease rates.

to the extent that the majority of aircraft are new, ordered speculatively from the manufacturers, and leased to a wide range of lessees.

The majority of orders are for narrowbodies. The principle of operating leasing is that profits are made from lease rental streams and RVs. Equity invested will typically be 10-15%. Most lease terms are 5-7 years and lessors arrange debt balloons to be repaid from RVs at the end of the lease. Lessors can make the majority of profits from RVs,but they are volatile, so lessors take high risks and can make high losses. RV performance is therefore crucial, and one of the most important elements of successful operating leasing.

Aircraft with the highest demand in the market retain the highest RVs. These are aircraft operated in large numbers by a large number of lessees, and so are the most easily remarketed. The latest generation narrowbodies fall into this category. In contrast, widebodies with special capabilities and niche markets are the hardest to remarket and have the poorest RV retention.

Lessors have therefore expanded their portfolios with the A320 and 737NG families, explaining why 79% of the 3,100 leased mainline jets are narrowbodies.

This ratio of narrowbodies to widebodies is consistent with most lessors' portfolios, in particular those of smaller lessors that have expanded their fleets in recent years with speculative orders for new aircraft. "We have focused on widely used narrowbody aircraft, which we are able to place with lessees, despite lease rates being down," says Bob Genise, chief executive officer at Boullioun. "The majority of our fleet is A320s and 737NGs, and these have lower exposure than widebodies and other narrowbody types. Good RV prospects and the best aircraft are some of the factors in successful operating leasing. We have more A320s and 737NGs on order."

More than 80% of GECAS' portfolio comprises narrowbodies, while ILFC is an exception with widebodies accounting for 30% of its 591 aircraft. ILFC has a wider variety of aircraft in its portfolio, but is also large enough to remarket aircraft in the event that they are returned.

Second tier lessors have concentrated their portfolios on new generation narrowbodies. CIT, Boullioun and debis AirFinance have all placed speculative orders for A320s and 737NGs in recent years, although many lessors have acquired others.

Besides aircraft type, lessors must carefully consider lessee selection. More airlines are acquiring aircraft from operating lessors with the fall in lease rates. Besides careful lessee selection, lessors often limit risk with a wide lessee base. ILFC, for example, has 136 lessees for its 591 aircraft, an average of just four per airline. ILFC's lessees are spread globally, and include major carriers which are generally regarded as low credit risk and have only used operating leasing in recent years. These include American, Continental, Southwest, Alaska Airlines, British Airways (BA) and Lufthansa, plus almost every major flag carrier in the world. It also includes a wide range of weaker credit airlines from all parts of the world.

CIT, the third largest independent lessor, has 100 lessees for its 183 mainline jet aircraft, less than two aircraft per lessee. Examples of its lessees include BA, Wuhan Airlines, LTU and the TACA Group.

Genise explains that Boullioun has a similarly wide distribution of lessees because it does not like having concentrated credit and geographical risk. Customers include BA, Go, America West, Frontier, Virgin Blue and CSA. New customers include Hainan and China Eastern.

Lessee spreads are generally wide with all lessor's portfolios. Smaller lessors, such as Orix, Deutsche Structured Finance, Safair, Sunrock and Tombo generally have smaller spreads of lessees and higher credit quality airlines, with some portfolios being concentrated on a few major customers.

Lessor strategy

The predicted rise in operating leasing over the next 5-20 years will see large numbers of aircraft being added to portfolios. The number of lessors in recent years has declined. Debis AirFinance, for example, bought Aer Fi and Indigo. Other portfolios are for sale, with Morgan Stanley offering Ansett. Further consolidation may occur, although there have been new entrants, such as IEM and Lombard.

With the sale of Ansett many lessors expect consolidation. "Besides Ansett there are another one or two lessors for sale, and there are also owners which want to exit the operating lease business," says Richard Baudoin, managing director of The Aviation Capital Group.

Frank Haspel, chief executive officer at debis AirFinance agrees. "GECAS and ILFC will remain the front runners, but the second tier lessors may want to change, so these will get bigger by buying smaller lessors. This could lead to GECAS and ILFC having a few substantial competitors in three or four years. We may buy another lessor, or get bought by someone."

The expected consolidation of lessors and growth in leasing means portfolios of remaining lessors will grow faster than operating leasing itself. This will put

TOP OPERATING LESSOR PORTFOLIO, LESSEE AND OWNERSHIP

Lessor	Parent company	Portfolio size	Average age	Aircraft types	Lessees	Aircraft on order
GECAS	GE Capital	1,024	8	A320, A330, 737, 767, 777		100
ILFC	AIG	591	N/A	All Airbus, 737, 747, 757, 767, 777, MD-83, MD-11	American, Continental, British Airways, Lufthansa, THY, Mexicana & Jet Blue	538
Boeing Capital	Boeing	276	9	717, 727, 737, 757, DC-10, MD-80, MD-11	EAT, DHL, American, AirTran, Continental, Northwest, United	4
CIT Aerospace	Filed for IPO	183	12	A320, A330, A340, 737, 757	America West, American, United, Delta, Aerosvit	85
Ansett Worldwide	Morgan Stanley	176	10	A300/310/320/340 737/757/767/747/ MD-80	Aer Lingus, Air France, Alitalia, American, Cathay Pacific, Varig	0
debis AirFinance	Daimler Chrysler	132	8	All Airbus, 737, 757, 767, MD-80	Air Canada, Air France, Avianca, British Airways, Korean, TAM, Thai	30
Babcock & Brown	Babcock & Brown	140	10	A300, A320, 737,	Air France, British Airways, BMI	0
BAE Systems Asset Man	BAE Systems	101	11	BAE 146, Avro RJ	Aer Lingus, Air Canada, Eurowings	0
GATX	GATX Corp	94	6	A320, A330, 737	South African, Swiss, TAM, LTU	N/A
Aviation Capital Group	ACG	77	10	A320, 737, 757, 767	American, Southwest, Air France, Mexicana, TACA	0
Boullioun	West LB	74	5.5	A320, 737NG, 757	America West, Airtours, Air Europa, Air Berlin, China Xinhua, Go	47
Orix	Orix Corp	58	10	A319/20, A330, A340, 737	Air Canada, America West, Air New Zealand, Lufthansa, British Airways	0
SALE	Boullioun & SIA	40	4	A320, A330, 737, 777	China Eastern, EVA, Korean Air	32
Pembroke Group	Rolls-Royce & GATX	40	7	A321, 717, 737, 757	Air France, Delta, SAS, Qantas	14
Tombo Aviation	Mitsui & Co	36	7	A320, 737, 757	Excel, Air Europa, Hapag Lloyd	1
Bavaria	Schorghuber	28	8	A320, 737	Varig, VASP, Transaero, TAP	10
Deutsche Structured Finance	Aereal Bank AG	23	4.4	737-300, 767-300	Air New Zealand, Deutsche BA	0
IEM	Abbey National	23	6	A320, 737-300, 737-800, 757, MD-82	TACA, TAM, Varig, Air Europa, SIA, Continental	0
Sunrock Aircraft	Nissho Iwai	18	7	737, 757, 767	Varig, SAS, Jet Airways, Kibris	0
Itochu Airlease	Itochu Corporation	10	5	A320, 737, 757, 767	British Airways, Britannia	0

competitive pressures on lessors to increase their portfolios at fast rates. The ability to do so will depend on financial strength and adopting the right growth strategy. Lessors that are successful will build large portfolios and gain market share.

There are also the new-entrant lessors, such as Lombard Aviation Capital, which plans to acquire or build a portfolio of up to 200 aircraft in the next six or seven years.

Lessors are characteristically cautious about long-term predictions, although they do expect strong growth in the short-term. "Operating leasing is expected to account for about 35% of the fleet in five years, and if the manufacturers orders are examined it is clear operating lessors control a large number of the orders. This 35% of the fleet is equal to 4,500 aircraft, so there will be a net increase of more than 1,000 aircraft in five years. That is, 200 aircraft per year, which is a large percentage of expected new orders in this period," says Haspel.

Analysis of the distribution of leased aircraft among airlines reveals second tier carriers dominate over major airlines. "The top 25 airlines only lease 10% of their fleets, while the next 100 lease 25% of their aircraft," says Baudoin. "If the top tier airlines increase their portion of leased aircraft, the total number of leased aircraft expands rapidly. I expect the portion of aircraft leased by major airlines to grow even faster after 11th September 2001".

The current mainline jet backlog is 2,860 Airbus and Boeing aircraft, and lessors account for 1,000 (35%) of these orders. Lessors account for most deliveries scheduled for 2008-2010.

ILFC, CIT, debis AirFinance, Aviation Capital, Boullioun and SALE are among lessors planning to increase their portfolios at an equal or faster rate than the predicted growth of operating leasing.

ILFC has nearly 600 orders outstanding. These will allow ILFC to double its size over the next eight years, without considering the options it holds.

GECAS and CIT have 100 and 85 outstanding orders. CIT's orders are large in relation to its portfolio. The lessor has shifted its focus from used jets and regional aircraft to large orders for A320s and 737s. In addition to the 183 mainline jet aircraft in its portfolio, it also has regional jets and turboprops, which bring its total fleet to 292 aircraft. This could double in five years to almost 600 aircraft; with an increase of more than 200 aircraft for mainline jets.

Its orders for 85 new aircraft are its underlying business, but it also does purchase and leaseback transactions as well as buying aircraft from other lessors with leases attached. These can be 20-30 per year, and allow CIT to buffer its growth rate without having an impact on orders for new aircraft. Orders for new aircraft alone will allow CIT to grow its portfolio by 10% per year.

Boullioun's 47 firm orders are joined by options on a further 58. The firm orders are spread over eight years, which alone would allow the lessor to increase its portfolio by 60%. The options give it flexibility to grow faster if allowed by market conditions. "We have spread our orders and options so we can easily place small numbers each year with lessors, since we also have to re-market aircraft being returned from leases," says Genise. "We expect our portfolio to increase to 125-150 in five years. That is, a doubling which means we hope to grow fast relative to the operating lease market. Our strategy is to grow the portfolio by $500-600 million per year."

SALE also has ambitious growth plans. It has 27 aircraft on firm order and expects to take the 29 options it holds. It also expects to acquire aircraft through purchase and leaseback transactions, and so expects to increase its portfolio to about 100 aircraft in five years.

Debis AirFinance also aims to increase its portfolio by about $800 million per year. This would grow its jet fleet by about 100 to 230 in five years.

Baudoin explains that Aviation Capital Group aims to increase its fleet of 77 aircraft by about 25% per year. If maintained it will have tripled its portfolio to about 225 aircraft.

The growth plans of these six lessors alone could see an increase of up to 1,200 aircraft in five years: a 39% increase in mainline jet aircraft on operating leases. If achieved, these six lessors would account for all the predicted growth in operating leasing over the next five years. Since this does not include other lessors' growth targets, it indicates that there will be strong competition to take advantage of the predicted growth in leasing. There are also the plans of new entrant lessors, such as Lombard, which will fuel competition.

Factors that will determine success in the period of expected rapid expansion are lessee assessment, aircraft selection, financial strength and management capability.

"Success is mainly down to a combination of good lessee credit quality and aircraft with the strongest RV prospects, as well as the funds to pay for expansion," says Genise. "Our owner West LB provides us with funding for orders, but we would also like to do some third party funding and are looking at EETCs and securitisations."

Lessee assessment is important to ensure that losses due to returned aircraft are minimised. Part of the growth in operating leasing will come from leases to weaker credit airlines. "It is important to understand a lessee's market position relative to its competitors. Lessors have traditionally only leased to non-bankable credits, and it is only in the past five years that bankable credits have started to use operating leasing," says Haspel. "As long as we have an asset which is remarketable and think the lessee can make it we will lease aircraft to non-bankable credits. We have not had problems with airlines in Africa and Latin America, but since 11th September 2001 we have had difficulties with airlines we did not expect to have problems with. To be successful we need to have a well balanced fleet, respond quickly, have the funds available to grow be able to offer attractive financing and competitive lease rates."

Baudoin emphasises the importance of airline assessment. "The level of an airline's credit is relative. We have to look at its management, financial performance and strategy, but must also have the ability to evaluate it".