

# AVIATION LEASING AS A SECURE INCOME STRATEGY

## A REAL OPPORTUNITY TO HELP WITH A PENSION SCHEME'S FLIGHTPATH

### AVIATION OPERATING LEASING – A FAMILIAR “SALE AND LEASE-BACK” MODEL

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With the need for maturing funds to set investment strategies that help meet their on-going liabilities, there is a search for opportunities to invest in assets that will provide stable and secure cash flows. Whilst there are some well-established investment opportunities that meet this requirement, constructing a diversified portfolio of uncorrelated investments should help limit overall volatility and provide a further benefit.

The concept of investors buying an asset and then renting it out for an income is very well understood in the Real Estate sector. Many funds have a long history of Real Estate allocations, and many of these have focused on strategies where the tenants have longer term commitments, and therefore the value of the rental income is a significant part of the overall proposition.

Infrastructure, as a broad asset class, is also seen as a source of stable cash flows, as assets generate the regular incomes from their utilisation. And it is within this broad sector that we believe investors should consider the opportunity of Aviation Leasing, as it is an area which is well suited to generate secure long-term income flows.

The financing of an aircraft, and the subsequent leasing to an airline is a familiar “sale and lease-back” structure, albeit possibly on a not-so-familiar real asset. However, investors can look to the strong airline industry market dynamics, as well as a high level of regulation overseeing the sector, to benefit from a diversifying source of secure and stable income.

## SOLID SUPPORT FROM THE GROWING AVIATION INDUSTRY

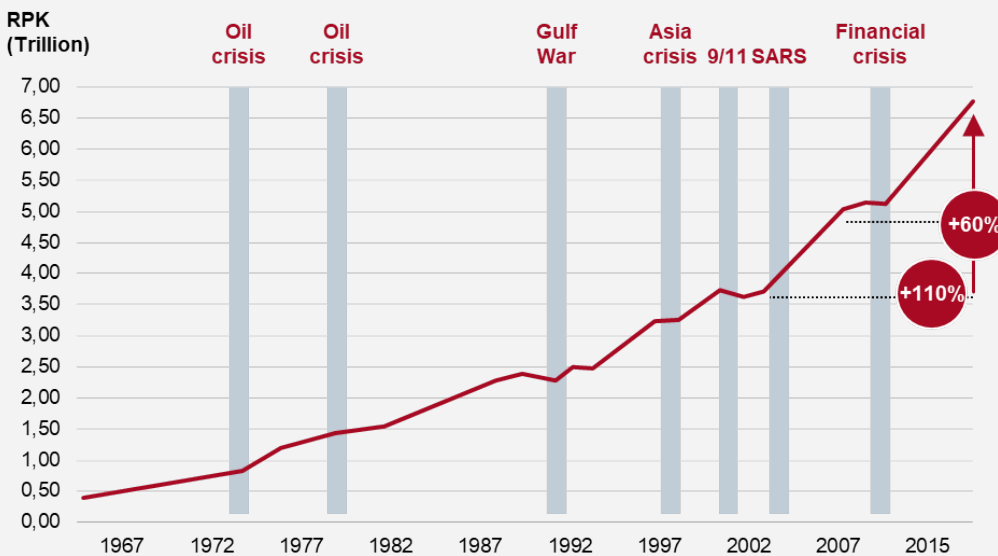
In terms of the sector, the underlying long-term dynamics of the airline industry remain positive, as strong demand for passenger traffic continues. Historic growth over the 5 years prior to 2018 has been in excess of 6% per annum, and whilst there have been some temporary setbacks driven by external market factors, this trend is expected to continue, demonstrated by a more than doubling in passenger traffic since 9/11.

### IATA expected development of global air traffic (in RPK)<sup>2</sup>

|              |      |
|--------------|------|
| <b>2016</b>  | 7.4% |
| <b>2017</b>  | 8.1% |
| <b>2018F</b> | 7.0% |

### IATA expected global development of net profits of the airline industry<sup>2</sup>

|              |            |
|--------------|------------|
| <b>2016</b>  | \$ 34.2 bn |
| <b>2017</b>  | \$ 38.0 bn |
| <b>2018F</b> | \$ 33.8 bn |



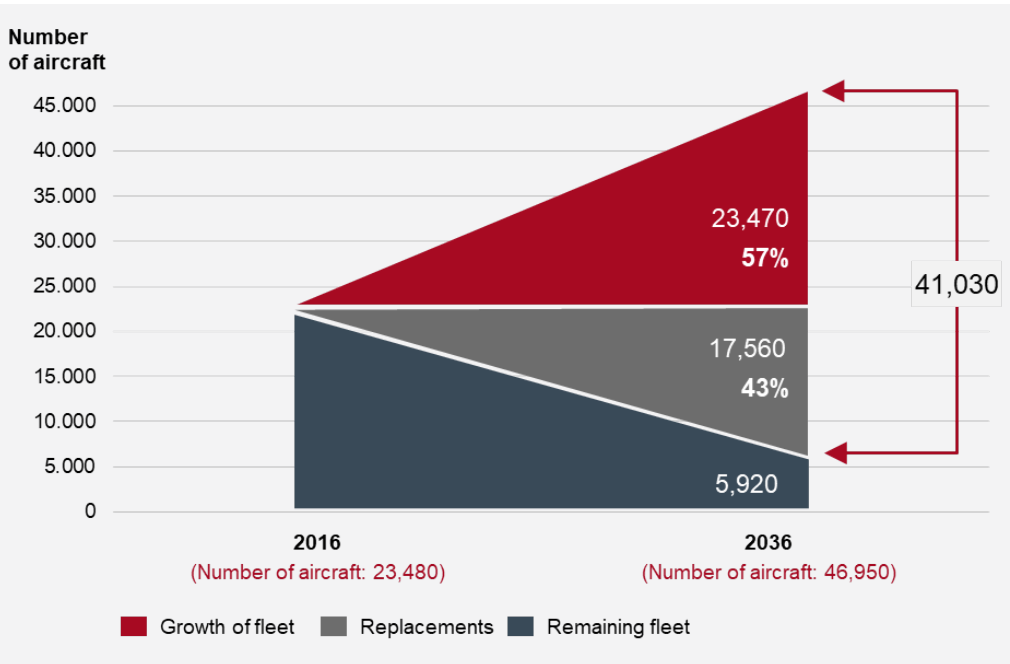
Global annual air traffic (trillions of RPK)<sup>1</sup>

<sup>1</sup> Source: Airbus Global Market Forecast 2017 – 2036, ICAO and KGAL analysis; RPK = Sold revenue passenger kilometers.

<sup>2</sup> Sources: IATA, Fact and Figures, June 2018.

This growth in demand has fuelled a subsequent growth in the passenger fleet, which currently stands at approximately 24,000 aircraft and is estimated to double over the next 20 years. The requirement for new aircraft, within this overall increase in total numbers, is compounded by the need to replace older aircraft as they come to the end of their usability. This results in Boeing estimating that the total requirement for passenger aircraft over the coming 20 years is in excess of 40,000 new aircraft.

**40,000**  
new aircraft

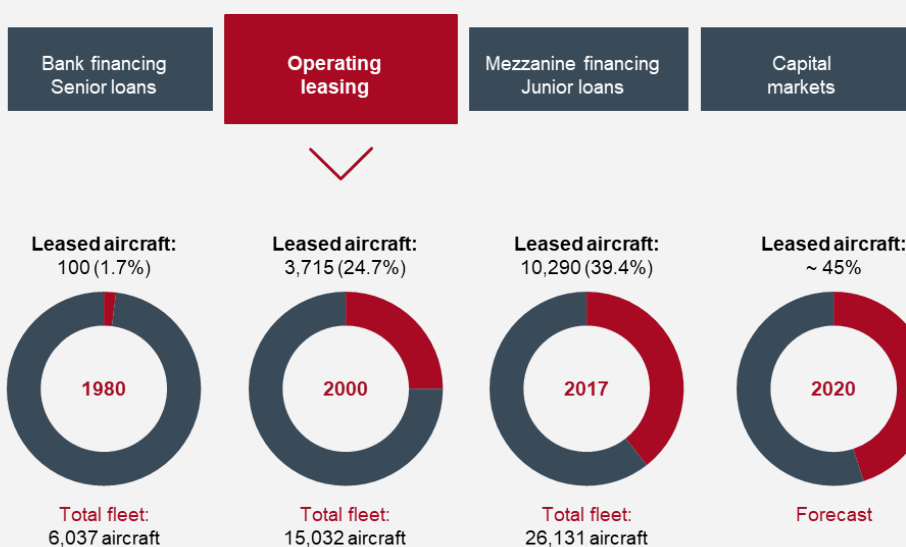


Development of the global aircraft fleet (forecast)

Source: Boeing Current Market Outlook 2017 – 2036

## OPERATING LEASING IS AN INCREASE SOURCE OF FINANCING ACROSS AIRLINES

Airlines have a number of options when it comes to financing aircraft, but increasingly they have looked to the benefits and flexibility of operating leasing aircraft as an important approach, with the percentage of operating leased aircraft increasing from less than 2% in 1980, to approximately 40% in 2017. This operating leasing model is well established now, with a wide range of airline operators choosing to finance all or part of their fleets in this way.



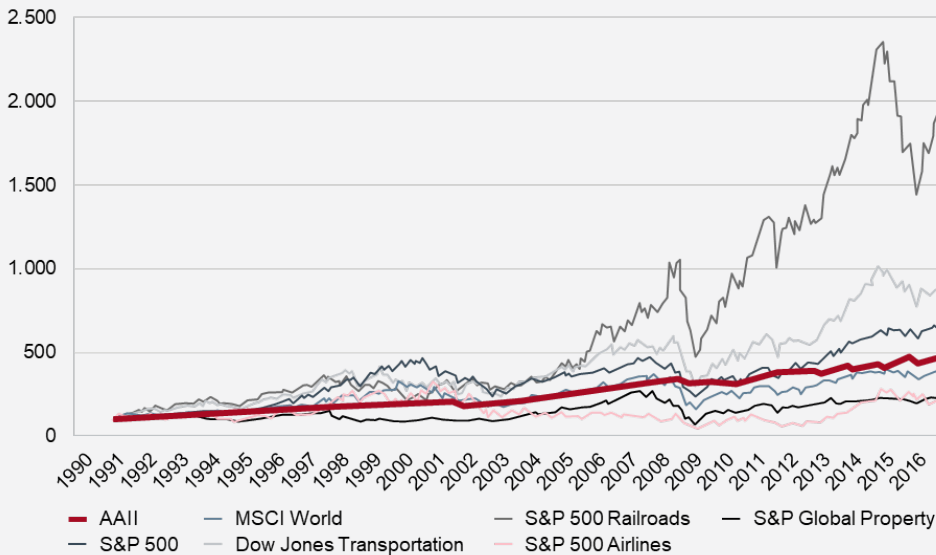
Development of aircraft operating leasing

Source: Boeing, "Lease Industry grows rapidly", 2018.

Investors providing the capital to finance these aircraft are protected by the regulations surrounding the industry, as well as specific clauses in the agreements that ensures that all maintenance and operation aspects are covered by the airlines, which take all responsibility for operating risks out of the hands of the investors. Hence these leases have the equivalent protection found in the triple net leases within the real estate sector.

## AVIATION OPERATING LEASING PROVIDES THE BENEFITS OF DIVERSIFICATION

Investors financing these operating leases face two variables; leasing rates, established at the beginning of the lease and payable over the whole term, and residual values, when leases have come to an end. In terms of leasing rates, returns over time can be seen to have been fairly stable. The Ascend Aircraft Investment Index, constructed by Flight Ascend Consultancy, a third-party industry consultant, illustrates the returns from operating leases over time. In addition, and importantly, it demonstrates the uncorrelated nature of these returns with other investment opportunities, a key benefit to helping deliver the benefits of diversification.



### The Ascend Aircraft Investment Index (AAII)

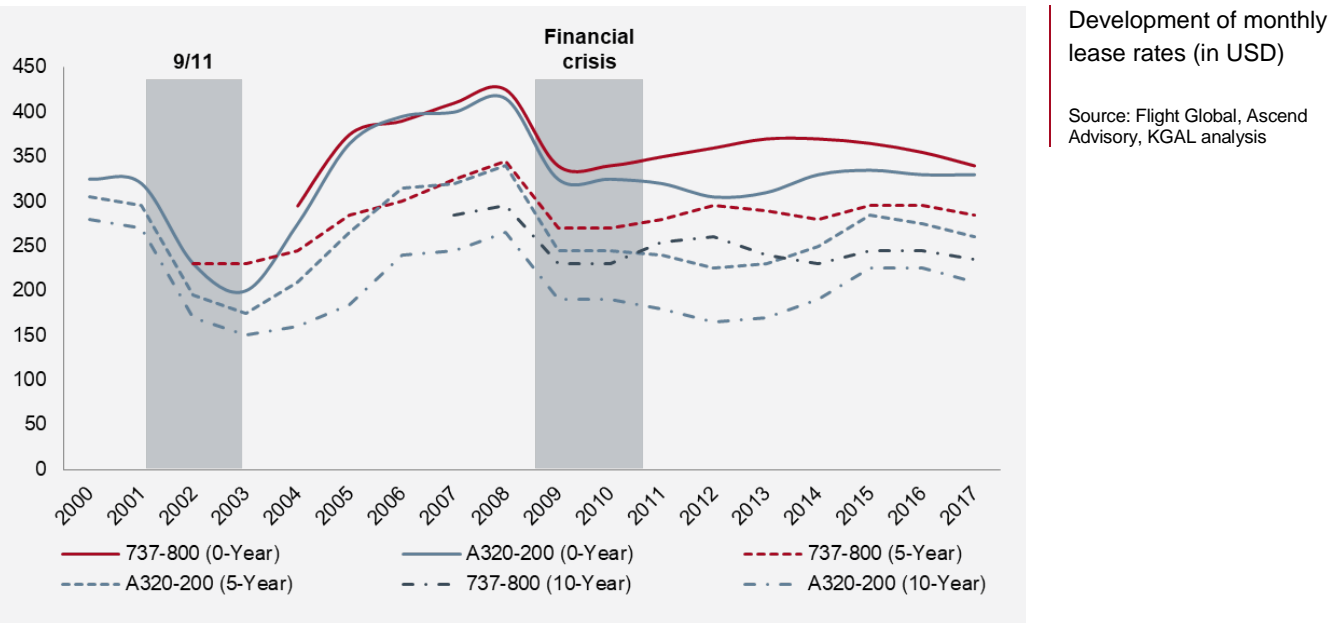
Source: Flight Ascend Consultancy: [www.ascendworldwide.com](http://www.ascendworldwide.com); AAII simulates all processes of an aircraft leasing portfolio (acquisitions, subsequent leases and disposals), uses the market values of its extensive appraiser database and runs a 25-year passive portfolio strategy.

|                                      |                    |                                   |
|--------------------------------------|--------------------|-----------------------------------|
| <b>AAII</b>                          | <b>S&amp;P 500</b> | <b>MSCI World Index</b>           |
| 100                                  | 38                 | 43                                |
| <b>S&amp;P Global Property Index</b> | <b>Gold</b>        | <b>S&amp;P 500 Airlines Index</b> |
| 31                                   | 21                 | 9                                 |

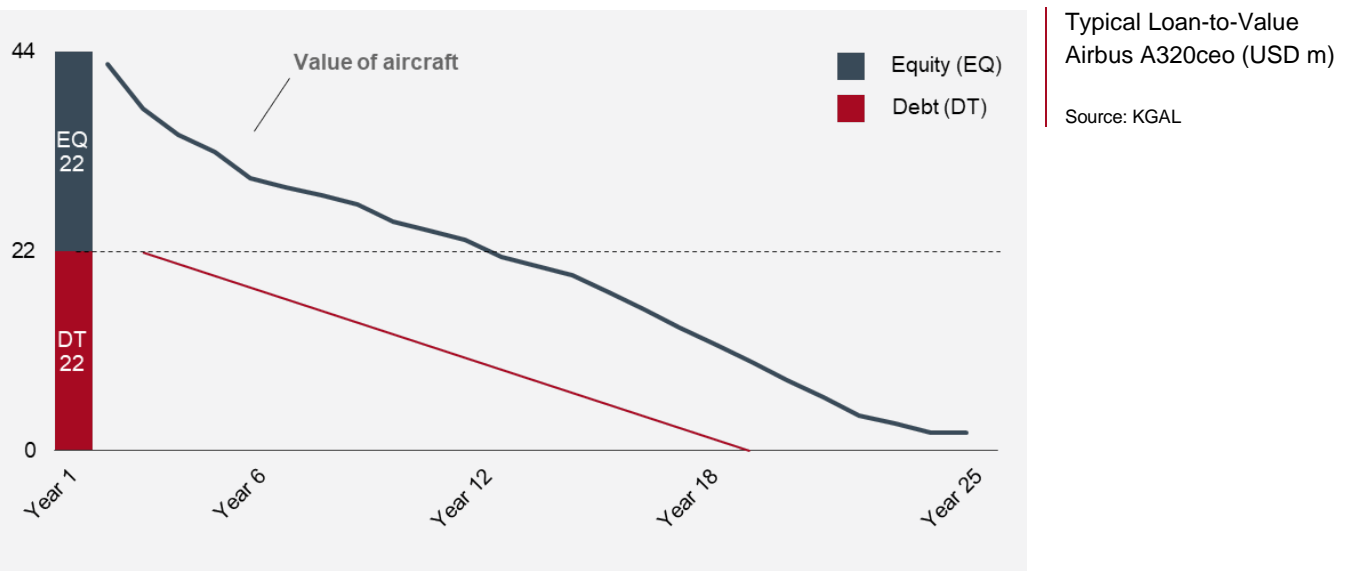
## CONTRACTUAL INCOME IS FIXED FOR THE LEASE PERIOD

An important benefit is that leasing rates are usually fixed for the period of the, typically, long-term lease. This is the key to generating a stable income stream, and helps protect investors against any short-term fluctuations in the market.

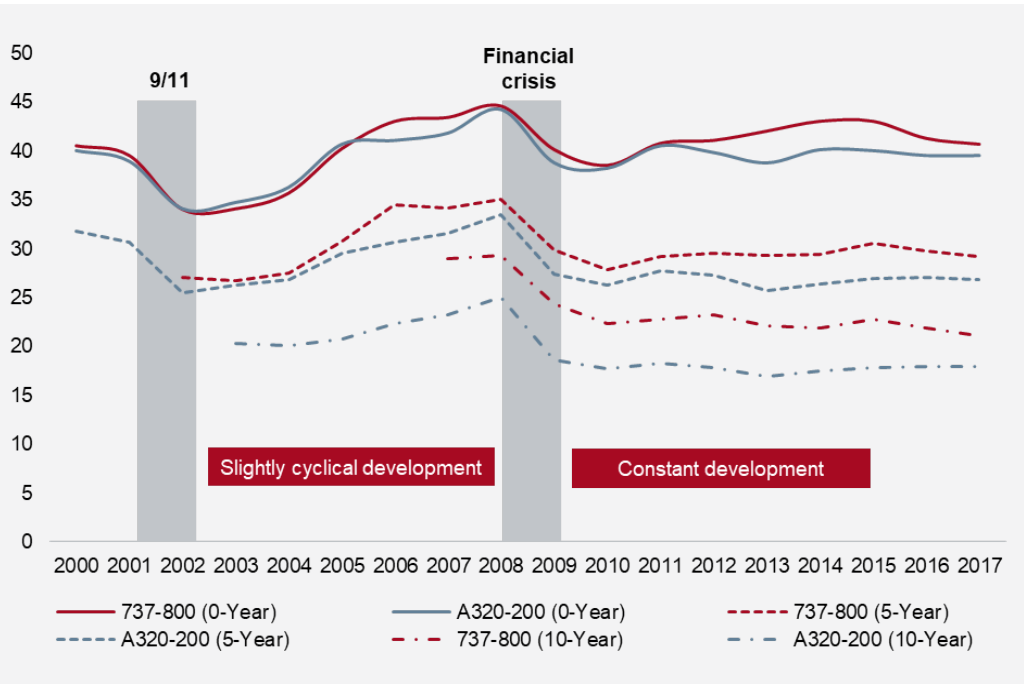
In order to help optimise the returns, financing of these leases can include a certain level of debt, with banks and insurers providing fixed-rate loans that amortise over the term of the lease.



The nature of these fixed, long-term leases results in the opportunity to create a strategy that looks to generate a fixed annual return to investors, after servicing the debt costs, with the debt typically largely paid down over the term, resulting in the investors benefiting from the residual value of the aircraft at the end of the lease.



As with all assets, the residual value of an aircraft is driven by demand. Aircraft with high commonality and a wide distribution across operators, and that are most easily transferred between airlines tend to hold their value better than aircraft that are costly to refit and have a limited operator base. Therefore, a focus on readily marketable aircraft types, such as “narrow-body” aircraft like the Boeing 737, and Airbus A320 classes, can help reduce the risks associated with aircraft with weak market representation.



Development of aircraft values (in USD)

Source: Ascend Advisory

## ESG – MORE TO AVIATION THAN JUST EMISSIONS

ESG considerations are increasingly important. Whilst all current aircraft produce carbon emissions, responsible investing is about ensuring that any effects are well understood and minimised, where possible. By focusing an investment strategy on relatively new aircraft, investors are helping reduce relative emissions, as newer, more efficient aircraft replace the older fleet, with newer aircraft in certain circumstances being 20% more efficient than the retiring models they are replacing.

In addition, we should not underestimate the social benefits afforded to developing economies and society in general as air fares are reduced due to competitive pressures, enabling greater mobility for both work, as well as social benefits.

As a result, investors who are able to take the time can find an opportunity where they will receive a secure and stable income stream, generated from the ownership of real asset, which is fixed for the term of the fund, typically 8-10 years. Building a broad portfolio of a number of marketable aircraft, leased to a variety of well-understood airlines, enables portfolio diversification. Under the current market conditions, annual distributions of around 5.5% should be possible in this core aviation market, with overall fund returns in the region of around 6% per annum.

**20%**  
more efficient  
than the  
retiring models

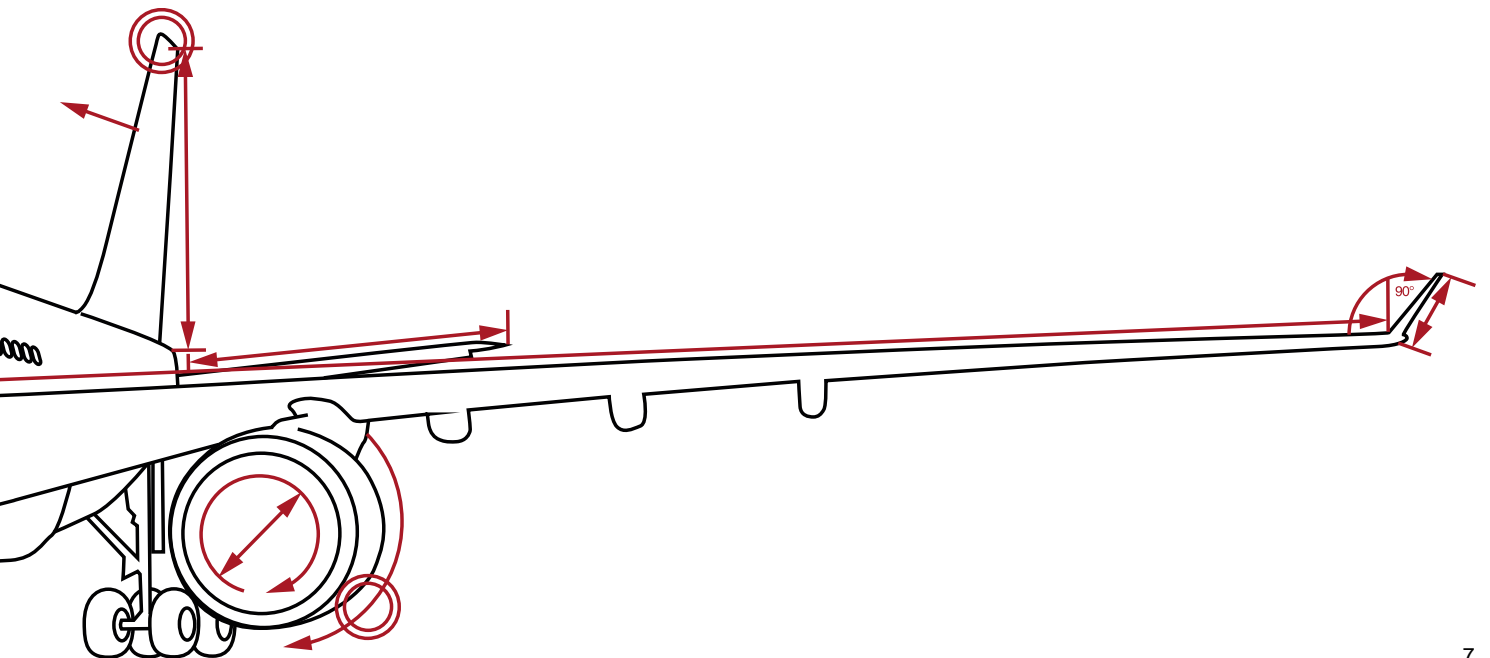
## AVIATION OPERATING LEASING PROVIDES A SECURE INCOME OPPORTUNITY

In summary, the strength of growth in the aviation industry continues to underpin a real opportunity for investors to diversify into a lowly correlated secure income source. Whilst in this period of “easy money” since 2008, expected returns on all asset classes have come down, under the current market conditions, it is possible to create a diversified aviation portfolio, across operators, aircraft and terms, which should deliver a steady income over the fund’s life.



Example of net cash flow to investors

Source: KGAL



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## KGAL Group

To date, the aircraft fund investment volume realised by KGAL Group totals more than €7.4 billion. Since the initial aircraft fund in 1979, KGAL has concluded transactions for more than 800 aircraft, 81 private placements and other investment models, as well as 58 mutual and three institutional funds. KGAL Group is a leading, independent investment and asset manager with an investment volume of €22.7 billion. The investments focus on long-term capital investments for institutional investors in the real estate, infrastructure and aircraft asset classes.

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