



The case for investing in the regional airline industry

Fifty per cent of passengers worldwide are flying sectors below 500 nautical miles and thirty per cent below 300 nautical miles - the regional airline industry is anything but a niche market

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About the European Regions Airline Association (ERA)

The European Regions Airline Association (ERA) is a non-profit trade association representing the intra-European aviation industry.

Since its inception in 1980 ERA has developed and grown in size and reputation to represent nearly 50 airlines and over 110 service providers including airframe and engine manufacturers, airports, suppliers and service providers from all over Europe. ERA is a well-respected and established voice of the industry. Through its shared knowledge and experience ERA is able to offer its members an invaluable means of helping identify and address common challenges.

ERA works on behalf of its members to represent their interests before Europe's major regulatory bodies. The Association also bring members together to exchange information and learn from each other through different events and forums. A major role for ERA is to raise the profile and importance of regional air transport to the economic and social development of Europe and this is undertaken through lobbying and communication campaigns.

For more information visit www.eraa.org

1. EXECUTIVE SUMMARY

The objective of this report is to spell out the investment case for the regional aviation industry and to demonstrate why there is a sound business rationale for investing in or lending against regional jets and turboprops. The report shows how regional airlines, operating smaller aircraft, have become an integral part of the world's aviation infrastructure without which major airlines would lose a significant portion of their feeder traffic.

The report begins with an assessment of the scale of regional aviation relative to mainline carrier routes served by narrow or wide-body equipment. This shows how the traditional perception of turboprops serving short routes no longer represents the core of regional aviation. The scale of regional aviation has grown considerably in recent decades with the average capacity of turboprop aircraft rising from 19-40 seats to over 70 seats today. In the case of jets this began with 50 seaters and is now rising towards 80-100 seats.

The report includes a review of the applications for regional aircraft. They enable airlines to provide the right balance of capacity and frequency on key routes. In the important role of feeding mainline carriers, regional aircraft can supplement mainline capacity and increase frequency when markets are growing. When markets are weak, regional aircraft can be used to defend an airline's position by maintaining frequency with less capacity or by replacing narrow body aircraft that may be too large. Regional aircraft can also enable airlines to manage demand fluctuation between seasons or even during the day. These applications, among others, show how regional aircraft are an integral part of the world's aviation system.

The report also compares the operating costs of regional aircraft to those of narrow body aircraft. For this purpose, regional jets and turboprops are compared against the most popular narrow body A320 and B737-800 aircraft.

A brief product overview for both regional jets and turboprops is followed by an analysis of the various business models that regional carriers adopt in today's market place. This includes the vital role of regional carriers in feeding traffic to mainline carrier long-haul networks, whether they are wholly-owned subsidiaries, franchise operators or providers of capacity in the form of wet lease arrangements or capacity purchase agreements. The role of independently branded carriers, which in some cases also feed mainline operators or service distinct local markets and government sponsored public service obligations, are also addressed. Many of these are established and successful carriers that merit closer analysis by the aircraft finance community.

For lessors and lenders a vital investment criteria is the critical mass and liquidity of any aircraft type in the market place. The report extensively analyses the distribution of both regional jets and turboprops that have been delivered to date or are on order. It focuses on the current generation of in production aircraft and addresses the status of future aircraft not yet in production and compares them with current generation narrow and wide body equipment.

The report tackles the important question of how regional aircraft values perform over time. This includes a review of how future values are expected to perform and these are benchmarked against the A320 and B737-800 types. This review also provides data on how selected aircraft types have performed over time and an assessment of value volatility since the 1990s.

The penultimate section examines the current status of the regional aircraft finance market. It reviews the mix of leases, loans and export credit in the regional aircraft market and assesses the main participants.

Principal findings:

- a. while smaller than narrow body operations, the scale of regional aircraft operations is substantial;
- b. regional aircraft have the right capacity for many routes that do not justify narrow body equipment;
- c. regional aircraft can enable network airlines to optimise capacity and frequency for high yield business passengers;
- d. regional aircraft can compete favourably with the operating costs of narrow body aircraft particularly on short sectors;
- e. current generation and forthcoming regional jets and turboprops represent modern state-of-the-art technology;
- f. many regional carriers are a strong lending or leasing risk proposition either because they are part of a major carrier and/or they have clear niche markets with high yields, little competition and high barriers to entry;
- g. many regional aircraft types now have a well balanced level of market penetration and a strong level of liquidity;
- h. aircraft values for current generation regional types have held up strongly since their respective entry to service when compared to most narrow body aircraft and, in some cases, more strongly. Some perform as strongly as or better than the B737-800;
- j. the values of large regional jet aircraft (70+ seats) and turboprops have proved less volatile over the years than most narrow body aircraft;
- k. while regional aircraft have a lower per unit capital cost than narrow body aircraft, typical new appraised values range from upwards of US\$20m to about US\$35m so that transaction costs can be efficiently structured into financing such aircraft particularly if multiple units are financed in the same facility;
- l. the regional aircraft finance market is characterised by a growing level of operating leases, but lags behind the narrow body market except for certain large regional jets which are increasingly considered to be small narrow bodies by some lessors and lenders;
- m. the absence of many traditional sources of financing creates opportunities for new lenders to enter the market with lower levels of competition. There is an early mover advantage for lenders willing to consider bi-lateral loans to good quality regional operators or for financing growing lessors at conservative loan to value ratios.

5. REGIONAL OPERATOR CHARACTERISTICS

Key Message:

Many regionals are a strong lending or leasing risk proposition either because they are part of a major carrier and/or have clear niche markets with high yields, little competition and high barriers to entry. Some regionals provide capacity on a leased basis to mainline carriers thereby transferring any commercial risk.

Main-line carrier subsidiaries

Regional carriers in Europe and worldwide apply a number of different business models. Several are wholly-owned subsidiaries of major network carriers. In Europe many network carriers have regional subsidiaries whose role is either to provide service on thinner routes with a lower cost base than their parent companies or to provide feed traffic to main line services. Lufthansa Regional, HOP! and KLM Cityhopper are Europe's

largest examples. BA Cityflyer's operation has a different business model in that it provides complementary point-to-point services from London City.

From a risk perspective, such carriers represent the same credit proposition as their mainline parent companies and constitute a significant portion of regional airline fleets.

Case study - KLM Cityhopper



KLM Cityhopper (KLC) acts as an operating carrier for the KLM Group, with all flights having Amsterdam Airport Schiphol as their origin or destination; KLM does all the ticket sales for KLC flights meaning that KLC has no commercial activities.

On a yearly basis, KLC completes around 100,000 flights (~ 270 flights per day). This accounts for around 45 per cent of total KLM flights.

KLC operates with a fleet mix of 100 seat (E190) and 80 seat (F70) aircraft. Given the market demand, these aircraft enable a high frequency model to and from the main regional airports throughout Europe.

Annually, KLC serves more than 6.5m passengers. Two thirds of KLC's passengers have a transfer connection to and from other KLM destinations. One third is point-to-point without transfer. KLM has, in general, a greater share of transfer passengers than the other major European regional hub feeders;

There are many benefits of using a dedicated regional airline feeder as opposed to integrating regional aircraft into the mainline short-haul operation.

The main characteristics of a regional feeder operation are:

- High frequency;
- short flights;
- small airports;
- short turnaround with many transfer passengers;
- remote handling (not at the gate);
- many aircraft changes;
- numerous night stops; and
- early departures and late arrivals.

Due to the nature of the operation (small aircraft, short flights), the cost per available seat kilometer (CASK) is relatively high.

A dedicated regional feeder airline enables fully integral steering of the regional operation (crew planning, aircraft planning, maintenance planning, handling agents and airports) with a collective labour agreement tuned to the regional operation; this is a strong tool to keep the CASK of the regional operation at an acceptable level. It would be much harder to achieve if the regional operation were within the operating mechanism of the medium- and long-haul operation.



7. REGIONAL AIRCRAFT VALUE TRENDS

Key Message:

Historical and future value trends of regional aircraft compare well and, in some cases, more favourably than for larger aircraft.

Value trends for regional aircraft

Many appraisal firms, such as AVITAS, Ascend and IBA, regularly produce generic half-life appraisals for commercial aircraft, including regional types. Across all appraisals for regional aircraft values there is a consensus that values have historically performed as strongly as narrow body aircraft over time.

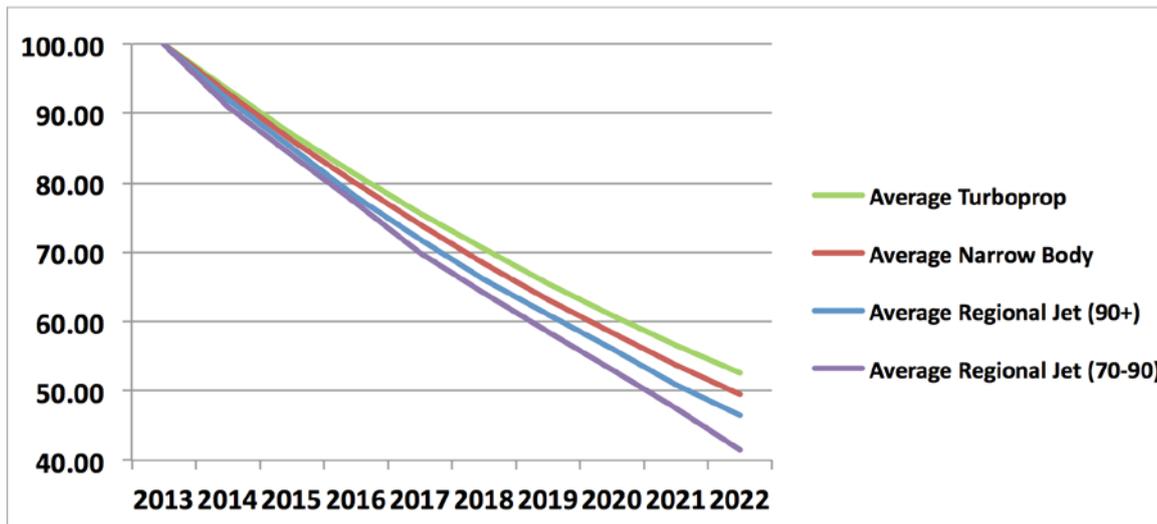
For new aircraft, appraisers adopt a combination of economic utility to derive their base values and historical data and future projections to derive high and soft future values. On this basis, figure 28 compares projected future values for two selected narrow-body aircraft (the B737-800 and the A320) against categories of regional jet and turboprop aircraft. The absolute values of regional aircraft, according to the appraisal community, range from about US\$20m to US\$35m, while narrow body values exceed US\$40m. Figure 28 expresses values as a

percentage of new value. The regional aircraft included are the same in production aircraft as outlined previously in figure 4.

Figure 28 shows that the expected value for narrow-body aircraft after 10 years is some 50 per cent, while turboprops perform slightly better and large regional jets slightly below this level. Increasingly, some of the larger regional jets are considered to be equivalent to narrow body jets so this aircraft type separated from others is expected to perform in line with narrow bodies. By contrast, smaller regional jets which, to date, have experienced good value retention are expected to perform less well over the next decade as many carriers continue the trend towards increasing average aircraft size. In contrast, the forthcoming new generation of smaller regional jets are expected to perform more strongly.

Figure 28 – Value retention in percentage of new price for regional jet, turboprop versus narrow body aircraft

Source: Average of appraiser values – authors analysis



10. ACKNOWLEDGEMENTS (WHERE NOT OTHERWISE SOURCED)

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Contributions:



Case Studies:



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