Investec

Reaching New Heights

Orders surge for OEMs in the aviation markets

OUT OF THE ORDINARY

What's inside:

Key market insights

European airlines reporting strong earnings

2023 has been a good year for many airlines, primarily attributable to extremely strong demand, especially for leisure, premium and intercontinental travel coupled with capacity growth constraints restricting supply and a moderate fuel price. The International Air Transport Association (IATA) is forecasting an industry profit of $23bn and an operating margin of 5%, the same margin as that earned in 2019. Following a generally successful 2023, many airlines are now braced for the challenge to sustain capacity levels in the wake of engine and other issues taking aircraft out of service, with production levels still slow to ramp up as supply chain issues persist. Higher interest rates, inflation and heightened geopolitical tensions are all challenges to the airline operating environment in 2024.

Europe's largest full-service carriers reported strong third quarter (Q3) results, on the back of seasonal and pent-up leisure demand paving the way for higher fares. International Airlines Group (IAG) reported a record operating profit of €1.7bn, Lufthansa €1.4bn and Air France-KLM €1.3bn with operating margins of 20%, 14% and 15%, respectively. IAG attributed its success to sustained strength on its North and South Atlantic routes and in leisure destinations around Europe. Lufthansa recorded the biggest growth in passenger numbers (15% quarter-on-quarter) by adding flights and up-gauging aircraft. Notably, in the face of capacity constraints, Lufthansa reactivated less fuel-efficient current technology aircraft, such as the A340 and B747. All three airlines have been utilising cash to decrease net debt, which has been reduced in aggregate across the three airlines by €5.2bn since 2022.

US LCCs waning

The three large European low-cost carriers (LCCs) also reported strong Q3 operating results. Ryan Air led the trio with an operating margin of 35% for the quarter ended 30 September 2023. Wizz Air reported an operating margin of 24%, reversing a prior year loss attributable to sub-optimal fuel hedging, and EasyJet reported an operating margin of 21%.

Across the Atlantic in North America, the results were mixed. The US majors reported positive Q3 operating margins (Delta 13%, United 12%, America 5%, Southwest 2%). However, the US LCCs – Frontier, JetBlue, Spirit and Allegiant – reported negative operating margins of -6%, -7%, -15% and -3% respectively, perhaps indicating that pent-up demand in the North American ultra-low-cost market segment is waning. Spirit cited reduced demand coupled with inflationary pressures and noted that increases in employee costs have exceeded Available Seat Kilometres (ASK) growth.

Boeing's production woes continue

The 737 MAX-9 door plug loss incident in January 2024 has highlighted another apparent failure in production line quality control, although this is yet to be confirmed by the investigation. The loss of a door plug in flight was a lucky escape from what could have been a catastrophic incident if it had happened at a higher altitude when passengers may have unbuckled their seatbelts. The very nature of 737 main cabin doors is that they 'plug' the aperture from the inside and thus the pressurisation exerts a force on the doors which helps to keep them in place in the unlikely event of door mechanism failures and to maintain the cabin pressure.

The door plug in this case was fitted to fill an aperture which could have an emergency escape door fitted if the operator uses a higher seating density configuration. With a lower density configuration, there is no need for an additional exit and thus the aperture is covered and is not visible from the inside of the cabin. The door plug is hinged at the bottom and has attachment bolts to hold it in place. Although still speculation, the latest evidence does point to a production or pre-entry into service issue as the inspection of other similarly configured 737 MAX-9 aircraft with other operators has apparently revealed loose retention bolts. If this is found to be a result of quality control or other process failures, then further scrutiny will fall on Boeing from the Federal Aviation Administration.

The 737 MAX has also suffered recent incidents of loose or incorrectly assembled rudder control rod fasteners as well as some non-standard fittings in the vertical stabiliser fitting bolts on certain MAX aircraft. There is speculation that the industrial processes in the supply chain are suffering as a result of the loss of many experienced workers during the Covid-19 pandemic layoffs and production line shutdowns, but we have to await the outcome of investigations to identify the root causes.

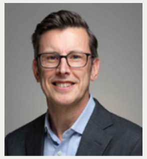
Orders up for OEMs

On a positive note, for both primary original equipment manufacturers (OEMs), orders and deliveries for 2023 are as follows:

2023	Net orders	Actual deliveries	Mid-year estimated deliveries
Boeing	1,456	528	503
Airbus	2,094	735	712

Both Boeing and Airbus look to have broadly met or just exceeded their revised 2023 targets for overall production numbers, but the challenge will be how to ramp up that production to hit the much-increased intended target rates for 2024 onwards in the face of well-documented challenges. The door incident on the 737 MAX 9 at the moment looks unlikely to impact production rates but should the outcome of the investigation point to systemic failings in the production process, the plans to ramp up the rates may be further impacted.

A word from the Aviation Finance Team

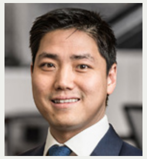


Nick Cowney
Investor Relations, Aviation

"2023 has seen the page turned on the industry's recovery from the global pandemic. Most metrics (passenger numbers, flight numbers, load factors) are now back to or ahead of pre-Covid levels. Domestic travel is now exceeding pre-pandemic levels and international travel is within five percentage points. Major airlines have reported strong results due to yield and revenue management as customers continue to prioritise experiences and travel in the face of the cost-of-living crisis. Supply-side problems (availability of narrowbody aircraft and engines, bottlenecks in the maintenance supply chain, shortages of pilots and air traffic controllers) have restricted airlines from expanding capacity and thus imposed supply discipline."

David Louzado
Head of Technical, Aviation

"Boeing has had another setback with the 737 MAX programme following the loss of the 737 MAX 9 door plug in flight but has at least managed to slowly ramp up production rates across all types in 2023. Both Boeing and Airbus have record backlogs to clear but Airbus is leading the way in new orders and numbers of aircraft delivered."

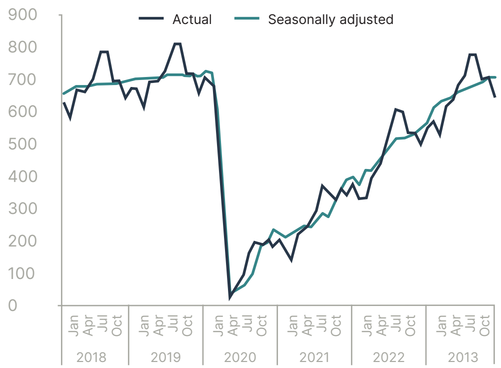


Derek Wong
Head of Aviation Debt Funds

"Investec Aviation had a busy and fruitful 2023, deploying over $800m in aviation and financing over 60 aircraft. This covers a broad spectrum of transactions but focused on strong credits, robust asset security and optimised structures that generate attractive returns for our partners. While 2024 will see further normalisation of the aviation market, a deficit of narrowbody aircraft will underpin positive value trends. We anticipate airlines having to navigate higher costs and a softer yield environment this year. A combination of more OEM aircraft deliveries and increased trading among lessors spurred by moderating interest rates will further boost opportunities for deploying funds in aircraft debt in 2024."

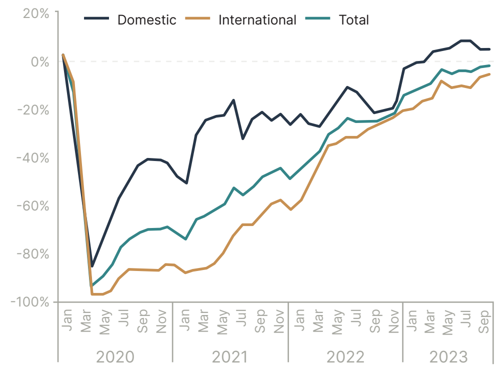
Trends

Global Air Passenger Traffic (RPKs)



Sources: IATA Sustainability and Economics,
IATA Monthly Statistics

Global Domestic & International Traffic (RPKs), YoY change vs 2019



Sources: IATA Sustainability and Economics,
IATA Monthly Statistics

Global air travel continued its steady recovery in November and numbers are now 99% of pre-pandemic levels. Air traffic measured by Revenue Passenger Kilometres (RPKs), an indicator of global passenger demand, grew by 30% year-on-year (YoY) to November 2023. Capacity, as measured by Available Seat Kilometres (ASKs), increased 29% YoY, recovering to 98% of pre-pandemic capacity. Since May, the industry-wide passenger load factor has trended at near pre-pandemic levels and ended November at 82% for the month. All regions have seen strong passenger growth, with North America, Latin America and the Middle East surpassing pre-pandemic levels by 8%, 4% and 1%, respectively. Africa and Europe are close to pre-pandemic levels at 1% and 2% below, respectively. Asia Pacific, while gaining momentum, is 7% below pre-pandemic levels. IATA noted that air ticket sales trended close to 2019 levels, indicating resilient demand for air travel despite the economic challenges faced by consumers.

Domestic air travel has in aggregate fully recovered, with RPKs 7% ahead and ASKs 6% ahead of pre-pandemic November 2019 levels. A slight downturn over the past months was noted reflecting cooling pent-up demand. China's domestic demand surged in November after a lull in October, with seat capacity remaining elevated, partly driven by the more frequent use of widebody aircraft on domestic routes.

International air travel has continued its steady growth trajectory. Globally, traffic grew 26% YoY to November 2023 and is now 95% of pre-pandemic levels. The growth trend was consistent across all regions over the year. October and November was marked by the conflict in Gaza, with many airlines suspending operations to Israel. However, these events have not significantly dampened global traffic levels. International traffic levels remain robust in North America, Latin America and the Middle East. Africa and Europe are approaching full recovery. Meanwhile, Asia Pacific's international recovery continues despite a slowing in recent months.

Airline ticket sales are close to pre-pandemic levels, however growth has flatlined. Domestic ticket sales continue to reflect the slowdown in China observed since July 2023. International ticket sale growth has also slowed but remains aligned with the stable recovery trend observed since the beginning of 2022. Pressures on household incomes, including high energy prices, continue to pose challenges for consumers.

Airline financial performance over the last 15 years shows that when the industry is exposed to external shocks, it typically returns to profitability relatively quickly. This reflects both the resilience of the industry and the importance of air travel in the global economy as an enabler of business, trade and tourism. IATA forecasts the industry to return to a profit of $23bn in 2023, underpinned by firm consumer demand and a complete re-opening of markets in Asia Pacific. However, the forecast net profit margin of 2.6% is low and the performance by region is varied.

Regionally, North America has the largest contribution to industry profitability, accounting for 56% of the total profit forecast for 2024. Only North America and Europe, the quickest regions to recover from the Covid-19 pandemic, are forecast to have generated an aggregated net profit between 2008 and 2024. The Middle East is also forecast to generate profits in both 2023 and 2024. The prolonged travel restrictions in Asia Pacific have led to forecast losses of $72bn between 2020 and 2023 in that region. However, IATA forecasts Asia Pacific to return to profitability in 2024, driven by the continued traffic recovery and favourable growth fundamentals.

Willie Walsh, IATA's Director General, commented: "Considering the major losses of recent years, the $25.7bn net profit expected in 2024 is a tribute to aviation's resilience. People love to travel and that has helped airlines to come roaring back to pre-pandemic levels of connectivity. The speed of the recovery has been extraordinary; yet it also appears that the pandemic has cost aviation about four years of growth."

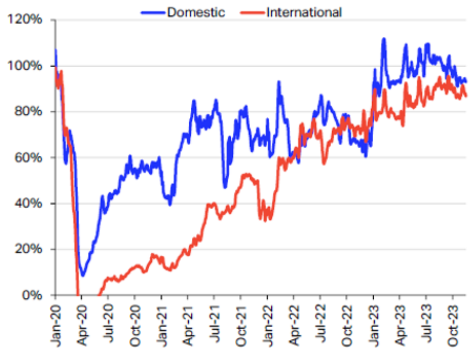
IATA forecasts that some 4.7 billion people are expected to travel in 2024, an historic high that exceeds the pre-pandemic record of 4.5 billion in 2019.

Global air traffic

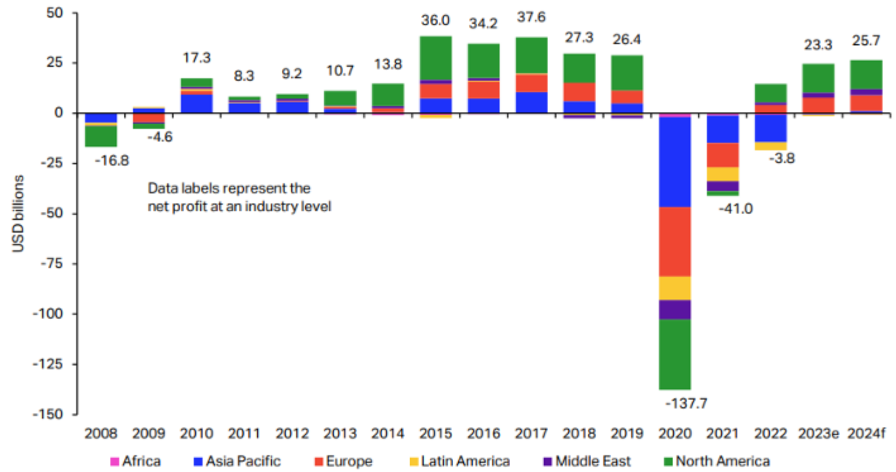
(as measured by RPKs) versus pre-pandemic November 2019

Global	99%
Domestic	107%
International	95%
Load factors	82%

Ticket sales by purchase date, 7-day moving average versus % share of 2019 levels



Airline net profit by region



Source: IATA Sustainability and Economics, Airline Analyst

Market responses

- **In October, EasyJet** announced a $20bn firm order for 157 A320 family aircraft (56 A320neos and 101 A321neos) for delivery between 2029 and 2034. With this new order, EasyJet has 315 aircraft on order for delivery by 2034 and 100 purchase rights. EasyJet's CEO commented that the new order would "enable EasyJet's fleet modernisation and growth to continue beyond 2028 while providing substantial benefits including cost efficiencies and sustainability improvements". By phasing out its older A319 aircraft by 2030 and replacing its A320ceos, EasyJet believes that its more fuel-efficient fleet, with additional capacity, will allow the airline to reduce costs per seat and drive increased profitability. EasyJet reported a headline pre-tax profit of £445m in the year ended 30 September 2023, up from a loss of £178m in the prior year, driven by increased capacity and load factors, coupled with the continued growth of EasyJet holidays, partially offset by higher fuel costs and industry-wide inflationary pressures increasing costs. The CEO noted that: "We see a positive outlook for this year with airline and holidays bookings both ahead year on year and recent consumer research highlights that around three-quarters of Britons plan to spend more on their holidays versus last year with travel continuing to be the top priority for household discretionary spending."
- **Mid-October, Boeing** announced that it is working with **NASA** and **United Airlines** to evaluate the impact of Sustainable Aviation Fuel (SAF) on contrails and non-carbon emissions during test flights. The project will see a 737-10 destined for United, fly with 100% SAF and conventional jet fuel in separate tanks. NASA's DC-8 airborne science lab will fly behind the 737-10 and measure emissions produced by each type of fuel and contrail ice particles, while NASA satellites capture images of the contrail formation. The objective is to understand how advanced fuels, engine combustor designs and other technologies may reduce atmospheric warming. Boeing has a target of delivering aircraft compatible with 100% SAF by 2030.
- **Early November**, Moody's upgraded **TAP Air Portugal's** long-term corporate family rating one notch to B1 with a positive outlook. The upgrade reflects the airline's continuous strong improvement in operating profitability supported by its leisure customer base and exposure to the buoyant North Atlantic and Brazil networks. The positive outlook is underpinned by Moody's expectation that TAP will continue to benefit from recovering passenger traffic with a strong yield environment. However, Moody's notes that the rating is constrained by TAP's small size, concentrated route network and volatile and weak historical operating performance.
- **Mid-November, Cathay Pacific Group** announced that it expected to record its first profitable year since 2019, on the back of passenger numbers forecast to reach 95% of pre-pandemic levels by the end of the year. In the first half of 2023, the group posted an operating profit of $1.1bn. The airline noted that 2024 will see it fully rebuilding flights but said constraints in staff recruitment and supply challenges are affecting the global aviation industry.

- **Early December, Alaska Air Group** announced that it would acquire **Hawaiian Holdings Inc** for $1.9bn, including debt. Alaska said it would pay $18 per share in cash, close to four times Hawaiian's closing price at the time of the announcement. The Maui wildfires, high fuel costs and jet engine recall issues contributed to heavy losses and a 65% share price drop in the last 12 months. The deal will likely attract antitrust scrutiny as US regulators challenge JetBlue's proposed $3.8bn acquisition of Spirit Airlines. The tie-up with Hawaiian would give Alaska Air, valued at $5.1bn, control of more than 50% of the market for Hawaii flights, one of the world's most popular tourist destinations. Alaska Air defended its 270% premium offer as a bargain, noting that the deal values Hawaiian at 0.7 times its annual revenue, far below the industry average of 1.7 times. It added it expected a minimum of $235m in annual savings and expressed confidence that regulators would approve the deal by the end of 2024 because the two airlines overlap in just 12 of the 1,400 flights they collectively operate.

- **Mid-December, Turkish Airlines** announced an order of 220 Airbus aircraft (70 A350 widebody jets and 150 single-aisle A321neos) as part of a milestone agreement to boost Istanbul's role as an international hub and bolster Turkey's vast tourism industry. The airline earned $2.8bn in net profits in the first nine months of 2023, up nearly 25% from the same period last year. Its Istanbul-listed shares have risen 16% this year in US dollar terms, ahead of the broader stock market.

- **Mid-December, Lufthansa Group** announced a major order for up to 200 aircraft (80 firm orders and 120 options) worth $9bn at list prices. The order is split: 60 A220s (40 firm, 20 options), 100 737 MAX-8s (40 firm, 60 options) and 40 A320neo purchase options, for delivery between 2026 and 2032. Lufthansa described the order as "accelerating the largest fleet modernisation in our company's history. This increases our order list of around 200 aircraft to 280 – plus an additional 120 purchasing options for further state-of-the-art short- and medium-haul aircraft". Lufthansa has not operated any Boeing 737s since early 2016, with the 737 MAXs being delivered to other operators within the group. The airline noted that the addition of the 737 MAX provides procurement flexibility.

- **In December**, lessor **SMBC Aviation Capital** reported that it had received insurance settlement proceeds of $710m relating to 16 aircraft previously leased to **Aeroflot**. Lessors AerCap, CALC, CDB Aviation and DAE Capital have also reached settlement on claims relating to state-owned carriers, principally Aeroflot and its subsidiaries Rossiya and Podeba. Aeroflot's chief executive reported that 98 aircraft have been transferred to Aeroflot under deals between Russian insurers and Western lessors. In late December, two further Russian airlines, Ural Airlines and S7 Airlines, reported settlements with Western lessors concerning over 60 aircraft stranded in Russia, aided via the participation of Russian state insurance company NSK.

Recent debt capital market deals

- 5 October, **Aviation Capital Group** issued a $500m 5-year senior unsecured note. The issuance is rated Baa2 and BBB- by Moody's and S&P, respectively, and has a coupon of 6.75%. It has a yield of 6.957%, a spread of 225bps, and a price of 99.123 cents.
- 9 October, **BOC Aviation** secured a $1.375bn five-year unsecured term loan. The transaction was split into three tranches, with the first, second, and third having face values of $125m, $565m, and $685m, respectively.
- 23 October, **Willis Engine Leasing** issued a $410m six-year secured note. The note is secured by 51 aircraft engines, three ATR72-500, and one A320. The single tranche is rated A by KBRA and Fitch and is issued with a 72.2% LTV. It has a coupon of 8.0% and a yield of 8.461%. Proceeds from the issuance will be used for equipment purchases.
- On October 27th, **Air France-KLM** issued a EUR1.3bn perpetual note with a coupon of 6.4%. Air France-KLM has entered into an agreement with Apollo to subscribe to the notes, with Apollo holding the option to upsize to EUR1.5bn.
- 7 November, **BOC Aviation** issued a $650m five-year unsecured note. The issuance priced with a coupon of 5.750%, a yield of 5.934%, a price of 99.214 cents, and a spread of 130bps.
- 10 November, **Everbright Financial Leasing** issued an RMB3.0bn three-year unsecured note. The issuance has a coupon of 2.85% and proceeds will be used for general corporate purposes.
- 13 November, **Bocomm Leasing** issued an RMB6.0bn three-year unsecured green bond. The issuance has a coupon of 2.8% and proceeds will be used for general corporate purposes.
- 15 November, **Griffin Global Asset Management** issued a $400m 3.3-year unsecured note. The issuance has a coupon of 8.0%, a yield of 8.25% and was rated BB and BB- by Fitch and S&P, respectively. Proceeds will be used for aircraft purchases.
- 16 November, **Fortress Transportation and Infrastructure** issued a $500m seven-year unsecured note. The issuance priced with a coupon of 7.875%, a spread of 359bps, and a price of 99.333 cents. The issuance was rated BB-, Ba2, and B+, by Fitch, Moody's and S&P, respectively.
- 17 November, **American Airlines** issued a $1.0bn 5.5-year senior secured note. The issuance priced with a par coupon of 8.5% and a spread of 405bps. The issuance was rated BB-, Ba2, and BB by Fitch, Moody's and S&P, respectively, and will be used to refinance existing debt.
- 22 November, **AerCap** issued a $1.5bn 3.4-year unsecured note with a coupon of 6.45%. The proceeds will be used for general corporate purposes.
- 22 November, **Air Lease Corporation** issued a CAD500m 4.5-year unsecured note. The issuance priced with a coupon of 5.4%, a yield of 5.64%, and price of 99.056 cents.
- 27 November, **AVIC Leasing** issued RMB2.0bn via a three-tranche ABS note. The notes are secured by aircraft as well as other assets.
- 28 November, **China Aircraft Leasing** issued a RMB500m three-year note with a coupon of 3.58%.
- 8 December, **Avolon** issued a $400m 4.5-year unsecured note. The issuance has a coupon of 6.58%, a yield of 6.295% and a spread of 215bps. The issuance was rated BBB-, Baa3, and BBB-by Fitch, Moody's and S&P, respectively.

Jet fuel market update

The oil market was underwhelmed by the outcome of the OPEC meeting at the end of November 2023 and Brent subsequently touched a low of $72 per barrel ($/b) a couple of weeks later. The cuts were only scheduled to last three months and there was scepticism as to whether the additional voluntary contribution of countries other than Saudi Arabia will be delivered in practice. The apparent weakness of OPEC was underlined by the announcement that Anglo would leave the group.

More recently, the market has been focused on the attacks on shipping in the Red Sea, but the highest Brent reached was $82/b and we are back under $80/b as of 11 January 2024. These days, less crude comes to Europe and North America from countries where the Red Sea and the Suez Canal are the shortest route than in the past. In any case, the largest crude carriers are too big for the Suez Canal (so they would have to take the long route around Africa anyway). So, the effect has not been as dramatic as might have been expected.

The accuracy of weapons used in the Red Sea attacks has been low and the attacks have caused limited damage to a handful of ships, but the cost of preventing them is very high. A US or UK missile used to shoot them down can be 100 times or more, than the cost to the Houthis in Yemen building them. This has raised the prospect of strikes on Yemen to degrade the ability to launch missiles. But as the Houthis claim to have come into the war on the side of Gaza, taking action against them could be seen as the US (and others) entering the war on the side of Israel. This risk may help to underpin oil prices.

Brent Front Contract

US$1 billion of capital deployed in 2023

Aviation Debt:

- Closed and mandated US$834 million across 67 aircraft

Aviation Equity:

- Invested US$360 million
- Remarketed and sold US$350 million

Marquee deals included:

- A350 and a B787 aircraft leased to Singapore Airlines
- Portfolio of 23 Airbus and Boeing aircraft for US lessor

Investec Aviation Finance

Aviation specialists

Over $10bn debt origination
(in last 10 years)

Supported by a FTSE 250 financial institution

Dedicated debt managers

Over $500m
assets under management

Proven seven-year track record

Originated $1bn of assets

Dedicated equity managers

$1.3bn capital deployed
(over 13-year history)

Raised $5.3bn of acquisition finance across four equity vehicles three equity funds fully exited

Partnership approach

Full alignment with investors via meaningful Investec co-investment in all managed platforms

About Investec

Investec is a leading UK FTSE 250 financial institution with a dedicated alternative investment platform. Our focus is on Cashflow and Asset Backed Strategies including Aviation Finance, Infrastructure Debt, Real Estate Debt, Private Credit and Fund Finance. The group was established in 1974 and currently has approximately 8.200 employees. Investec Aviation offers an alternative approach to commercial airlines and lessors needing innovative financing solutions.