HSBC Asset Management

The rise of the laptop lugger
– what’s new in why we travel

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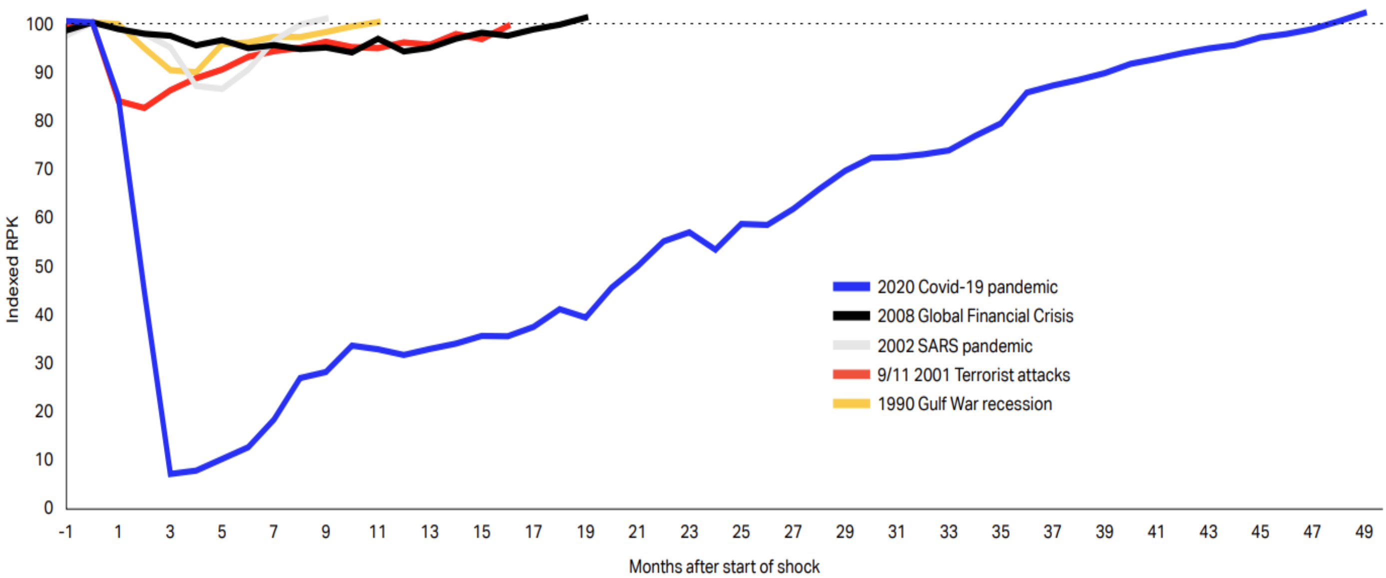
COVID-19 induced lockdowns inspired a series of bleak predictions about the future of air travel. Though in the rear-view mirror this may look like a blip, such an oversimplification masks a series of new and uncertain trends.

The recent 100% recovery of global air traffic provides a good prompt to take stock of the cyclical and structural trends now driving aviation – from winding down pandemic-era excess savings, to the changing nature of leisure travel.

Exhibit 1: Aviation has recovered from its most severe downturn

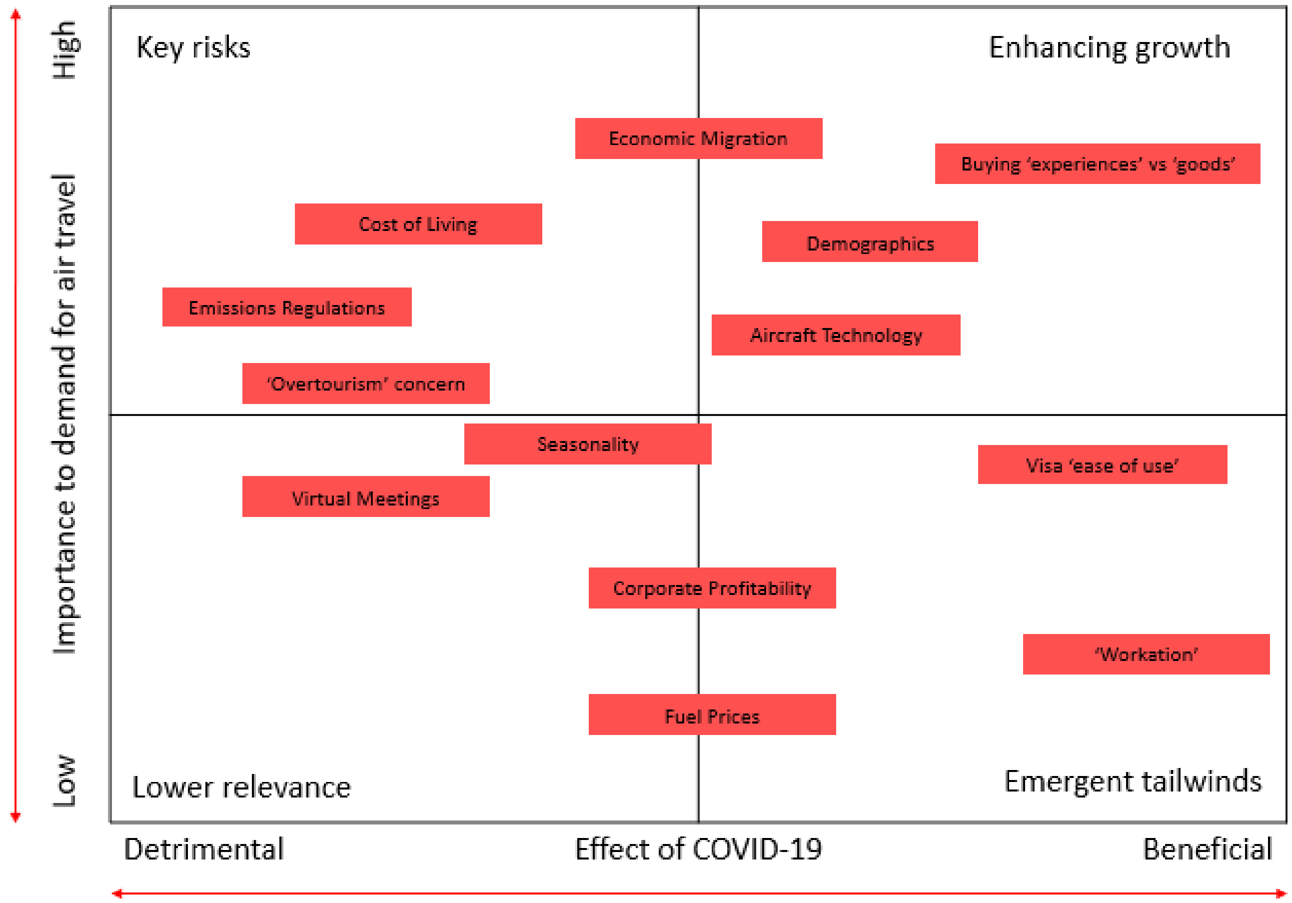


Note: RPK = Revenue Passenger Kilometres – a measure of volume of passengers moved in aircraft
Source: IATA Sustainability and Economics, IATA Monthly Statistics, iata.org/en/iata-repository/publications/economic-reports/global-outlook-for-air-transport-june-2024-report/

This review evaluates and updates important forward-looking considerations for investing in the transportation sector, particularly airports, which are an integral part of the infrastructure asset class.

While we foresee some additional complexities for the industry (greater seasonality, higher capillarity), the broad outlook for demand growth remains robust, underpinning the key attractions for exposure to an industry with GDP+ growth potential.

Exhibit 2: **Mapping COVID impacts into long term potential**



Source: HSBC AM

Why we travel – traditional segmentation

The most intuitive way to understand air travel is, in our view, the 'why'.

Leisure – those who are travelling to explore, gain new experiences, use vacation time with family, or emulate social media travel trends. Traditionally more value-oriented, these travellers think about travel as part of the total cost of a vacation.

Business – moving between countries for professional purposes – either to visit intra-company facilities, or on client business. Compared to overall employment trends, business travel is overindexed to knowledge intensive industries (banking, consulting, tech) – i.e. those where earnings power is high, client contact is valued and corporations tend to be global.

Visiting Friends and Relatives (VFR) – travel in this category is more attuned to family and connectedness. Economic migration and overseas education are two key reasons why family and friends spread around the globe, but the need to stay connected supports repeated trips between locations.

While the proportions of travellers in each grouping will differ from route-to-route, country-to-country, and region-to-region, these proportions range from 40-50% for Leisure, 15-25% for Business and from 25-35% for VFR.

What drives growth in aviation?

The traditional model for demand growth in air travel is a linkage between GDP/capita and propensity to travel. This follows a logarithmic, rather than linear scale.

There are several very populous and fast-growing nations at the 'rapid growth' end of the scale, while developed markets tend to be in the more wealth-inelastic part of the curve.

These developing nations are a key source of growth for global aviation – with industry body IATA forecasting them to contribute around 85% of the industry's growth in the next 20 years.

Exhibit 3: Asia Pacific is expected to be the powerhouse of aviation demand growth

Region	CAGR (2023-2043)	Additional passengers by 2043, million
Africa	3.7%	179
Asia Pacific	5.3%	2,750
Europe	2.3%	656
Middle East	3.9%	282
North America	2.7%	659
Latin America & Caribbean	2.9%	311
World	3.8%	4,154

Source: Air Passenger Forecasts, February 2024 update, iata.org/en/iata-repository/publications/economic-reports/global-outlook-for-air-transport-june-2024-report/

In the short run, there are supply-side dynamics that augment the pure demand-led trend. As air travel is notoriously price elastic in the short-run, airlines which are able to compete on cost can grow the overall market. The penetration of Low Cost Carriers (LCCs) has been highly successful in North America and Europe (at around 1/3 of all flights), while the model is still relatively nascent in Latin America, Middle East, Asia Pacific and Africa (in the range of 0-20%).

While we expect continued growth in the LCC share in North America and Europe to have a modest stimulative effect on demand, the boost in developing markets is likely to be significant. Considering that the (real) price of air travel has fallen in an almost unbroken trend since the 1950s, the contribution of LCCs in the next 20 years will, in our view, continue to be highly relevant.

The ability of airports to capture this trend will mostly be determined by location. In general, airports in Asia Pacific are likely to display the highest growth rates vs. the global peer group, although we expect airports located close to prestigious cultural attractions to share in this above average growth regardless of region.

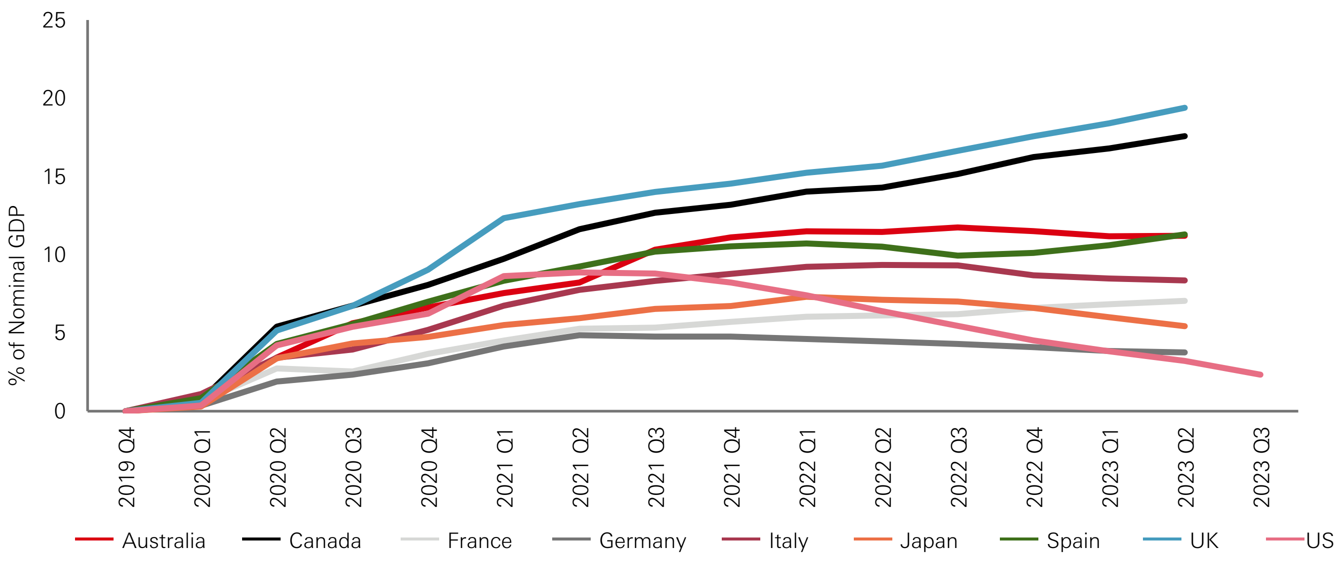
New trends spurred by COVID-19

There were some highly conspicuous effects of COVID-19 on aviation activity – the effect of border closures needs little explanation, for example. However, beyond the immediate impacts, the pause and subsequent recovery phases have spurred a number of new trends.

Erosion of excess savings

For many, lockdowns were an opportunity to accumulate extraordinary levels of excess savings. The reopening of borders proved a timely opportunity to spend these savings. The phenomenon of 'revenge travel' has been discussed extensively, but the status of these savings balances is now a key debate point in the tourism value chain. The subsequent exhibits suggest a mixed picture for pent-up demand, with excess savings in the USA nearly depleted (Exhibit 4), but European consumers retaining more potential to spend (with personal savings rates increasing in spite of the effects of inflation on day-to-day living expenses).

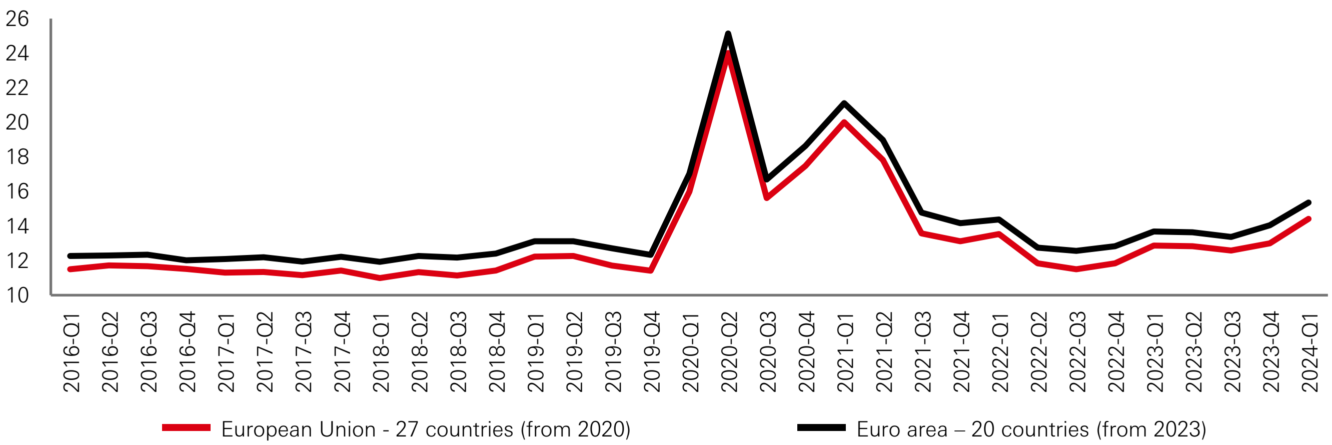
Exhibit 4: Cumulative excess savings still supportive in Europe, USA more mixed



Source: [The Fed - An update on Excess Savings in Selected Advanced Economies (federalreserve.gov)]

Exhibit 5: EU household savings rates well above trend, even as cost of living has risen strongly

Household Gross Saving Rate (%), Seasonally Adjusted

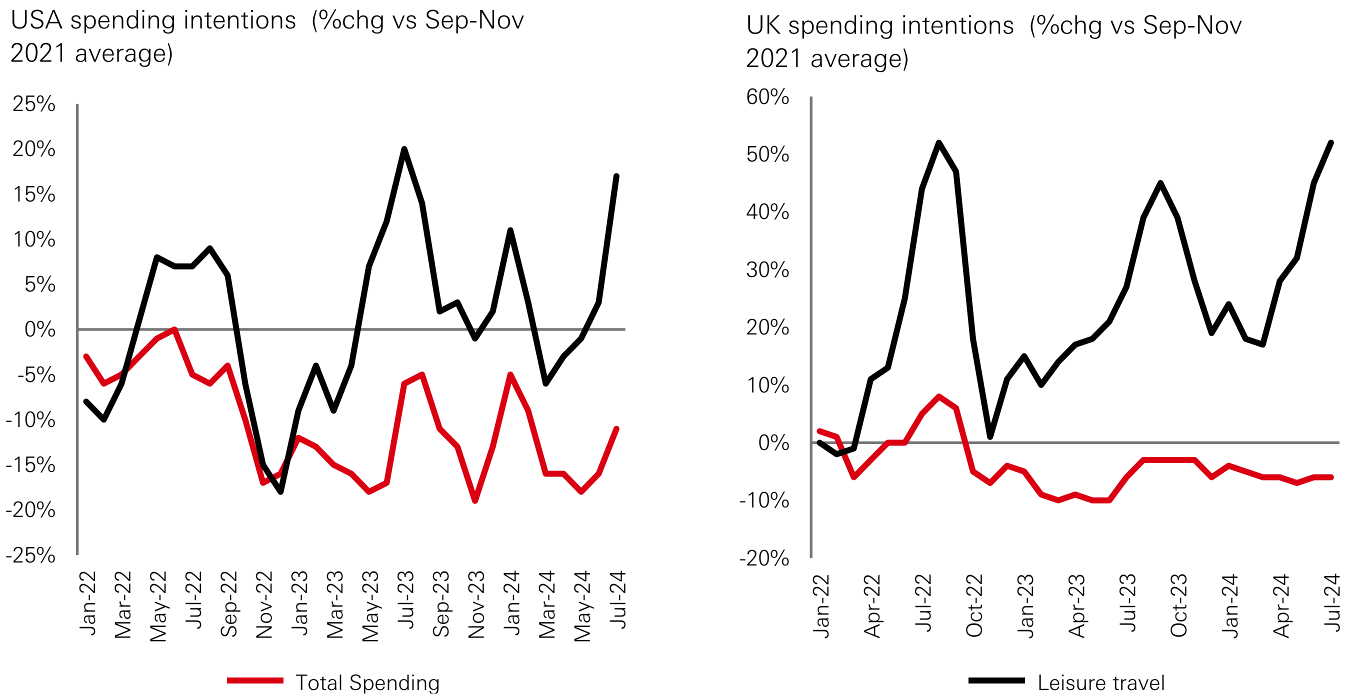


Source: [Quarterly sector accounts - households - Statistics Explained (europa.eu)]

After two 'restriction free' European Summers of extraordinarily strong recovery, some airlines are reporting the first signs of price sensitivity within leisure travel for Summer 2024.

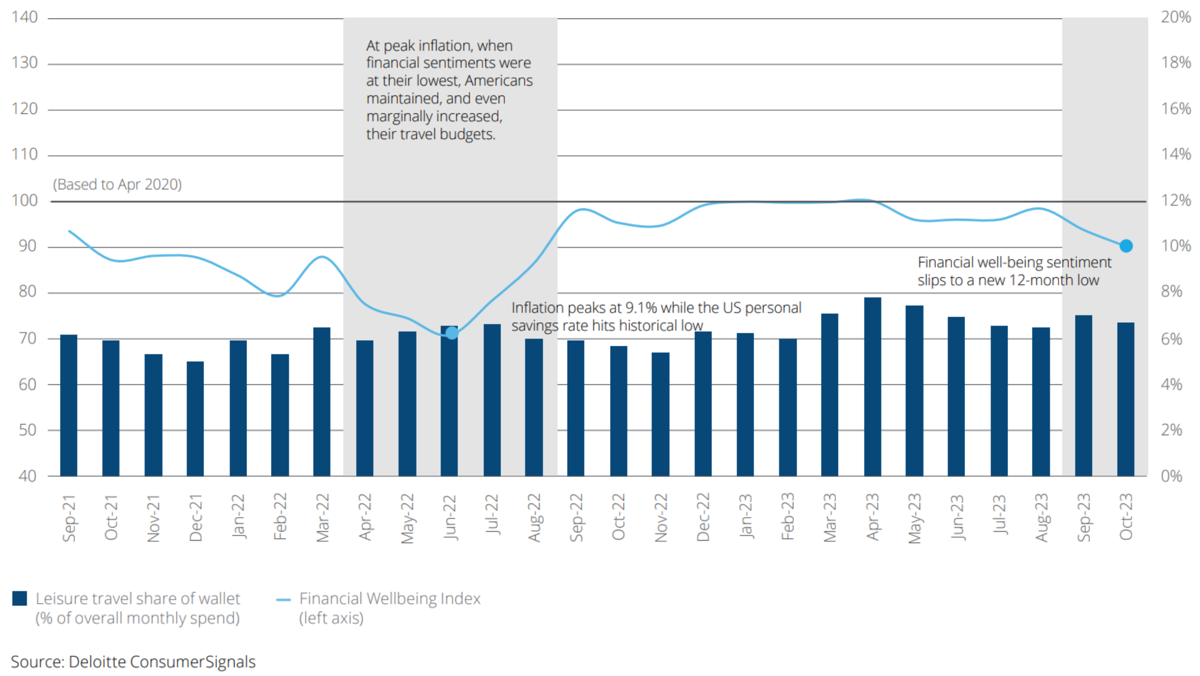
While some of the bounce-back in travel has inevitably been helped by consumption of excess savings, a range of consumer behaviour surveys suggest that consumers have reprioritised the value they place on travel compared to before the pandemic, as shown in the data below.

Exhibit 6: Consumer survey results show continued strength of leisure travel intentions



Source: [2024 travel outlook (deloitte.com)]

Exhibit 7: US consumers protected travel spend even as financial conditions deteriorated



Source: [2024 travel outlook (deloitte.com)]

This shift in behavioural intentions suggests that air travel is migrating, marginally, towards consumer staple rather than its traditional home in consumer discretionary.

Business travel – pros and cons

While there is no doubt that virtual meetings have reduced some demand for corporate travel, there may be more nuanced conclusions to be drawn.

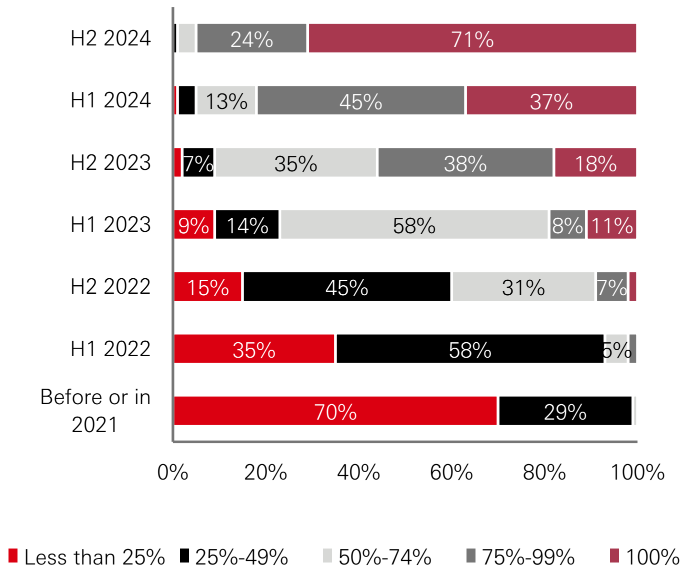
Starting with the obvious, not all meetings can be replaced by virtual meetings. As data, and our own interactions suggest, some types of interaction are more substitutable than others. In general, for business development activities (i.e. client meetings, industry conferences, trade shows), physical attendance remains important. Furthermore, for cross-border activities (where air travel is most likely to be involved) and where cultural differences come into play, we see physical presence as difficult to substitute.

On the other hand, internal meetings, leadership presentations, and training courses are at high risk of substitution. We expect that this did not (and does not) represent more than a minority of air travel journeys.

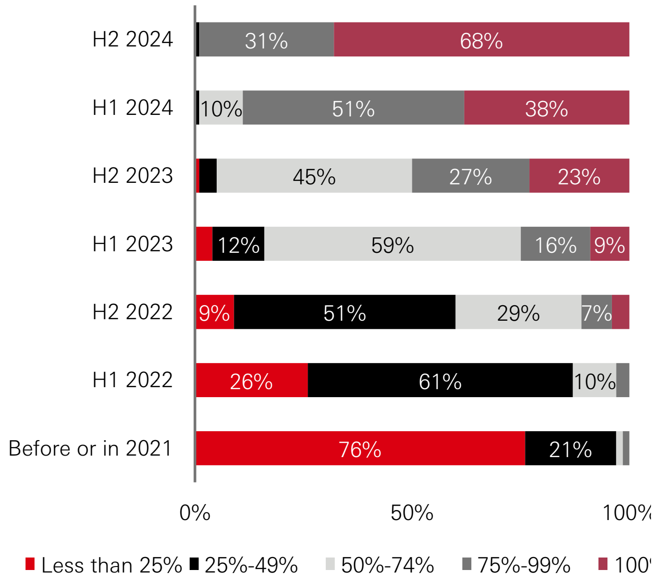
Exhibit 8 which follows highlights that in both Europe and the USA, around 70% of companies expect their travel spending to be fully restored to 2019 levels in H2-24 (with a further 25%-30% expecting spending to return to greater than 75% of pre-COVID levels). This indicative of a modest impairment of demand, rather than a drastic reduction.

Exhibit 8: Corporate travel still in the rapid recovery phase – somewhat lagging leisure, but likely to level out at around 90% of previous levels

United States, Spend as a percentage of 2019 by quarter
(2023 Deloitte Corporate Travel Survey)



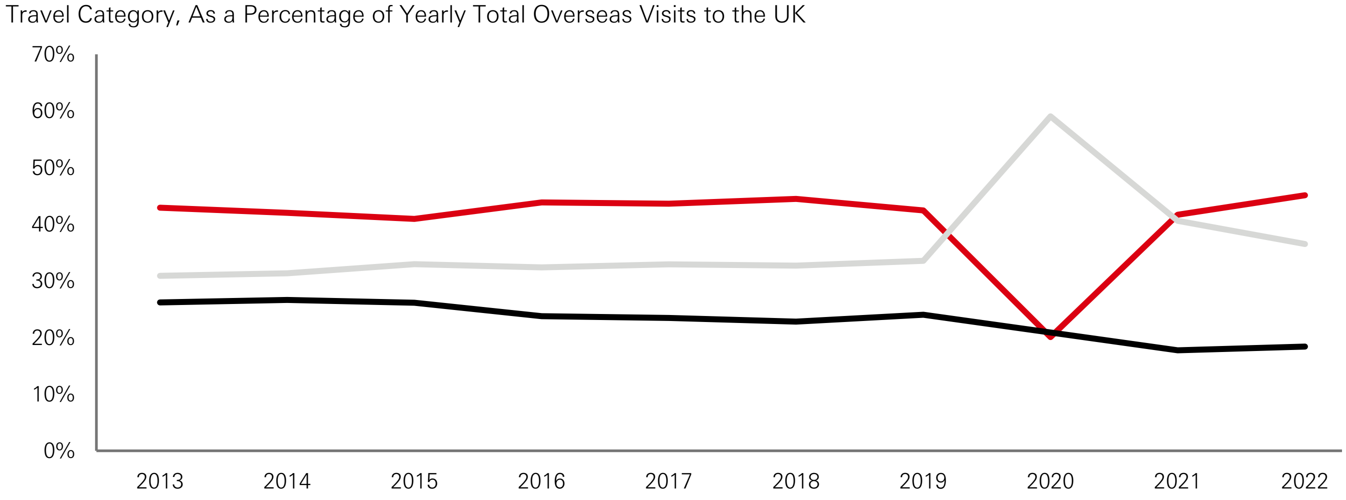
Europe, Spend as a percentage of 2019 by quarter
(2023 Deloitte Corporate Travel Survey)



Source: [Corporate travel study 2023 | Deloitte Insights]

While travel for pure business purposes does seem set to be a lower proportion of the total than in the past, this is not a new trend. Business travel has been on a downward trend for many years (as a % of the total), with recessionary periods often causing an acceleration of its decline. This is important to highlight, as airlines have had many years to plan for this trend.

Exhibit 9: UK example highlights that business travel was already in relative decline prior to COVID



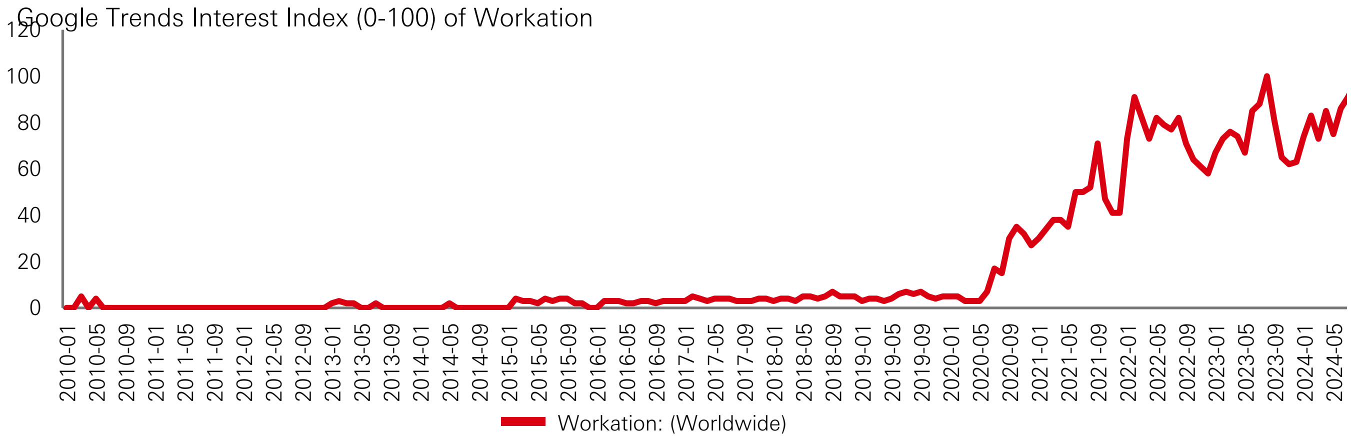
Source: UK ONS, [Travel trends - Office for National Statistics (ons.gov.uk)]

From an airport perspective, this decline in business traffic may be a revenue enhancer. While landing charges levied by airports do not distinguish between leisure or business, shopping behaviours of these groups tend to be quite different. A business traveller tends to arrive to the airport with little time to spare and migrate quickly towards a lounge, while leisure passengers tend to arrive sooner and be in a more relaxed state. The latter factors are conducive to shopping revenues generated by airports.

'Bleisure travel' – embracing flexibility

One of the least expected (and possibly least well known) trends to arise in the past 2-3 years is the amalgamation of business and leisure travel. This 'bleisure'/'workation' travel trend is embodied by those who travel to an overseas location accompanied by their laptops (and families) – extending their trip to 'Work from Vacation' for a period. These trips are not business-necessary (or paid for by employers) but are a way for travellers to maximise vacation allowances and potentially take more frequent trips than would be the case if they needed to be in the office. Destinations with (1) time zone coherence, (2) appealing climate, and; (3) well appointed hotels/apartments are likely beneficiaries of this trend. Regions which are set to benefit from this trend are Central America, Southern Europe, South Africa, and South East Asia.

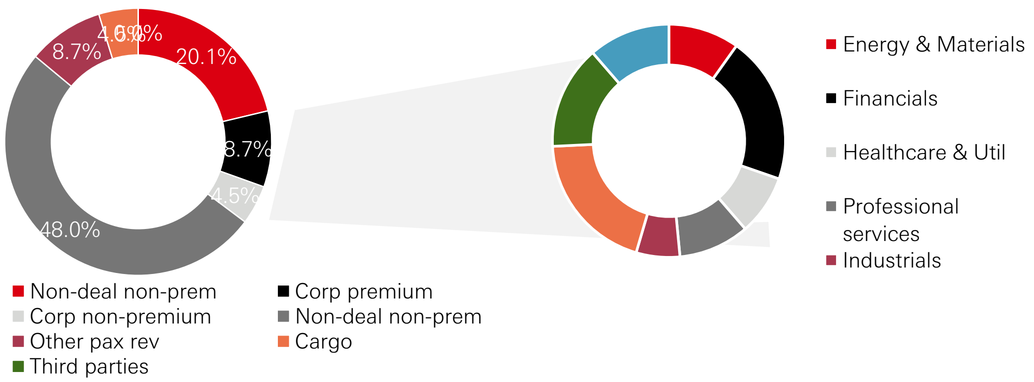
Exhibit 10: Workation trend seems to have more durability than other pandemic-era inventions



Source: Google trends

The decentralisation of the Finance/Professional Services workspace has reduced the requirement for daily proximity to London/New York/Hong Kong; and has strengthened the appeal of secondary hubs such as Singapore, Florida, Milan, Paris, and Frankfurt, where lifestyle considerations can be more balanced. Contrary to reducing the need for business travel, we believe this trend is likely to increase demand for air travel at the expense of rail/car travel as daily commutes are replaced with weekly or monthly trips to the 'head office' or to stay in touch with industry peers.

Exhibit 11: International business travel is dominated by a small number of knowledge intensive industries which are undergoing their own structural changes



Note: IAG = International Consolidated Airlines Group, the holding company of British Airways, Iberia, Aer Lingus, Vueling and Level.

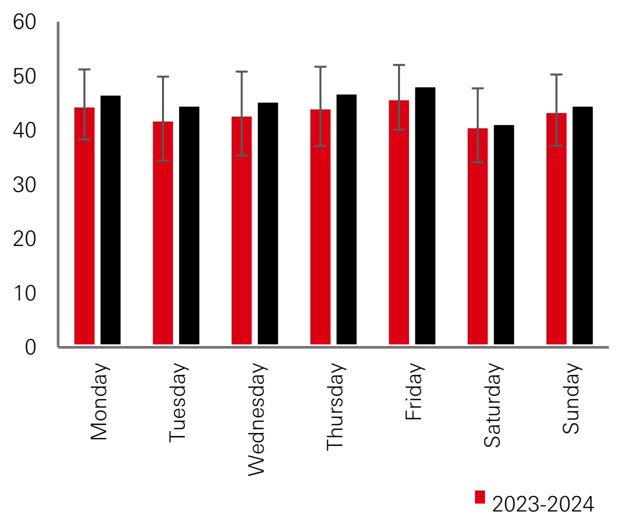
Source: IAG Capital Markets Day 2019

Changing traveller mix and the impact on seasonality

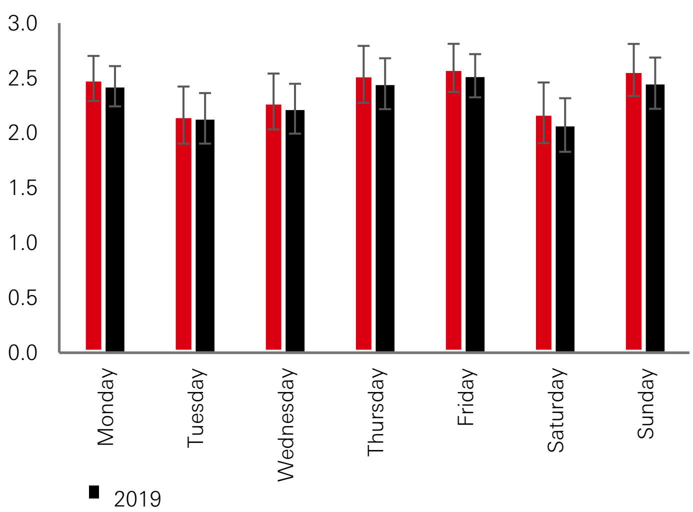
The corollary of business travel falling as a percentage of total travel is that leisure/VFR rises. Leisure travel tends to be characterised by larger peaks and troughs through the course of the year.Aviation, like many industries with high fixed costs, sees highest efficiency when demand is relatively stable throughout the week and throughout the seasons.As shown in the data below, there is already emerging evidence that certain days of the week are seeing higher peaks, and others deeper troughs. Extending this out to months of the year shows a similar trend.

Exhibit 12: Travel trends by day of week show slight shifts in the busiest days, but greater standard deviation

EUROCONTROL Average Flights per Day of the Week (000s)



TSA Average Passenger Volume per Day of the Week (million)



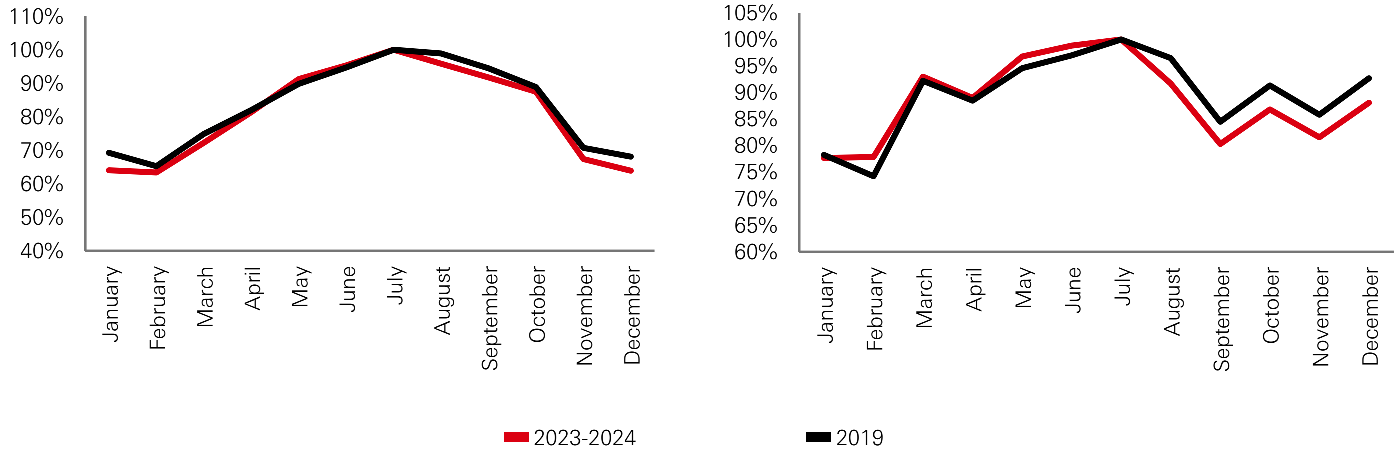
Source: EUROCONTROL

Source: TSA

Exhibit 13: Month-to-month comparison of aviation traffic shows emergence of new seasonal patterns

EUROCONTROL Flights per Month, as a Percentage of the Peak

TSA Monthly Passenger Volume



Source: EUROCONTROL

Source: TSA

For airports this is a trend that needs to be carefully monitored and planned for, i.e. ensuring that service quality remains consistently high without incurring excessive additional expenses (i.e. risk of falling asset utilisation as peak demand outgrows average demand).

Supply Chain complexity keeps supply/demand in check

Aircraft supply chains have developed to be global, complex and lean. While this has helped deliver leaps in aircraft development and production rates, the challenges presented by COVID are still reverberating.

Prior to 2019, Boeing delivered a peak number of 806 aircraft, while Airbus delivered 863. These rates were scaled back during the pandemic and have not been easy to restore; Boeing reaching around 65% of this production rate in 2023, and Airbus around 85%.

This has important implications for the aviation market considering that, had production rates remained stable there would have been a significant oversupply of aircraft in the market, potentially driving down prices and airline profitability.

Somewhat driven by circumstance rather than insightful planning, these delays in aircraft delivery have meant that the gap between demand (which took 3 years to recover to 2019 levels) and supply (which is still below pre-COVID levels) never led to a substantial consumer surplus. By contrast, while container shipping saw a demand boost during COVID but a large amount of supply arrived just as demand normalised, pushing the industry back into a more challenging position. Airlines faced significant funding challenges during the pandemic but have been able to restore, generally speaking, a sense of financial robustness through ticket pricing strength.

At the moment it remains unlikely that aircraft manufacturers will be able to contemplate a move to higher production rates. This will become increasingly necessary, as aviation grows at the same percentage CAGR, thus requiring a greater absolute number of new deliveries each year / per annum.

We estimate that net of retirements, the peak rate of supply can deliver approx. 1.5% growth in fleet, leaving airlines to meet a 4% demand CAGR through other means such as higher load factors, seat density and more intensive asset utilisation.

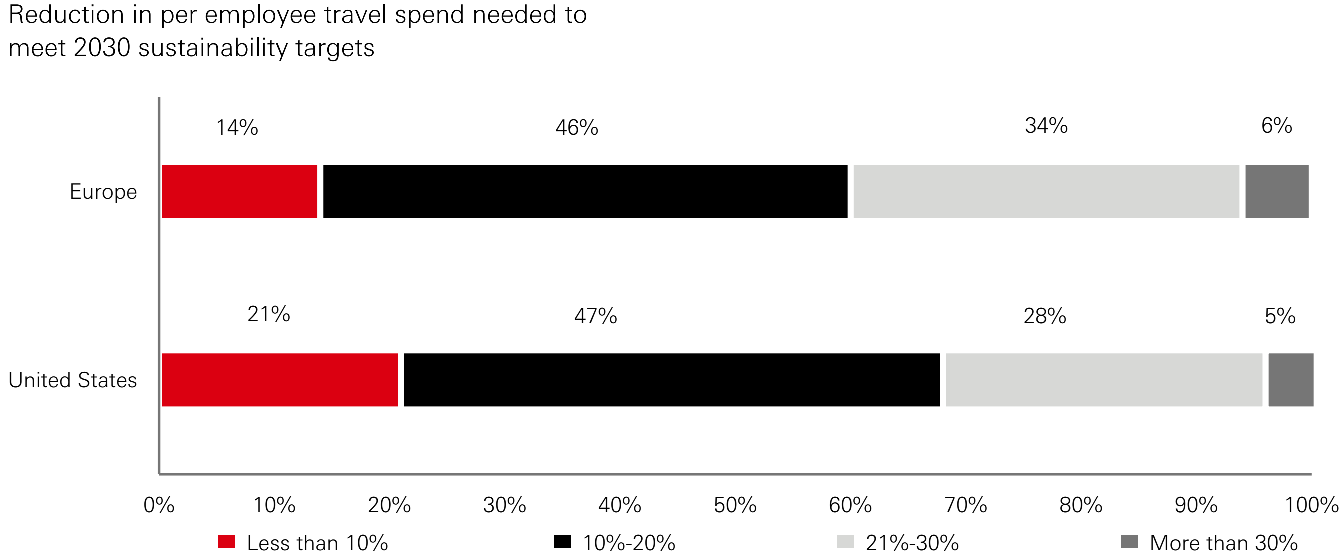
Sustainability focus – corporate commitments and regulatory constructs

Sustainability considerations for aviation have only risen over the past decade, and were accelerated during the pandemic.

Many corporations' emissions reductions commitments contain Scope 3 emissions, where business travel tends to be accounted for. As previously mentioned, business travel by air is concentrated on a handful of knowledge intensive industries. These industries' emissions footprints tend to be heavily skewed towards employee travel and therefore net zero commitments made by companies have a direct implication on business travel.

Though the early phases of air travel recovery presented anecdotal evidence of large blue chip companies cutting back on travel for environmental reasons, this seems to have evolved into a more balanced approach between a pragmatic minimisation of travel combined with either the purchase of emissions reduction instruments /or travelling in a lower booking class (since business class emissions are up to 3x the emissions of economy class seats).

Exhibit 14: Corporate net zero commitments likely to have an impact on travel volumes, but only ~5% of companies foresee >30% reduction in travel



Source: 2023 Deloitte Corporate Travel Survey, Corporate travel study 2023 | Deloitte Insights

In addition to the market-based response to sustainability concerns described above, the response of regulators and legislators has also been significant. Aviation (particularly in Europe) has seen a marked step up in instruments pricing the industries' emissions, to the extent that by the end of the 2020s, the industry will have;

- No 'free' emissions under EU ETS,
- An industry-wide emissions offsetting scheme (for international flights),
- Mandated Sustainable Aviation Fuel requirements,
- Higher taxation on the aviation fuel it requires to operate.

Combining these effects without an offsetting increase in ticket prices could pose significant profitability challenges in an already 'low margin' industry.

While the contribution of an airport's emissions in the aviation value chain are small, the industry does bear volume risk. Therefore should the airline sector focus on higher priced tickets at the expense of volume, this could impact the airport sector negatively.

The contribution of airports to the aviation value chain's emissions is relatively small. Eliminating these emissions does not require new technologies and can be achieved relatively quickly. However, planning timelines for airports are very long term, thirty years and above for a new terminal is not atypical. This forces airports to invest their expansion capital today wisely. Aeroports de Paris has already scaled back plans to add an additional terminal at Charles de Gaulle primarily due to sustainability reasons, focusing instead on enhancing the existing asset base.

Airport expansion in developed markets is rarely straightforward – benefits of greater connectivity accrue across a region/nation but the costs (noise, traffic, pollution) are borne by local residents. This makes approval processes lengthy and controversial – sustainability considerations are likely to further complicate the ability of airports to grow their footprint. Instead it is likely that expansion could be more modular and incremental in nature, which may reduce the cyclicality of shareholder cashflows.

Trends already underway – powerful factors for the 10 year view

Although air travel displays some correlation with the economic cycle, there are a handful of powerful dynamics driving growth in what could otherwise become a mature market.

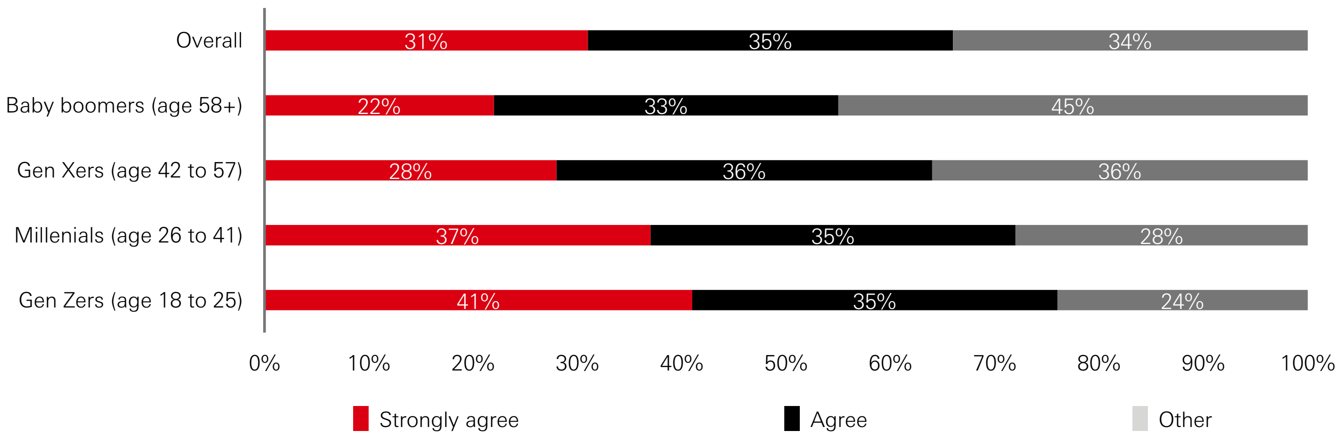
Even in developed markets where, ceteris paribus, economic growth may not lead to disproportionate growth in air travel; we see upside kickers from demography, aircraft technology and airline innovation. We expect these to support above-GDP growth in travel demand for many years.

OK boomer - changing attitudes

Not to be confused with an ageing demographic, generational cohorts appear to be carrying different attitudes as they age. As highlighted below, there is a marked difference in interest in travel among younger generations compared to their parents and grandparents.

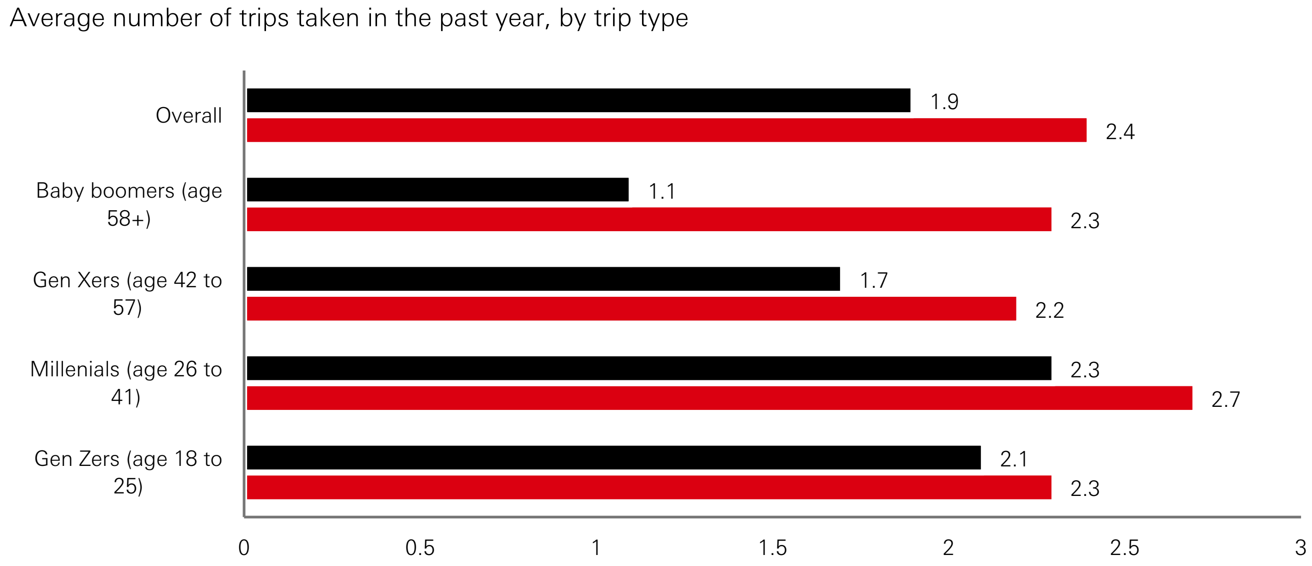
Exhibit 15: Gen Z, the FOMO generation's interest in travel is relatively high

Share of McKinsey survey respondents reporting an increased interest in travel



Source: McKinsey State of Travel Survey, Feb 27-Mar 11, 2024. The way we travel now | McKinsey

Exhibit 16: International travel disproportionately favoured by younger cohorts



Source: McKinsey State of Travel Survey, Feb 27-Mar 11, 2024, The way we travel now | McKinsey

The important implication of these generational differences for airports is that the demand for international travel, even in developed markets, is likely to outstrip population growth. The same cannot be said for all forms of transport, with younger generations showing lower interest in car ownership, for example.

New aircraft technology – opening thinner routes creating more city pairs

While the pandemic saw accelerated retirements of the largest aircraft in the skies, the Boeing 747 and Airbus A380; the reality is that this was a trend already well underway. The classic Jumbo Jet first entered service in 1970 – since then there have been many developments in materials and propulsion technology.

The current order backlogs for Airbus and Boeing are dominated by twin-engine jets. These are lighter (so can land on shorter runways at smaller airports), smaller (need fewer passengers to be filled) and have 30-50% better fuel efficiency (lower operating cost) – but without sacrificing on range.

This enables airlines to operate profitably on routes outside of major airport hubs, and connect countries that have never previously had direct flight connections.

We expect this to mean a move away from hub-and-spoke operation, and to benefit smaller 'gateway' airports – i.e. capital cities of medium sized countries.

For airport investors this will likely require careful evaluation of the competitive positioning of an asset to this trend.

Exhibit 17: Old vs New comparison for aircraft – fewer seats but no sacrifice on range

	B747-400	B787-9	A380	A350-9
Max Seating	416	296	550	350
Range	13 380 km	14 010 km	14 800 km	15 000 km
Max take-off weight	396 890 kg	254 700 kg	575 000 kg	280 000 kg

Exhibit 18: Growth in 'unique city pairs' indicates the fading appeal of megahub airports

Global airline industry	2019	2020	2021	2022	2023e	2024f
Unique city pairs	21,736	15,621	16,846	19,665	21,006	22,056
Compared to 2013	30%	-6%	1%	18%	26%	32%
Real return fare*. 2018 USD	306	239	226	245	259	252
Compared to 2013	-20%	-37%	-40%	-36%	-32%	-34%
Value of trade carried, USD billion	6,482	5,961	7,570	8,424	8,046	8,311
% YoY	-2.7%	-8.0%	27.0%	11.3%	-4.5%	3.3%

*Including ancillary revenue
Source: IATA Sustainability and Economics, iata.org/en/iata-repository/publications/economic-reports/global-outlook-for-air-transport-june-2024-report/

VFR – the unheralded travel superpower

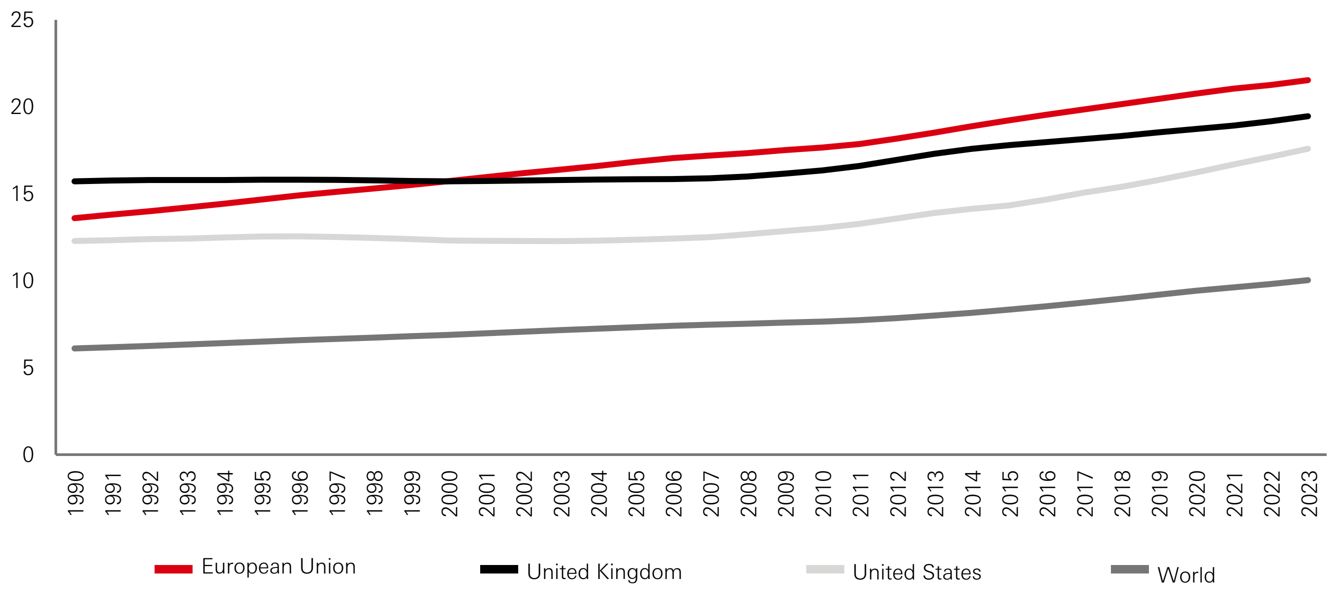
While there may be greater uncertainty about the outlook for globalisation of capital, demographic forces make it highly doubtful there will be a slowdown in the globalisation of labour.

It is not a new insight to note that ageing populations create labour shortfalls. The model most commonly employed around the globe to date to solve this has been economic migration. This has created a vast, global network of friends and families who regularly travel back and forth to stay in touch. In the UK, overseas travel to visit friends and relative accounts for around 35% of inbound visitors, a huge contribution to air travel.

While greater workforce automation may solve some of these labour shortfalls, it is likely that the requirement for internationally mobile labour will continue or even become more important, driving additional demand for air travel.

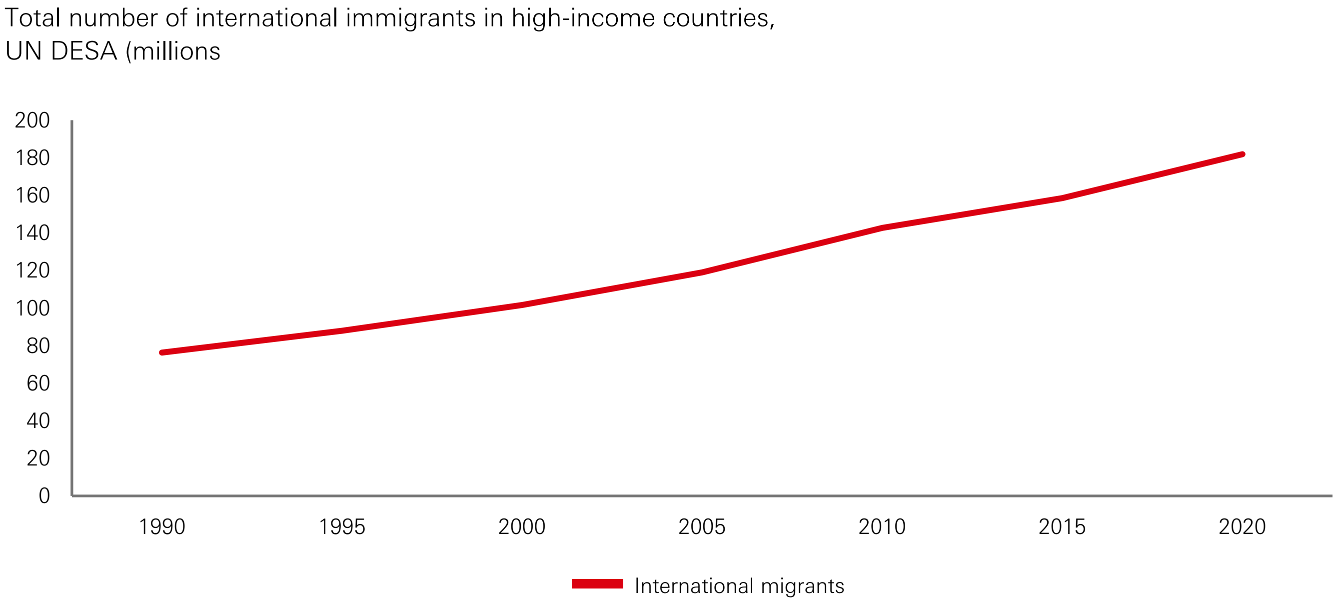
Exhibit 19: Ageing population = potential workforce undersupply

World Bank Data, % of Population Ages 65 and Above



Source: World bank data

Exhibit 20: Long upward trend in international immigration



Source: [Migration - Our World in Data]

The long term outlook

Though the pandemic gave rise to a number of challenges over the medium term, it has also created new opportunities.

While there are likely to be some permanent shifts in demand patterns as a result, the key drivers for above-GDP growth will, in our view, remain firmly intact and in some cases, enhanced.

This has a range of implications for stakeholders in aviation. Consumers may face higher prices but benefit from a wider range of destinations. Airlines may need to rethink the product offering for premium cabins and consider a lower reliance on hubs. For infrastructure, and particularly airport investors, we see multiple opportunities;

- Wealth and demographic effects supporting above-GDP growth rates
- Higher retail spend – leisure travellers tend to spend more in airport shops than business travellers; this could be a tailwind for non-regulated profits
- Higher retail spend (2) - The trend to accumulation of experiences vs. goods appears to have been accelerated exiting the pandemic, making the value of a leisure traveller's 'dwell time' in an airport particularly valuable (opportunity to spend). Airports may need to develop experiential and unique attractions alongside the traditional hard retail approach.
- Lounge use – traditionally rented out to airlines and reserved for premium customers, we see space for a directly operated 'pay per use' lounge to become more prominent
- Seasonality enhanced – requiring smart resource planning to avoid poor service quality and also additional costs
- Care on capital allocation – airlines achieve high yields at peak times, this drives demand for peak capacity rather than average capacity. Airports should be careful to ensure this peak demand is properly remunerated.

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