Aviation Strategy

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Triumph of Trump the Tariffman

TARIFF is the "most beautiful word in the dictionary" according to Donald Trump, soon to be the 47th president of the USA.

This time Trump has achieved a clear, almost overwhelming victory, winning the popular vote as well as the majority of state electors. In Congress, Republicans are in control of both the Senate and the House of Representatives.

So how much of his radical agenda will actually be implemented? Of course, no one knows, but Trump can never again be underestimated.

His new trade policy is based on tariffs — proposed at 60% for imports from China and probably 20% for Europe. Implementing this policy would be much easier than deporting millions of illegal immigrants.

The 19th century English economist David Ricardo developed the Theory of Comparative Advantage, which postulated that both global and national welfare would be maximised under a regime of free trade in a world without tariffs or other barriers to trade. In practical terms, the theory recommended that countries concentrate on economic activities where they have an efficiency advantage relative to others, trade goods and services in the interest of consumers, and ignore politicians. Among free market economists it has proved to be a robust theory. Its validity becomes particularly clear when extreme isolationist policies are pursued; in the 1930s the 40-60% tariffs imposed on imports to the USA were a major contributor to the Great Depression.

President Trump obviously does not care about Ricardo. His view seems to be that trade is a zero-sum game; if the USA has a trade deficit with a foreign country, that country must have been unfairly undercutting the USA. Tariffs will protect American industry and American workers. And in trade negotiations (a kernel of truth here), the USA has a huge advantage because of its size and the fact that its domestic sector is much larger than its international one.

What does a 20% tariff mean for aircraft manufacturing?

Probably, a much more vicious version of the pre-2019 US/EU trade war when the US imposed 10% tariffs on Airbus products to compensate for unfair launch aid, and the EU retaliated by placing taxes on Boeing products, citing unfair subsidies to Boeing from NASA, the US DoD and others.

The commercial truce agreed between the US and the EU is now again threatened by a double-edged tariff war. A quick look at the orderbook tables on this and the following page reveals some of the unintended consequences of simplistic tariff laws.

Our estimate of the values (actual rather than list) of Airbus's current orderbook destined for US customers is

This issue includes

AIRBUS'S US ORDERBOOK

	Total	Value ($bn)
United	209	13.0
Delta	200	10.8
Frontier	176	8.4
American	150	7.2
JetBlue	111	4.2
Breeze	62	1.9
Spirit	56	2.6
TOTAL	**964**	**48.1**

Orderbook as at end Oct 2024.
Estimated actual not list prices.

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BOEING'S EUROPEAN ORDERBOOK

	Total	Value ($bn)
Ryanair	190	7.6
AerCap	132	6.4
Avolon	113	4.7
Lufthansa	101	9.4
SMBC	81	3.2
SunExpress	74	3.0
IAG	50	2.0
Norwegian Air	50	2.0
Macquarie AirFinance	40	1.6
TUI Travel	39	1.6
UTair	28	1.1
BA	26	3.6
Air Europa	20	0.8
Timaero Ireland	17	0.7
THY	11	1.2
Cargolux	10	1.5
Luxair	8	0.3
SkyUp Airlines	7	0.3
Enter Air	6	0.2
Volga-Dnepr UK	6	0.6
Air France-KLM Group	5	0.6
TAROM	5	0.2
Maersk Aviation	1	0.1
TOTAL	1,020	52.6

Orderbook as at end Oct 2024.
Estimated actual not list prices.

CHINA'S ORDERBOOK

Airbus			Boeing		
	Total	**Value ($m)**		**Total**	**Value ($m)**
China Eastern	95	4,415	Ruili Airlines	42	2,100
China Southern	93	4,287	China Southern	29	1,160
Cathay Pacific	76	4,820	Cathay Pacific	21	3,150
Air China	60	2,700	Greater Bay Airlines	15	600
Xiamen Airlines	38	1,724	Donghai Airlines	12	480
Shenzhen Airlines	32	1,446	Okay Airways	12	830
Spring Airlines	16	708	Minsheng Leasing	11	440
Sichuan Airlines	11	848	Air China Cargo	2	200
Chengdu Airlines	1	48	Xiamen Airlines	2	80
			China Eastern	1	110
Total	**422**	**20,996**		**147**	**9,150**

Orderbook as at end Oct 2024.
Estimated actual not list prices.

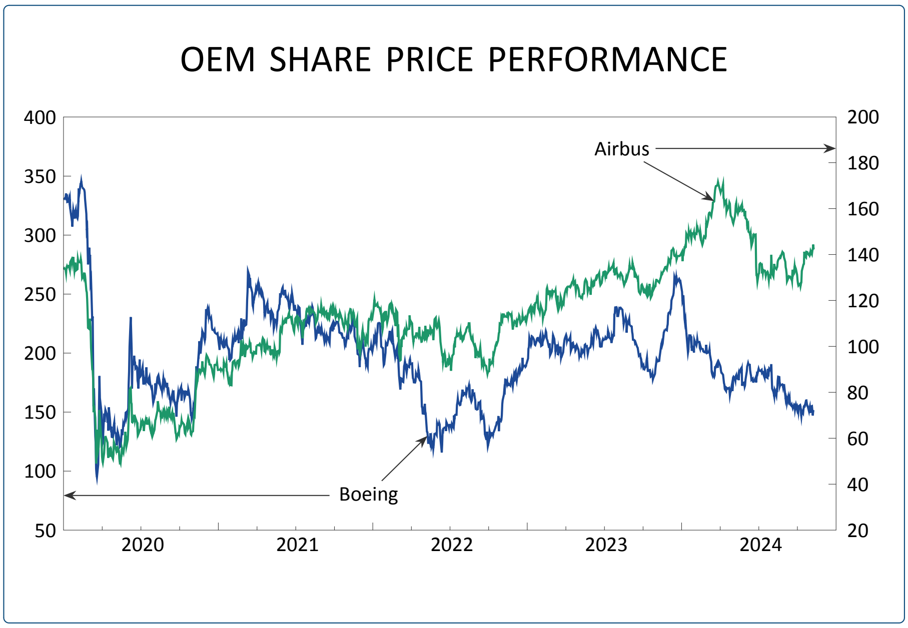
$48bn; the value of Boeing's orders by European entities is $53bn. So who pays the 20% tariff, potentially about $10bn for Airbus and, assuming European retaliation, also about $10bn for Boeing? The answer is: some combination of the OEMs, the airline/lessor purchasers and ultimately the passengers.

Is Boeing going to jeopardise its fragile recovery plan by alienating customers like Ryanair and Lufthansa? If not, it will have to absorb additionals costs. What is the position of the leasing companies, based in Ireland, but backed with American capital?

Are the leading US network airlines — United, Delta and American — going to have to accept additional billions in import taxes on their Airbus orders? What about the airlines like Frontier, JetBlue and Spirit which have recently suffered financial difficulties?

There is also the question of the international ownership of the aero-engine manufacturers whose engines come attached to US imports. IAE is 50% Pratt & Whitney, 25% MTU, 25% Japanese Aeroengine Consortium; CFM is 50% GE, 50% Safran.

Punitive tariffs on China will further isolate it from the USA. They could even threaten the projected long-term global traffic growth which is supposed to be led by China. Very probably, they would reinforce Airbus's advantage in this market — Airbus's Chinese orderbook is currently double that of Boeing.



Aviation Strategy

JetBlue: Recovery from Self-Inflicted Damage

THROUGH the 2010s, JetBlue was remarkably successful. It achieved average revenue growth of 10% a year, operating margins of 12% and net margins of 6%. It successfully introduced a quality “value” focused product to undermine the incumbent majors, particularly on the transcontinental routes, and grew to hold the position of the sixth largest carrier in the US (behind Alaskan).

But since the resumption of “normality” in the airline industry after the ending of the pandemic, it has lost its way: it lost a total of $411m in 2022 and 2023 on a revenue base that was some 15% higher than that in 2019. Forecasts suggest it could lose an additional $300m in the current year.

Some of its misfortune is of its own making.

Risky route expansion

In a highly risky move, in 2020 (at the height of the pandemic) the airline aggressively opened 60 new routes — nearly four times as many as the average over the previous ten years.

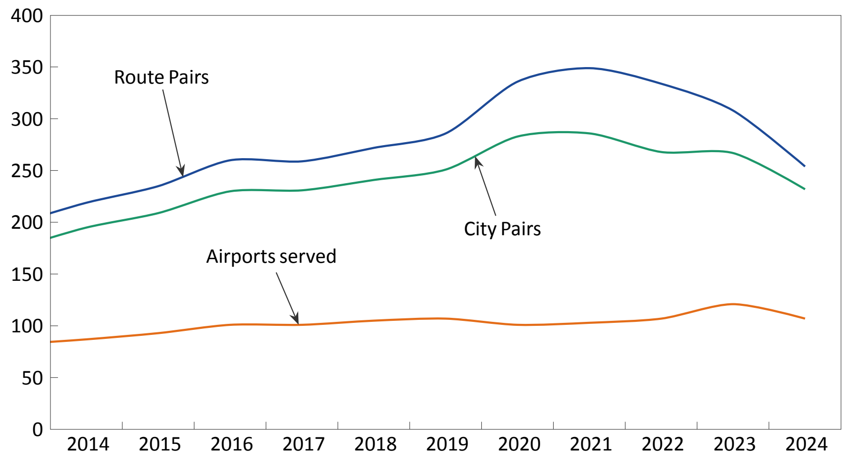
The then CEO, Robin Hayes, explained that in normal (pre-Covid) times substantially all of the airline’s growth had come from adding capacity to existing routes, with only a handful of aircraft available to take on the “risk” of experimenting with new routes. But in the pandemic, he said, “everything is risky... Suddenly, we have planes on the ground and business travel demand that’s depressed. It’s a fabulous time to experiment with routes.”

The view was recovery in demand, when it came, would lead fully into JetBlue’s strengths: short haul, domestic, point-to-point, and leisure oriented. In the pre-crisis market, over 80% of its traffic was leisure- or VFR-based, and 85-90% point-to-point.

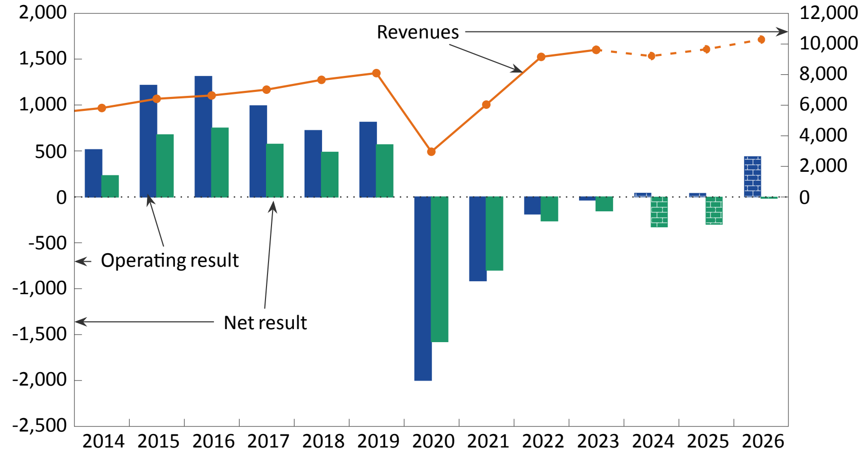
Unfortunately, this is also what other Low Cost competitors did. At the same time, the network carriers — faced with a (possible) fundamental change in the dynamics of corporate business demand — aggressively promoted their basic economy fares.

JetBlue was particularly harmed by the industry overcapacity in the

JETBLUE: NETWORK DEVELOPMENT



JETBLUE: FINANCIAL RESULTS ($m)



Source: Company reports. Forecast Barclays.

JETBLUE: POSITION IN ITS FOCUS CITIES 2024

Market	Passengers (m)	Share 2024	Share △ v2019	Rank 2024	Rank △ v2019	Largest competitor	Share 2024	Share △ v2019
New York†	9.4	14.2%	↑1.4pts	3	–	United	21.4%	↑2.3pts
Boston	4.7	25.1%	↓3.9pts	1	–	Delta	21.1%	↑6.5pts
Fort Lauderdale	3.2	19.3%	↓4.4pts	2	↓1	Spirit	30.4%	↑7.3pts
Orlando	2.5	9.4%	↓2.4pts	6	↓2	Southwest	20.9%	↓0.7pts
Los Angeles†	1.6	3.2%	↓1.1pts	8	↓2	Southwest	19.7%	↑7.6pts
San Juan	1.5	24.3%	↓8.4pts	1	–	Frontier	15.8%	↑9.8pts

Source: DoT Form41 12 months to June 2024
Notes: † includes all airports

Caribbean and South America. At the full year 2023 results announcement, the airline stated that Latin American routes accounted for 35% of its capacity; and that capacity to the region was 60% higher than it had been in 2019.

Focus Cities

JetBlue has lost ground in all but one of its "focus cities" (see table above). These have seemingly been chosen either as major metropolises that can be the source of strong originating demand, or those where there is equally strong demand as a leisure destination.

New York is the carrier's largest market — it dubs itself New York's Official Home Town Airline. JetBlue is still the third largest carrier there, but has managed to increase its share of the market by 1 point to 14% since 2019.

Boston too is a major strength, and while JetBlue remains the largest player, the data from Form 41 seem to suggest that in the 12 months to end June 2024 it carried nearly 20% fewer passengers than it had in 2019, that its share of total passengers fell by nearly 4 points; and that Delta has made strong inroads, increasing its share by 6.5 points to 21%.

JetBlue is also the largest carrier in San Juan (Puerto Rico) as it was in 2019. However, it has seen a substantial incursion of competition, losing eight points of market share to 24% — more than made up for by growth from Frontier, which is now the second largest airline plying the island. Much the same story pertains at Fort Lauderdale, where Spirit — with 30% of the market — toppled JetBlue from pole position.

Meanwhile, JetBlue dropped two places in the leadership rank at the highly competitive Orlando well behind market leader Southwest.

In Los Angeles, the story is a little more complicated. JetBlue had had a major presence at Long Beach airport, but moved its entire operation there to LAX when it and American created their abortive North-East Alliance in October 2020. Over the past few years, Southwest has pushed a lot of capacity into the bay area and, with a near 20% share, has nudged American from top spot.

North-East Alliance with American

In 2020, JetBlue and American Airlines announced the signing of a "strategic partnership": the North-East Alliance (NEA). This was to encompass a mass of codeshare agreements and loyalty benefits to be focused on the US northeast coast and particularly JetBlue's strengths at New York and Boston — JetBlue (in more normal times) carried twice as many passengers as American at JFK and 50% more than American at Boston. American saw the region as a gap in its nationwide coverage. The two carriers described the alliance as providing seamless connections between their two networks, and the usual marketing hype of "giving customers new options with improved schedules, competitive fares and nonstop access to more domestic and international destinations".

What they failed to realise was a change in regulatory oversight under the Biden administration. The deal was tacitly approved by the DoT in November 2020. But in May 2023 the DoJ won a lawsuit against the airlines, ordering them to end the partnership. The court ruled that the NEA violated the Sherman Antitrust Act by: reducing competition between two of the four largest domestic carriers in the northeast; weakening JetBlue's independence; allowing the airlines to divide the market horizontally; and, requiring significant operational and pricing collusion. The two have been forbidden further collusion attempts for ten years.

Spirit Merger

Spirit and Frontier announced an agreed \$2.9bn merger, subject to regulatory approval, in February 2022. It would have made a lot of sense: both had the same ULCC operating model, each operating A320s, modest route overlap; and both with the legacy of Bill Franke's backing. It might have created a meaningful US ULCC.

In April of the same year JetBlue trumped the offer, and finally won the deal to acquire Spirit for \$3.8bn in October 2022.

Again JetBlue misread the political and regulatory environment. It possibly did not help that Robin Hayes explained that the rationale for the acquisition was to "become bigger". The plan seemed to be little more than a way of getting hold of over 200 A320s (and an order book for 60 more) and removing a competitor on some of its important leisure routes. The merged entity would have created the fifth largest carrier in the US.

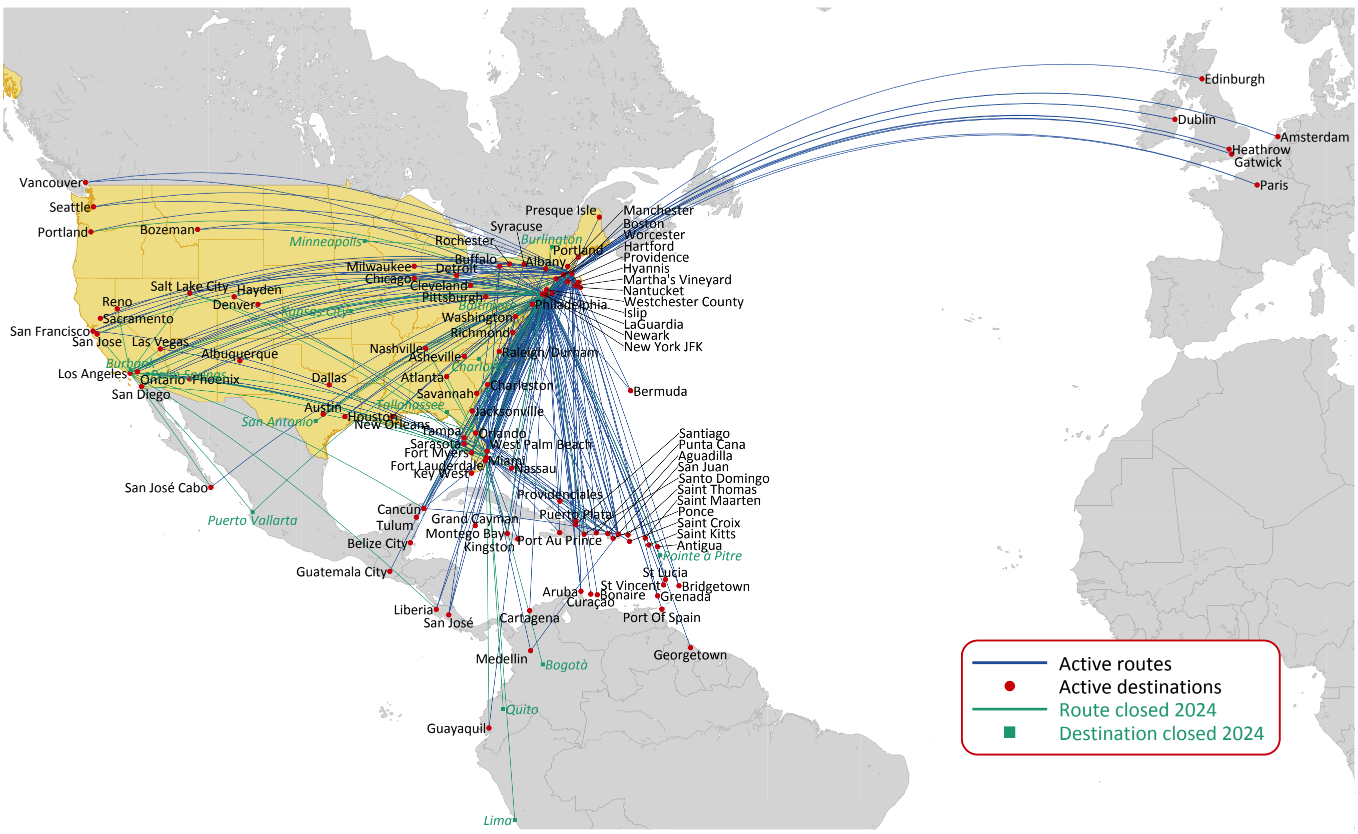
What he perhaps failed to realise was that there was significant route overlap from the potential merger, and that competition regulators don't really like mergers specifically designed to take out competitors to reduce competition.

The deal was blocked in January 2024 and formally abandoned in March. An expensive strategic error: JetBlue had to stump up a reverse breakup fee of \$69m to Spirit, and \$400m to Spirit's shareholders (on top of the \$400m it had spent in the previous two years).

JetForward

Robin Hayes was replaced as CEO in February 2024 by Joanna Geraghty (who had been the airline's President since 2018, and becomes the first woman to run a US airline). She brought back JetBlue veteran Marty St. George as her President, rescuing him from what must have been an interesting job as COO of LATAM Airlines that he had held since 2020. They promulgated a restructuring programme, dubbed JetForward, to get the airline back into sustained

JETBLUE: ROUTE NETWORK



JETBLUE: FINANCIAL DATA ($m)

FY end December	2018	2019	2020	2021	2022	2023	@ end June	2024
Revenue	7,658	8,094	2,957	6,037	9,158	9,615	Flight equipment	10,396
Net income	487	568	(1,576)	(797)	(260)	(151)	Right of use assets	555
							Other assets	1,121
Operating cash flow	1,200	1,449	(683)	1,642	379	400	Current Assets	4,555
Capex	(1,114)	(1,156)	(791)	(995)	(923)	(1,206)	*Of which Cash∗*	*4,008*
Spirit Acquisition					(297)	(131)	**Total Assets**	**16,627**
Other income (expenditure)	(15)	(15)	207	(5)	(46)	(3)	Current liabilities	3,755
Free cash flow	71	278	(1,267)	642	(887)	(940)	Long term debt	7,868
Inc (dec) in debt	465	658	2,504	(882)	(369)	1,062	Lease liabilities	511
Equity (dividends/buy back)	(334)	(491)	481	52	46	49	Other liabilities	1,849
							Total Liabilities	**13,983**
Total change in cash∗	**202**	**445**	**1,718**	**(188)**	**(1,210)**	**171**	**Shareholders' equity**	**2,644**

Notes: ∗ inc investments and securities.

profitability.

In the company's presentation of the strategy in September, it said that, simply stated, the strategy was to be loved and be profitable — for crewmembers, customers, and owners.

The target is modest: to increase operating profits by $800-$900m over 2025-27, through four priority moves.

- ✈ **Reliability**: a "reliable and caring service drives choice, satisfaction and cost savings",
- ✈ **Network:** "best East Coast leisure network where our value proposition is positioned to win",
- ✈ **Product:** "products and perks customers value to capture growing share of premium customers",
- ✈ **Financial Future**: "a secure financial future that sustains our cost advantage to our peers and restores our balance sheet".

Network optimisation

Core to the strategy is undoing the risky over-expansion of the network of 2020. JetBlue announced the closure of 15 underperforming "Blue Cities" and over 50 routes by January 2025 (see map on the preceding page). Roughly 20% of its flying programme is being redeployed to focus on its core North East leisure routes.

It has substantially drawn down services from Los Angeles, exiting its handful of west coast routes, services to Central America and Florida. It is retreating from Fort Lauderdale, where it has been pressured by Spirit, and dropping services to domestic destinations outside its core New England heartland and those to Bogotá, Quito, Guayaquil, and Lima. It is cutting services from its North East bases to destinations in the MidWest, and other non-leisure routes. It has significantly downsized operations at New York's LaGuardia airport.

But then it has redeployed aircraft on new routes from smaller airports in New England to leisure destinations in Florida and the Caribbean, added frequencies on core North East leisure and transcontinental routes. It is also "seasonalizing" its Mint fleet — redeploying transatlantic aircraft to select domestic routes in the low winter season.

"Capital Light" financial policy

To achieve its financial goals, it is pursuing what it calls a "capital light" policy. Like many other A320 operators JetBlue has been hit by the Pratt & Whitney geared turbofan reliability issues: during 2024 an average of 11 aircraft have been grounded, and it expects grounded aircraft on average to be in the high teens throughout 2025.

In January it "smoothed the upcoming delivery stream" of new aircraft; and then in July renegotiated (again) with Airbus to push 44 of the 48 A321neo aircraft it had originally planned to acquire between 2025 and 2029 into the long grass — now not expected until the 2030s (see table on the following page). By this move it will avoid (or defer) capex of some $3bn. It also plans to extend leases (or purchase off lease) up to 30 A320s to maintain capacity in the core fleet.

It nevertheless continues with its

JET BLUE AIRCRAFT FLEET

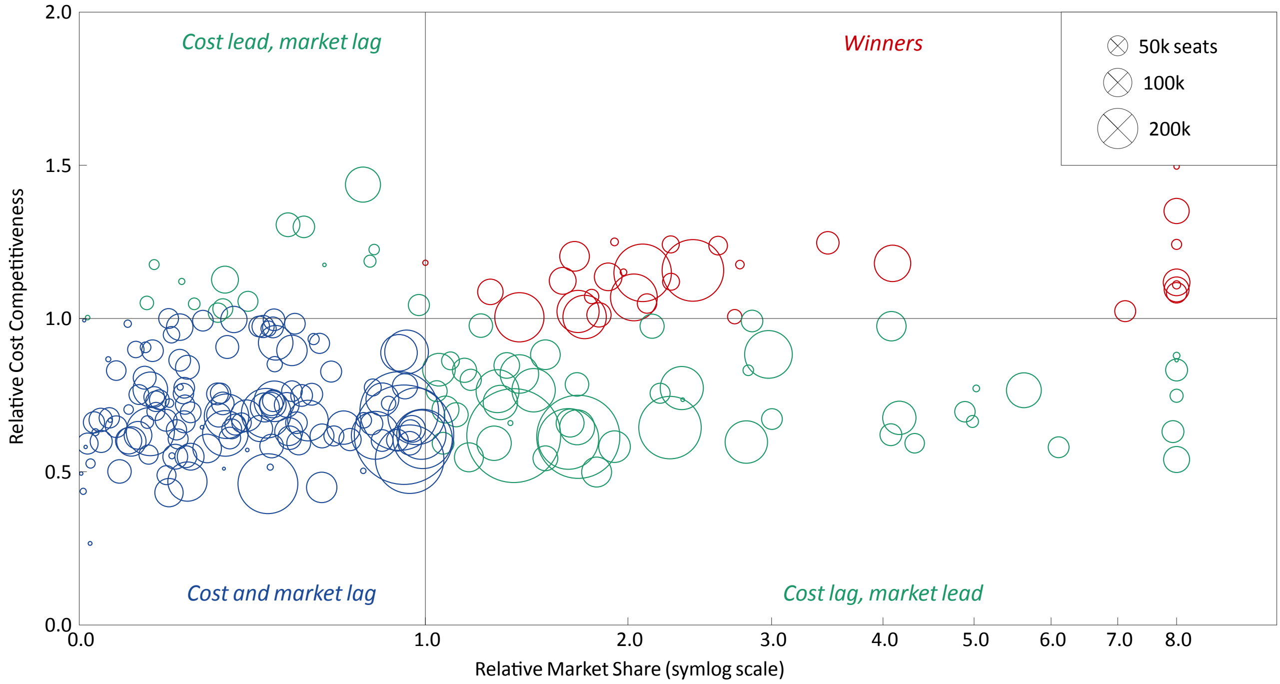
	In Service			Planned Deliveries∗						
	Sep 24	*[parked]*	Avg Age	Q4 2024	2025	2026	2027	2028	2028+	Total
A220	38	*[5]*	1.6	6	20	20	5	7	4	68 †
A320	130	*[6]*	19.2	(2)	(5)					
A321	63	*[3]*	8.4							
A321neo	36‡	*[8]*	3.0	1	4				44	49
E190	20		15.3	(13)	(7)					
Total	**287**	***[25]***	**12.2**	**(8)**	**12**	**20**	**5**	**7**	**48**	**87**

Notes: ∗ (contractual return); † Options for 20 A220 2027-28; ‡ Includes 11 LR

acquisition of A220s (of which it has 48 on order, with 20 options, to be delivered between 2025 and 2028). The aim is to remove the last of its E190s during 2025 leaving it with a two aircraft type fleet. The company states that the A320 have 90% more premium seats and deliver 30% lower unit costs than the E190s leaving the fleet.

In August the airline raised some $3.2bn through three financing transactions: including an expensive $2bn senior secured loan on a near 10% coupon, and a $765m term loan credit at 550bp over base, backed by the assets of its frequent flyer programme, TrueBlue. This leaves it at the end of September with total long term debt of $7.9bn, up from $4.9bn at the start of the year (against a net asset value of $2.6bn), but it does have $4bn in cash — equivalent to 40% of turnover — and the availability of a further $600m from its (undrawn) revolving credit facility.

JETBLUE: NETWORK ANALYSIS 2024



Source: Skailark

Product development

JetBlue heralded 2024 with plans to enhance revenue by $300m through various "revenue initiatives". In January it started charging $49 for "Core Preferred Seats" — the window and aisle seats in the row immediately behind their "Even More Space" premium economy cabin — although elite members of their frequent flyer programme can book these without payment. And it is progressively promoting the Even More Space seats to encourage higher uptake.

From September, the airline changed the specification of the basic economy fare "Blue Basic" to allow passengers booking it to bring on board carry-on luggage to fit in an overhead bin. This brings it more into line with the major network carriers' basic fare products (except for United).

JetBlue has relented to pressure, and with the stated aim "to be loved" by premium leisure passengers, announced plans to open its first ever airport lounges — at JFK towards the end of 2025, to be followed by one at Boston Logan. It also plans to offer a new "Premium" co-branded credit card which will allow holders complimentary access to the lounges, alongside TrueBlue Mosaic 4 members (the highest elite status in the FFP), and customers flying transatlantic Mint (its lie-flat "business class").

Recent Results

The results for 2024 so far do not make for comfortable reading — although in the company's presentation on the Q3 results, management prided themselves on improving the quarter's underlying operating margin by 5 percentage points — albeit to a negative 0.4%.

For the three months to end September, capacity fell by 4% year on year, demand in passenger miles dropped by 2% (and 3% in passenger numbers). Unit revenues grew by 4.3%, helped (probably by the reduction in capacity), while it mentioned that it had achieved a cumulative $275m of its $300m planned "revenue initiatives", and it was on track to exceed the initial targets. The company also noted that there appeared to be some moderation of the competitive excess capacity on Latin American routes. Costs fell by 4%, helped by a 17% decline in fuel cost. But operating losses (ex special items) came in at $(11)m compared with $(123)m loss in the prior year period, and it generated net losses of $(54)m down from $(129)m in 2023.

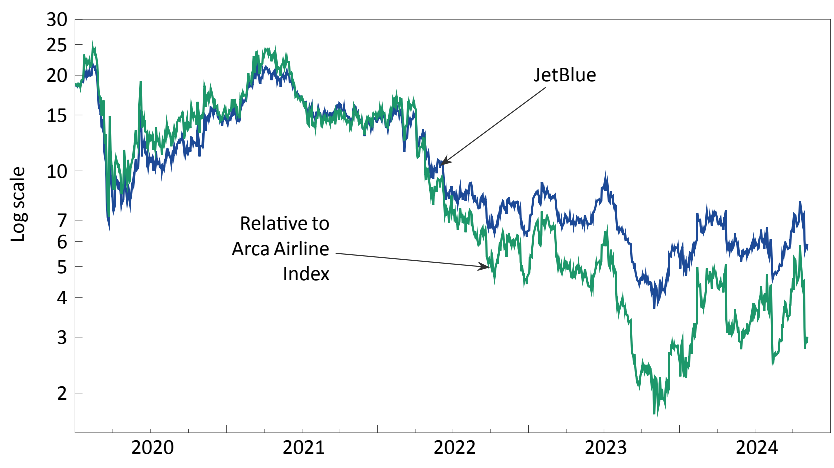
For the nine months it achieved underlying operating losses of $(110)m against a $5m profit in the same period last year; and net losses of $(173)m — more than double the $(74)m loss in the comparable period.

Guiding to a full year revenue decline of around 4.5%, and looking at the prospect of flat capacity growth over the next couple of years, returning to historic levels of profitability is possibly going to be a drawn out and tough task.

The market does not yet seem convinced: the shares have underperformed by 85% relative to the rest of the industry since the beginning of 2020.

But at least the company has abandoned its misguided strategies; and the management will be able to focus on "bringing humanity back to air travel", to be loved, and to be profitable.

JETBLUE: SHARE PRICE PERFORMANCE



Aviation Strategy

airBaltic and the ACMI solution

AirBaltic is the world's second largest operator of A220s, after Delta, with 49 currently in its fleet and firm plans to expand to 100 A220-300s by 2029/30. Despite difficult financials, It hopes to privatise and move from Latvian state ownership through an IPO, maybe next year.

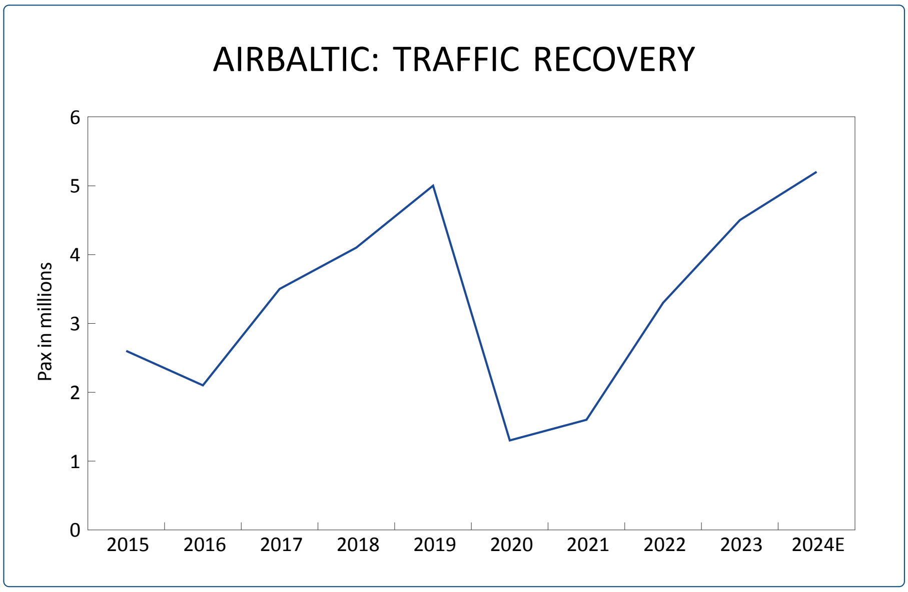
Wet leasing out

When we last looked at air Baltic (*Aviation Strategy*, September 2021) the big question was: how could an airline with a peak prepandemic annual traffic volume of under 5m passengers, which collapsed to just 1.3m in 2021, a fleet of 30 A220s and a limited home market absorb a further 20 aircraft scheduled for delivery over the following two years?

In fact, it got close to its targets — passenger volume was 4.5m in 2023 and is expected to rise to around 5.2m this year while the fleet increased by 17 units — largely by becoming a wet lease operator. In the summer of 2024 airBaltic contracted out 17 A220s to Lufthansa/Eurowings and SWISS. Its "IPO and Beyond" business plan envisaged 10 to 20% of airBaltic's capacity being outsourced on ACMI leases. It has already reached the 20% mark.

Lufthansa is the critical partner and this July a three-year agreement was signed for airBaltic to operate up to 21 A220s on behalf of the German flag-carrier. Outside the Lufthansa Group, there may be opportunities for airBaltic with Air France-KLM, another significant A220s operator. The airline is also exploring wet lease possibilities in Saudi Arabia, India and central Africa. airBaltic contends that it can provide a superior service compared to ACMI specialist companies because it itself is a full-service scheduled airline. It is interesting to note that the world's largest ACMI operator, with 215 aircraft, is Avia Solutions, which is Lithuanian controlled, although it moved its headquarters from Vilnius to Dublin in 2023

With its first half 2024 results airBaltic provided for the first time some detail on its segmental performance. It revealed that EBITDAR (adjusted for



Baltic Background

The three Baltic states are not like the Scandinavian block. Whereas the Danes, Norwegians and Swedes can, with effort, understand each other, Latvian and Lithuanian belong to Balto-slavic, a unique language family, unintelligible to outsiders and also mutually unintelligible between Lithuanians and Latvians. Estonian is a Finnic-Uralic language related to Finnish which itself is unrelated to any other European language (except remotely to Hungarian and maybe Basque). There are also 25% Russian-speaking minorities in Latvia and Estonia, and around 8% in Lithuania.

The states have in common a long history of being controlled by powerful foreigners, having been ruled at various times by Sweden, Germany, Russia and Poland. Until 1992 they were part of the USSR, and the political legacy is very strong in all three countries. They have been members of the EU since 2004.

The Ukrainian war has brought the vulnerability of the Baltic states back into focus. Their security is again threatened by President Putin's Russia as well as President Lukashenko's Belarus. Hence there is a heavy NATO presence in all three countries.

fleet overheads) margins were four times higher for its ACMI operation than for its own network. The figures (see table on page 13) relate to the second quarter which is low season for scheduled operations, nevertheless, the gap does raise questions about the sustainability of its wet lease pricing.

New fleet plan

In 2012 Martin Gauss was brought in as CEO and became the architect of airBaltic's current strategy based on the A220. Herr Gauss had previously been at Malév in Budapest and Deutsche BA in Munich, and is still qualified as an A220 pilot. airBaltic's revised fleet plan is for 100 A220 - 300s, configured with 145 seats, by the end of decade. It has converted ten of the 30 options it had in addition to the 50 unit firm order it placed as launch customer back in 2016. It has placed a further firm order for 30 units with deliveries from 2026. We estimate that the price for the 50 additional aircraft in the current plan would be around $1.6bn. All the aircraft being financed through sale and leasebacks, so the airline is reliant on the appetite of the lessors for A220s. airBaltic is effusive about the A220's environmental characteristics — a much smaller noise footprint and markedly lower carbon emissions compared to comparable aircraft. It is a very green-orientated company.

The A220 is claimed, probably correctly, to be the optimal aircraft for its business model — economical over short hops feeding traffic to/from the Riga hub and also capable of a commercial range of 4,575km. It operates to Gran Canaria and Sharm El Sheik, both routes of around 4,500km.

On a trip cost basis, the 145-seat A220s is competitive with A320 neos and 737 MAXes, about 10% lower. But on a per seat basis it would be about 20% higher and on a per passenger basis (comparing airBaltic's 76 % load factors to the 90%-plus achieved by the LCCs), the differ-

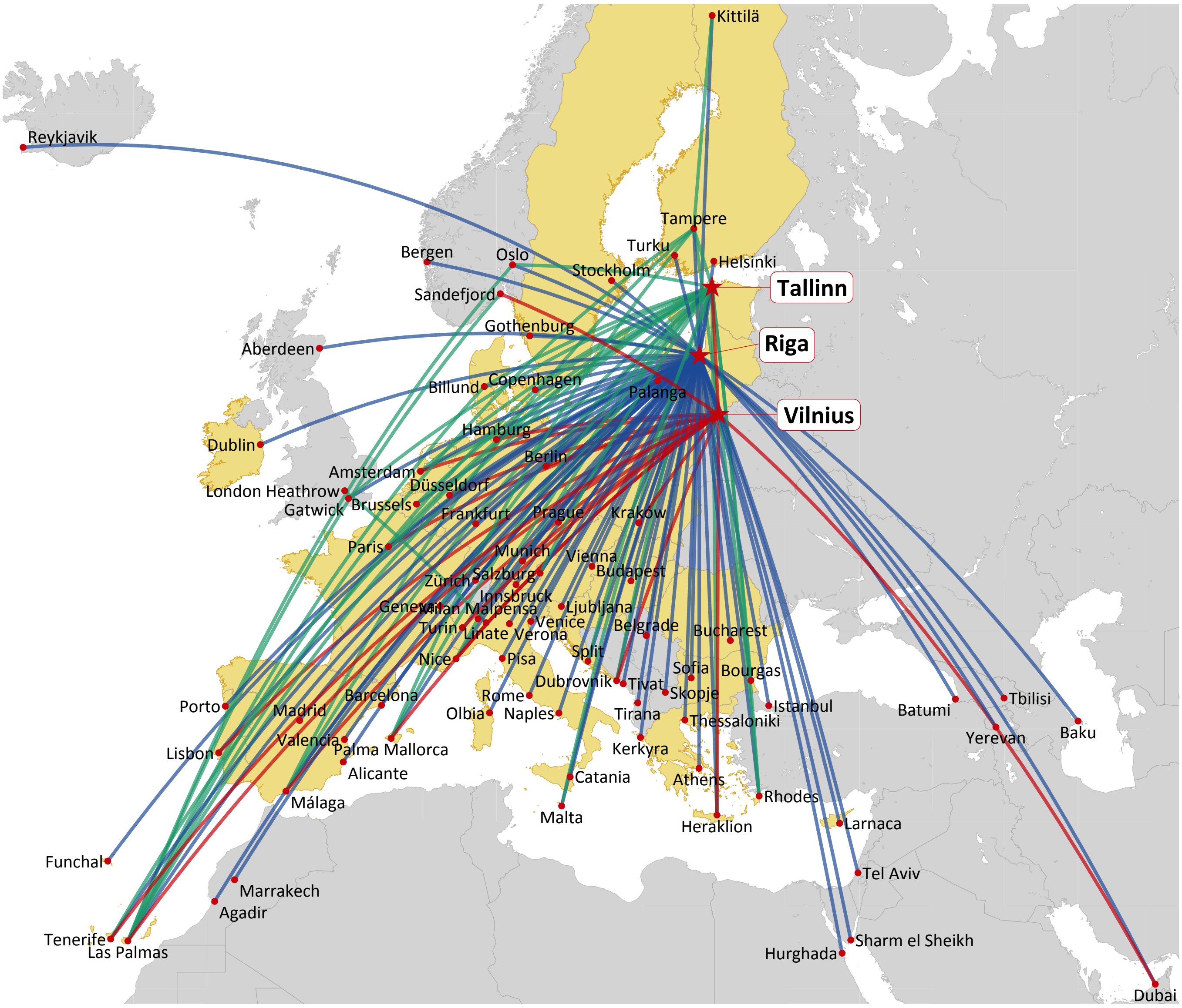
NEW FLEET PLAN

	A220-300s
2024	49
2025	54
2026	66
2027	77
2028	87
2029	100
2030	100

A220 Customers

Customer	Ordered	Operational	Backlog
Airlines			
Delta	145	71	74
AirBaltic	90	48	42
jetBlue	100	38	62
Air France	60	37	23
Air Canada	60	33	27
Swiss	30	30	
Breeze	90	29	61
ITA Airways	7	16	
Egyptair	12	10	2
Korean	10	10	
Iraqi Airways	5	5	
Air Tanzania	4	4	
Air Austral	3	3	
Qantas	29	2	27
Ibom Air	10	1	9
Lufthansa	40		40
Odyssey	10		10
Air Niugini	6		6
Air Vanuatu	3		3
	714	337	377
Lessors			
Air Lease Corp	76		76
Macquarrie	26		26
Azorra	22		22
Aviation Capital Group	20		20
Ilyushin Finance	14		14
Nordic Aviation Capital	8		8
Griffin Global Asset Managers	6		6
GTLK	6		6
Carlyle Aviation Partners	1		1
	179		**179**
Others			
Governments/Private	11	2	9
Undisclosed	8	8	
	19	**10**	**9**
Total	**912**	**347**	**565**

AIR BALTIC ROUTE NETWORK



ence would be around 30%.

Network

The three Baltic capitals and Tampere are small in comparison to the main population centres in Denmark, Norway, Sweden and Finland (see map) but airBaltic has a truly niche hub and spoke system at Riga, the capital of Latvia. It also has bases at the Estonian capital Tallinn and the Lithuanian capital Vilnius plus a new operation based at Tampere, Finland's second city. In 2023 2.3m passengers were flown to/from Riga, compared to 0.77m at Tallinn, 0.44m at Vilnius and 0.12m at Tampere.

By the end of this year the airline will have a network of over 130 routes — a mean average of under 40,000 passengers per route per year. The operating model depends on connecting lots of thin traffic flows (some of 2024's new routes include Riga-Tirana and Riga-Madeira) yet only 30% of the airline's Riga passengers transited at the airport, while 70% were on direct flights. The airline seems to be finding it difficult to push its load factor up to current European standards — in 2023 the load factor was 76.7%.

In allocating capacity between the three Baltic countries, the airline has to manage intense intra-Baltic rivalries, Although some aircraft carry the national flags of Lithuania and Estonia, politicians in these two countries still seem to want to restore

AIRBALTIC GROUP FINANCIALS (€ millions)

							Jan-Jun			
FY end Dec	2018	2019	2020	2021	2022	2023	2023	2024	@ End June	2024
Revenues	409	503	138	204	500	668	291	339	Fleet and RoU Assets	1,198
Net result	5	(8)	(265)	(136)	(54)	34	15	(89)	Current Assets	94
Operating Cashflow	47	87	(89)	(8)	70	138	63	77	*Cash*	*105*
Net Capex	(53)	(65)	(42)	(13)	(27)	(9)		(13)	Total Assets	1,397
Other Income	28	25	15	5	7	7	3	1	LT debt and lease	1,177
Free Cashflow	22	47	(116)	(16)	50	136	66	65	Current liabilities	354
Change in Net Debt	(29)	70	(109)	(98)	(46)	(145)	(63)	11		
Equity injection			250	45	45				Total Liabilities	1,531
Total Cashflow	**(7)**	**117**	**25**	**(69)**	**49**	**(9)**	**3**	**76**	**Shareholders' Equity**	**(134)**

Source: Financial Reports; 2024 unaudited

their flag-carriers.

Product

airBaltic describes itself as a hybrid, meaning having a cost structure something like the LCCs and service quality akin to the best of the European network carriers. airBaltic is keen on NPS (Net Promoter Scores), a measurement of how satisfied customer are with a product or service. Its score in the first half of 2024 was 66 compared to 36 for the rest of the European industry (or at least those airlines that report NPVs).

It achieved in 2023 an average revenue per passenger of €120 per passenger in compared to €73 at Ryanair. It also offers a Business Class product, but which generated only 6% of its passenger revenue. Logically, the airline has not joined a Global Branded Alliance (too expensive), but it does have an extensive series of codeshare agreements — 23 in total. It denotes its key partners as the Lufthansa Group, BA, SAS and Air France-KLM, in short, the European airline establishment. airBaltic has an innovative loyalty programme — Planies, which is the world's first Non-Fungible Token (NFT)-based airline programme. According to the airline, Planies are digital collectible NFTs, each of which consists of a unique cartoon artwork of an aircraft with 180 different traits, such as mouth, eyes, wings, engines, etc., stored on the Ethereum blockchain. They are issued, or minted, through the airline's website and then can be traded on the OpenSea marketplace. Holders of the Planies receive airBaltic Club points and other benefits. If this is not entirely clear, please visit www.airbaltic.com/planies-nft.

Tourism is important for the three countries. Riga, Vilnius and Tallinn have beautifully preserved or reconstructed mediæval Old Towns. Tampere has the Moomin Museum, a major attraction for the many fans of Tove Larsson.

SEGMENT ANALYSIS
(€ millions, Q2 2024)

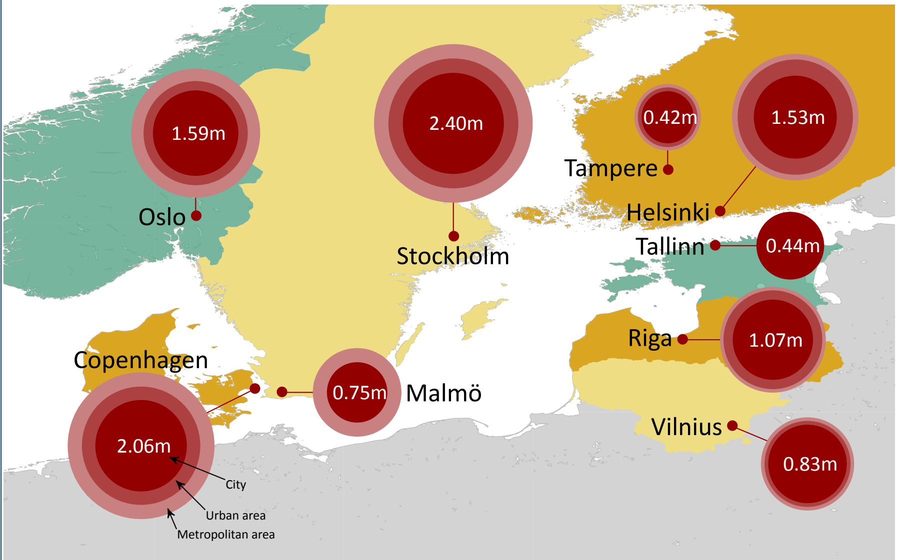
	Revenues	Adj EBITDAR	EBITDAR Margin
Own Network	154.9	25.4	16.4%
ACMI Out	52.1	33.5	64.3%
Total	**207.0**	**58.9**	**28.5%**

Financials

The financial history of airBaltic since it was renationalised in 2011, after years of losses under SAS (joint ownership with the Latvian state when set up in 1995) and an independent company called BAS owned by the then CEO, has been stressful. In the four years before the Covid-19 crisis, airBaltic just about broke even — a net profit margin of 1% — but a public/private equity injection of €131m in 2016 was required to stabilise the company. Then the pandemic hit the airline particularly hard.

During 2020-22 airBaltic accumulated a net loss of -€455m on rev-

BALTIC: MAJOR CITIES AND POPULATIONS



enues of €842m. The Latvian government responded with a series of equity injections totalling €340m, which was approved as emergency aid by the European Commission. As a result, the Latvian state ownership of the airline is now 99%.

2023 showed promise with traffic rebounding by 41% and the airline was able to report a net profit of €34m, a 5% margin on turnover of €668m. However, results for the first half of this year were disappointing: the company reported a net loss of -€89m compared to a profit of €15m the previous year. airBaltic claims that about half of that loss can be attributed to exceptional events, principally the industry-wide problems with Pratt and Whitney's PW1000G engines. As at mid-year the airline had six aircraft on the ground and had had to lease in capacity. airBaltic is still negotiating with P&W regarding compensation and commercial support related to the engine issues. Judging from settlements at other affected airlines, airBaltic can expect a generous package.

In July this year airBaltic resolved the challenge of a €200m bond issued in 2019 and expensively priced at 6.75% pa which was falling due. The airline was successful in placing a €340m bond issue. But this new bond was considerably more expensive: 14.50% pa over 5.2 years and secured on seven A220s. Unsurprisingly, since this could be considered as a quasi-sovereign bond, the issue was massively oversubscribed and in the end was allocated to over 100 local and international insitutional investors.

Despite the various equity injections airBaltic's balance sheet as at mid-year showed the carrier to be technically bankrupt with a deficit of-€134m in shareholders' funds. The cash balance was €105m bolstered by proceeds from the bond issue, equivalent to about 50 days of total expenses.

S&P earlier this year revised its stand-alone credit profile (SACP) on air Baltic to b- from ccc+ based on its view of "airBaltic's strong links with, and important role for, the Latvian government", emphasising the "moderately high likelihood that the Latvian government would provide extraordinary support to Air Baltic in case of need".

The airline and the Latvian government place great hope on the IPO, originally mooted for the end of 2024, now scheduled perhaps for 2025. In August Martin Gauss stated: "After the successful development of airBaltic in the first half of 2024 we are now together with banks and international advisors in an intense preparation for listing airBaltic at the stock exchange."

But an IPO would take away, or at least dilute, what the credit agencies regards as the airline's financial strength — its ownership by the state. Indeed, some of the statements that are made in Riga seem to reflect political aspiration rather than commercial reality; for instance, after receiving the €250m state equity injection in 2020, airBaltic stated that "the investment is planned to be returned to the Latvian state in form of proceeds from selling shares during a planned IPO." But it now clearly needs all the funds for an IPO for its own operations and the planned $1.6bn capex on new A220s.

The hoped-for solution is an industry investor. Inevitably, there have been reports that airBaltic is in pre-IPO talks with Lufthansa. There are obvious links, but does Lufthansa have the appetite for another strategic investment, with uncertain financial benefits and certain political complexities, having expended so much effort on ITA (*Aviation Strategy*, July/August 2024)?

Demographic Trends: Fundamental Air Traffic Demand Driver

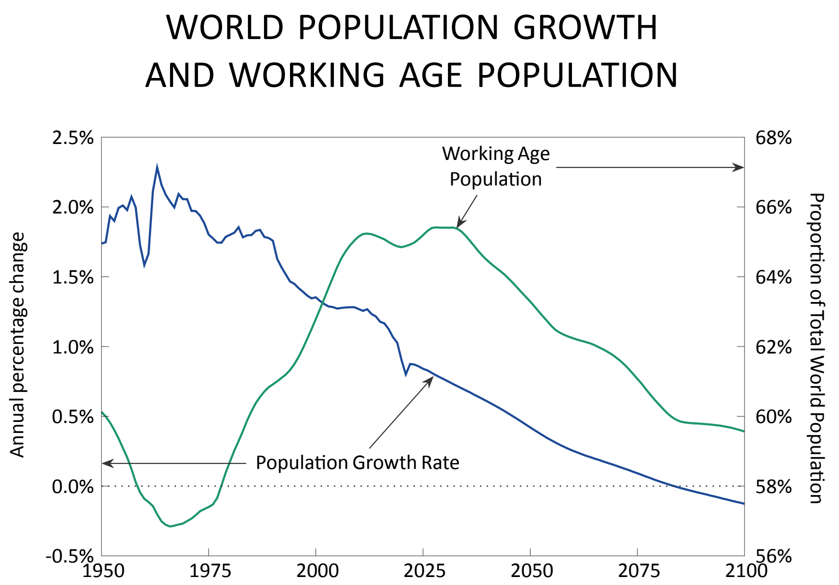
SINCE the beginning of the 20th Century, the World's human population has been growing at the highest annual average rate in its history.

This is understandable. From the onset of the industrial revolution in the late 18th Century there has been increasing urbanisation, education, and advances in health care with resulting reductions in infant mortality and increases in life expectancy. As each country has industrialised, it has reaped a "demographic dividend": more children survive infancy, the size of the working population has grown, generating the ability to increase total earnings (or GDP per head) for the benefit of a country's society as a whole.

We've been digging in to the figures from the UN Population Division's databases and forecasts (World Population Prospects 2024) and show some of the findings in the graphs on the following pages. They should be useful as indicators of the most fundamental driver of air traffic demand — demographics.

We have chosen to show data for three individual countries (Japan, China and India) as well as two of the UN's agglomerated sets — Europe and Northern America to represent the "western" post-industrialised countries; and Sub-Saharan Africa to represent developing nations.

According to UN, the annual rate of global population growth peaked in 1964 — at 2.25%. At this rate of growth the total population would double in 30 years. And indeed the world's population has grown from an estimated 1.6bn in 1900 to 8.2bn in 2024. But the rate of growth has declined to only 0.9% (that is still 70m more people this year than last). If this were to continue it would take 80 years for another doubling in the corpus of humanity.



Source: UN World Population Prospects 2024

But the UN expects the rate of growth to continue to decline over the rest of the century. Under its median forecast the world's population could peak in 2085 at 10.3bn before starting to decline.

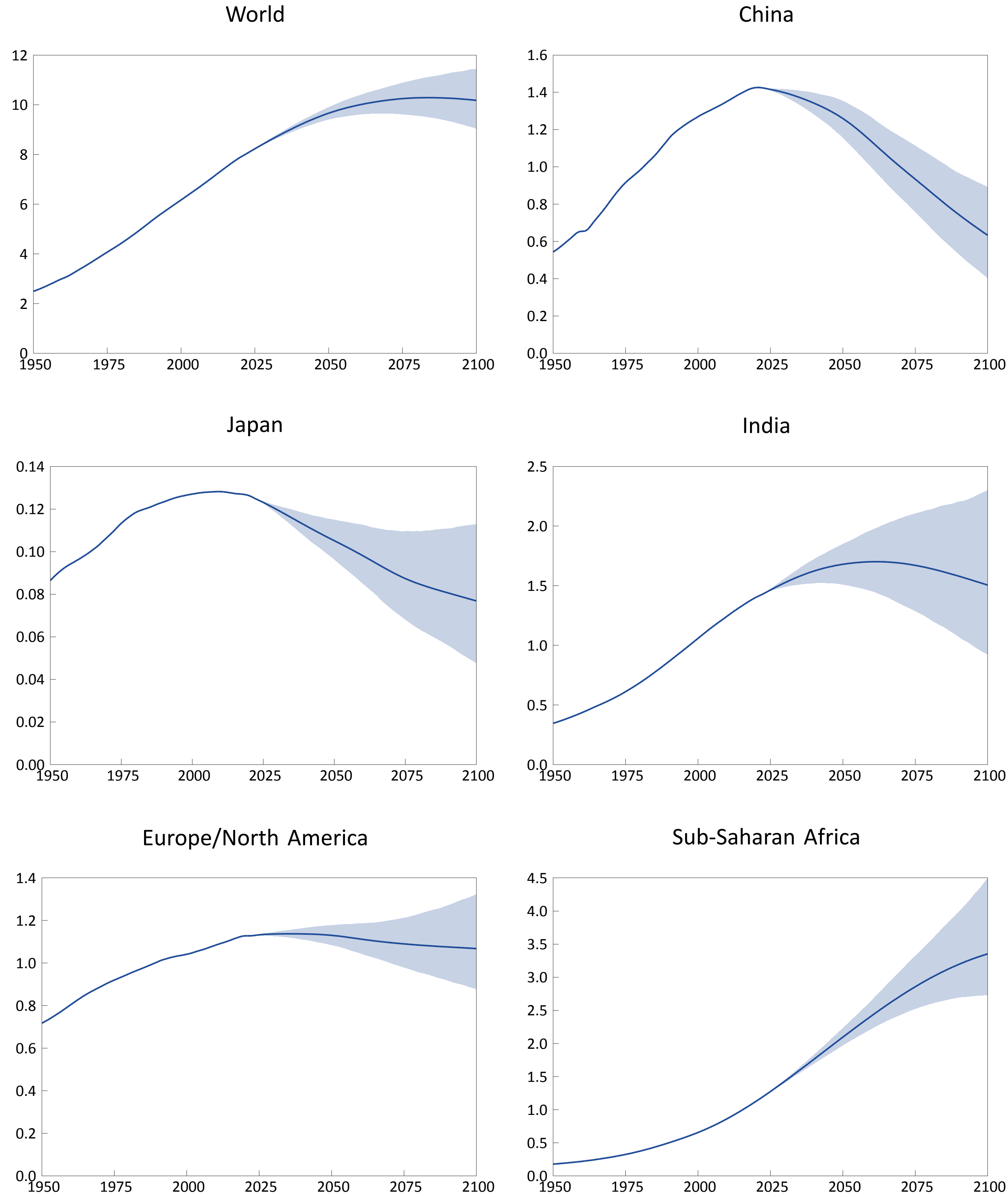
In hand with the population growth has been a reduction in the total fertility rate (TFR) — defined as the the average number of children a woman would have if she were to live to the end of her childbearing years and give birth in accordance with the prevailing age-specific fertility rates. The global TFR peaked at 5.3 in 1963 and is currently 2.2.

Declining fertility can be beneficial for economic growth. As fertility declines, the proportion of children in the population falls and the proportion of the population of working age increases, resulting in a lower dependency ratio (defined as the number of children and older people per 100 persons of working age). Provided jobs are available for the increasing population of working age, a country can reap the benefits of increased production and lower the costs associated with the decreasing proportion of dependants — a "demographic bonus".

But when fertility goes below a replacement rate of 2.1, the population ages, the numbers of people of working age declines, the dependency ratio increases and, in the absence of net immigration, the total population falls.

And this has happened to many of the advanced economies. Accord-

POPULATION ESTIMATES (billions)



Source: UN World Population Prospects 2024.
Note: shaded area=95% probability envelope

ing to the UN data, 68% of the world's population live in countries where the TFR is below replacement rate.

Japan's TFR fell below replacement rate in 1957 and is currently 1.2. Its population peaked in 2009 at 128.1m and is currently estimated to be 123.8m. The UN Population Report forecasts that by 2050 it could fall by 15% to 105m, the working age population falling by 25%, and a dependency ratio of 95%.

China's one-child policy, introduced in 1980, had its desired effect. The country's TFR which had averaged 6 children per woman in the 1960s and 70s, fell below 2.1 in 1991 and in 2024 is estimated to be 1.01. China's population peaked at 1.43bn in 2021 and now seems set to fall.

The PRC, now worried about the prospect of a declining population introduced a two-child policy in 2016, upgraded it to a three-child policy in 2021.

The UN forecasts suggests that these policy changes may have little impact on behaviour: it expects China's population to fall 55% from the peak to 633m by the end of the century. The working age population could fall by 70% over the period — admittedly that would still be nearly 300m people — and by 2100 the country could find itself with a dependency ratio of 116%.

India's population in contrast is still growing — it overtook China as the most populous nation on Earth in 2022. But its TFR has also dropped below the replacement rate (in 2020) and is currently estimated at 2.0 children per woman. The UN's median forecasts suggest that the country's population will not peak until it reaches 1.7bn in the 2060s.

Europe and North America, despite fertility rates of around 1.5 children per woman, might see the total population peak in the mid 2030s, but remain relatively stable thereafter. This is predicated on assumptions of net immigration (of around 2m people a year) continuing. But immigration is a contentious political issue that Japan, China and India do not face. Even so the combines region's dependency ratio is forecast to rise from 55% in 2024 to 58% in 2030 and 70% by 2050.

Some countries' populations are growing. We've taken the UN's grouping of Sub-Saharan Africa as an exemplar that shows a fertility rate falling but still above replacement rate at 4.2 children per woman in 2024. Under the UN's median forecasts, the TFR may fall below the replacement rate in the 2080s, but the population of 3.4bn by 2100 would still be increasing.

For these the dependency ratio should fall over this period as the working population grows, giving them to opportunity to achieve a population "dividend".

By the end of the century, the UN's median forecasts suggest that Nigeria's population will have doubled to 480m, those of the Democratic Republic of the Congo, Tanzania and Angola quadrupled to 430m, 260m and 150m respectively, Ethiopia up by 180% to 370m and Sudan by 170% to 140m. All will by then rank among the world's 15 largest countries by population.

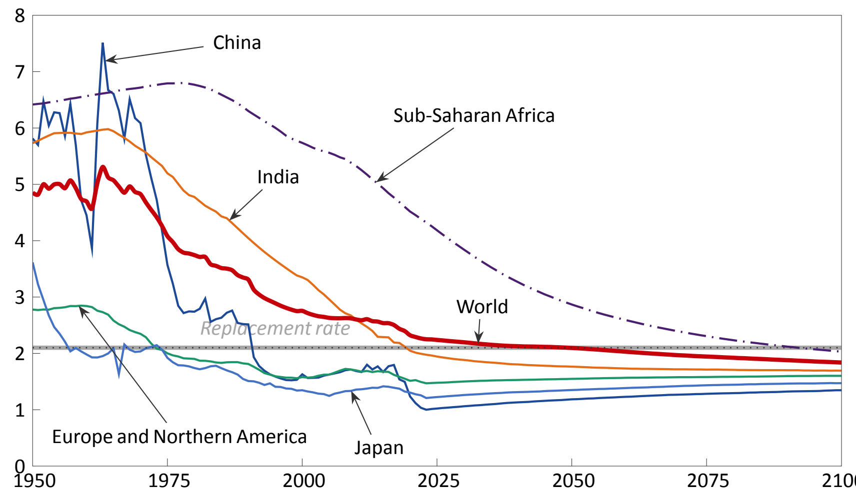
Impacts

These demographic changes are likely to have a major impact on the geopolitical order, put negative pressure on GDP growth, and prospects for air travel.

Countries with aging populations may face slower consumer demand: the elderly tend to spend less on discretionary items with knock on effects on retail industries, entertainment and travel. As the dependency ratio rises, greater pressure is placed on government resources and social safety nets: spending on pensions, healthcare and social services will escalate. This in turn will probably lead to higher taxation and Government borrowing with a consequent further negative effect on GDP.

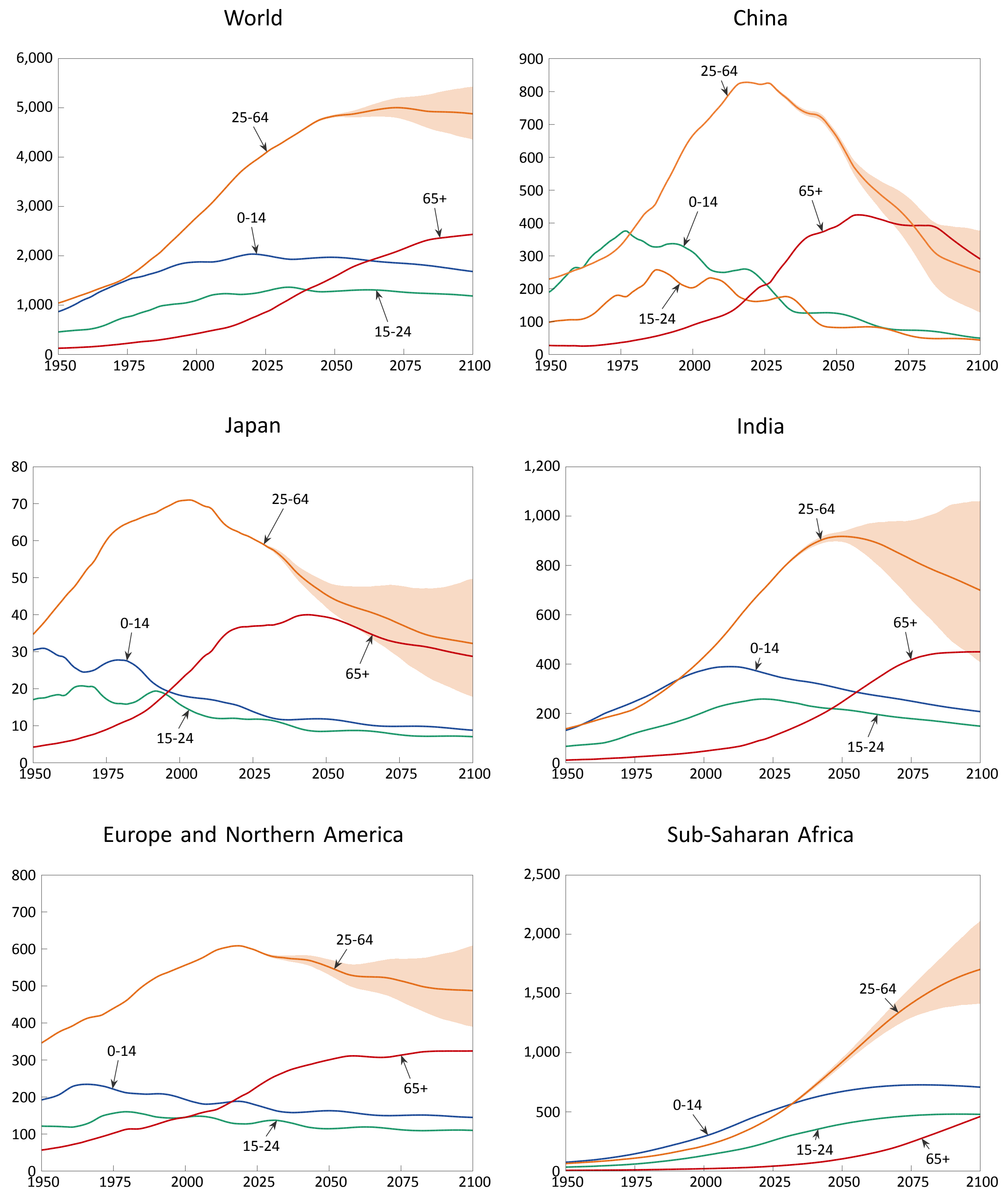
Shrinking working-age pop-

TOTAL FERTILITY RATE



Source: UN World Population Prospects 2024

Populations by Broad Age Groups (millions)



Source: UN World Population Prospects 2024.
Note: shaded area=95% probability envelope

ulations add pressure on labour intensive industries. There is already a burgeoning shortage of airline pilots (and air traffic controllers) — noticeably in the USA — adding significant pressure on wages (which leads to increases in airfares and possible downward pressure on demand). But the working age population is also the backbone of airline demand: various studies show the highest propensity to fly among those aged between 20 and 50. As this cohort shrinks, it is difficult to believe that their propensity to fly will increase enough to offset the decline in population. In addition, the newer generations at the bottom of this age range, and those newly entering it, will be more environmentally conscious.

Furthermore, the business travel segment, which has traditionally been a significant source of revenue for airlines, may well decline further decline as older workers retire and are not replaced by younger generations at the same rate. This trend could accelerate because of changes in corporate culture, where especially post-pandemic, companies have already begun shifting toward virtual meetings and remote work — let alone the pressures of ESG compliance — further reducing the need for air travel.

WORLD'S LARGEST COUNTRIES 2100

Rank			Population (bn)			Dependency Ratio	
2100	(∆)	Country	2100	2024	%ch	2100	∆
1	(–)	India	1.51	1.45	+4%	78%	↑31
2	(–)	China	0.63	1.42	-55%	116%	↑72
3	(+2)	Pakistan	0.51	0.25	+103%	56%	↓14
4	(+2)	Nigeria	0.48	0.23	+105%	48%	↓30
5	(+10)	Congo∗	0.43	0.11	+294%	52%	↓45
6	(-3)	USA	0.42	0.35	+22%	75%	↑20
7	(+3)	Ethiopia	0.37	0.13	+178%	58%	↓16
8	(-4)	Indonesia	0.30	0.28	+4%	69%	↑22
9	(+13)	Tanzania	0.26	0.07	+283%	57%	↓27
10	(-2)	Bangladesh	0.21	0.17	+20%	84%	↑32
11	(+2)	Egypt	0.20	0.12	+73%	63%	↑4
12	(-5)	Brazil	0.16	0.21	-23%	85%	↑41
13	(+28)	Angola	0.15	0.04	+296%	53%	↓37
14	(+16)	Sudan	0.14	0.05	+171%	58%	↓20
15	(-4)	Mexico	0.13	0.13	-0%	82%	↑33

∗*Democratic Republic*

China growing Old

China has additional problems. The national retirement age remains 60 for men and 55 for women (or 50 if factory workers).

Pensions can be miniscule: a UN report stated in 2020 the average monthly pension was CNY170 (less than $25). And the state-run Chinese Academy of Sciences sees the state pension system running out of money by 2035. China's National Health Commission projects the number of people 60 and older will grow to 400 million by 2035, from 280 million now.

Care for the elderly has traditionally been performed by family members under the Confucian concept of Filial Piety or *xiào* (孝, the character rather poetically and poignantly is apparently a combination of the character *lao* (old) above the character *zi* (son), ie an elder being carried by a son).

This was enshrined in law in 2013 making it a legal requirement for adult children to visit their elderly parents regularly, send them messages for their spiritual well-being, and "logical" amounts of money.

An unintended consequence of the one-child policy has been called the 4:2:1 paradigm: one adult child caring for four grandparents and two parents.

Shanghai, the largest city in China, was the first major city to reach a population where nearly 1 in 3 residents is over 60. In May 2016, the Shanghai Ministry of Civil Affairs mandated a new policy to protect the rights of older adults and punish children whose devotion to their parents is considered insufficient; violators will find their names publicly and shamefully called out and their credit standing negatively affected by the government. The so-called "credit blacklist" is a tool of market control used by the Chinese government to punish many kinds of illegal activity and can prevent individuals from opening a bank account, purchasing a house, starting a business, or even getting a library card.

China has also had to build gerontological care almost from scratch. It was only in May last year that China issued guidance to all provinces to build a basic elderly care system by 2025, foreseeing the need in ten years for about 40 million beds in community OAP facilities and nursing homes, up from 8 million now.