

2024: A Return to Normal?

AFTER four years of the catastrophic crisis of the Covid-19 pandemic, the world's airline industry is finally approaching recovery to the level of activity seen in 2019: the latest IATA estimates suggests that total passenger numbers in 2023 will only have been 4.8% below pre-pandemic levels, with load factors at 82% on a par; and that forecast passenger numbers in 2024, of 4.7bn, should exceed 2019 levels by 4.5%. Is everything back to the *status quo ante pestem*?

In December, IATA made a major revision to its annual forecast of the airline industry's financial performance from the version it presented to the group's AGM in June. Traffic was performing better than earlier expected, and IATA estimates that the global industry will have carried 4.3bn pax in 2023, 22% higher than the year before and 94% of the level in 2019, having in its previous forecast in June expected a 12% shortfall. With the opening of border restrictions, long haul traffic grew faster and demand in RPK is estimated to have grown by 38%. IATA expects a further increase in passenger numbers in 2024 of 10% to 4.7bn — 4% higher than the previous record in 2019, but 7% below what we might have expected from the long term trend (see graph below).

Passenger yields have also been stronger than anticipated, with an estimated year-on-year increase of 6% — it had earlier thought that yields would decline by 1%. Passenger revenues are estimated to have reached \$642bn, 47% up on the year before and 5% higher than 2019. Cargo is another story (see below).

The organisation has consequently raised its financial forecasts. Industry revenues in 2023 may ap-

proach \$900bn, 22% higher than prior year levels, 11% higher than it previously estimated; and 7% higher than in 2019. It increased its estimate of 2023 operating profits threefold to \$40.7bn, and net profits by \$13.5bn to \$23.3bn. This compares with results of \$43.2bn and \$26.4bn at the respective levels in 2019.

For 2024 its initial forecast shows a return to almost normal conditions: a near 10% increase in RPKs and passenger numbers, passenger yields 1.8% higher, cargo demand up by 4% but yields down by 21% (leaving cargo yields 11% higher than in 2019), total revenues up by 7.6% to ap-

proach \$1tn; and an operating profit of \$49.3bn reflecting a 5% operating margin.

Roller-coasting Fares

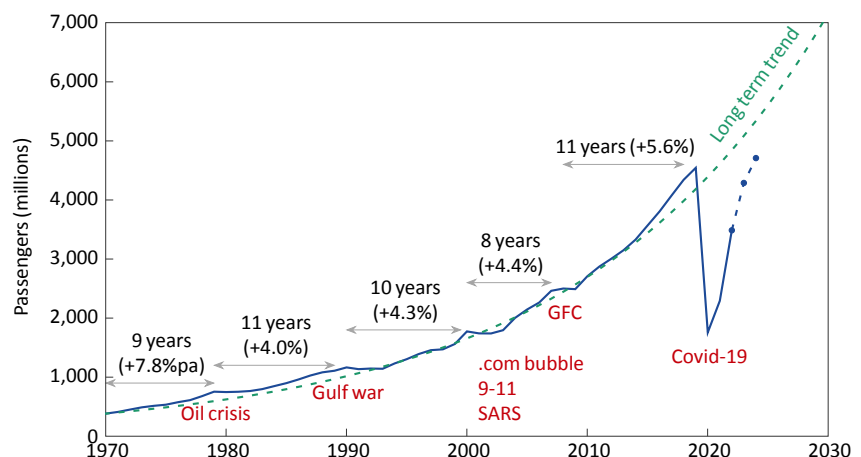
Fares have seen a roller-coaster ride since the start of the pandemic.

The "normal" condition in the air-

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AIRLINE PASSENGERS AND PEAK-TO-PEAK CYCLES



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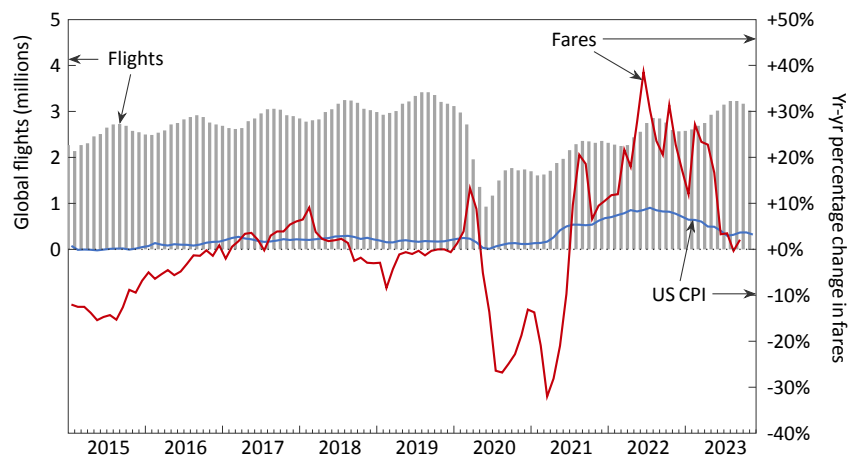
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AIR FARES, FLIGHTS AND INFLATION



Source: Financial Times.

Note: average one-way economy fares ex fees and taxes.

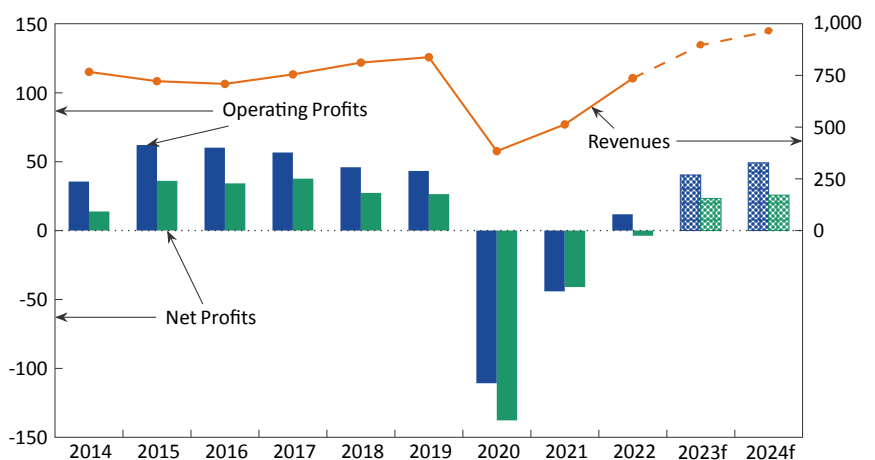
line industry (and one of the principal determinants of its growth) is for air fares to fall in real terms — between 2004 and 2019 fares (including taxes and fees) declined by an average annual 4.3% (and over 5% a year for the five years to end 2019).

According to data published recently in the *Financial Times* (see graph above), there was an initial strong spike in fare increases at the start of the pandemic (perhaps relating to the rapid grounding of aircraft

and travellers' eagerness for repatriation). Through much of 2020 and 2021, fares plummeted by 20-30% before rebounding as domestic markets recovered. But with the gradual reopening of borders from the beginning of 2022 there was a massive 30-40% jump in the cost of tickets. (This co-incidentally was a period that saw jet fuel prices reach a record high of \$172/bbl, as well as US inflation rising towards 10%).

Year-on-year growth has been

AIRLINE INDUSTRY FINANCIAL PERFORMANCE



Source: IATA (5/12/23)

dissipating through 2023, although fares are on average substantially higher than in 2019. The *Financial Times* notes that economy fares on popular routes such as London-New York JFK, at \$343 one-way (ex taxes and fees), are 19% higher than pre-pandemic (although the demise of Norwegian may have something to do with it); and Singapore-Sydney is \$100 more expensive, or 30% higher.

This has been reflected in recent published results — particularly of the US and European airlines — which have shown unit revenues far outstrip pre-pandemic levels. Many have been reporting record quarterly revenues and profits (excluding a

poor summer season for US LCCs, mainly reflecting heavy competition on point-to-point routes).

Airlines have faced criticism, particularly in Europe. Italy tried (illegally) to impose price caps on some island routes. The EU Commission said in November that it would be investigating why, according to the *Financial Times*, “airlines had pushed up fares by 30% over the summer creating bumper profits”.

One might have thought that Brussels would understand the laws of supply and demand. Fares have risen because of the strength of “pent-up” demand, increases in non-controllable costs (air traffic control,

airport charges) combined with a lack of capacity — supply chain issues limiting the delivery of new aircraft and restoration of parked equipment to working order, let alone the P&W geared turbofan problems grounding A320s.

According to IATA’s estimates, the global average one-way fare in 2023 could have been \$150, 14% higher than in 2019 in nominal terms but 11% lower in real terms: and in real terms 55% lower than at the peak of the previous cycle in 2008.

Air Cargo: Post-pandemic Slump and Possible Recovery

IN THE depths of the pandemic air cargo rescued some major airlines — Cathay Pacific, SIA and Korean, for instance — as airfreight rates soared by up to four times the pre-pandemic level. Post-pandemic, air cargo supply and demand have readjusted and rates have slumped. But there could be positive repercussions from problems in the maritime sector.

There were three interconnected reasons for 2021/22 air cargo boom:

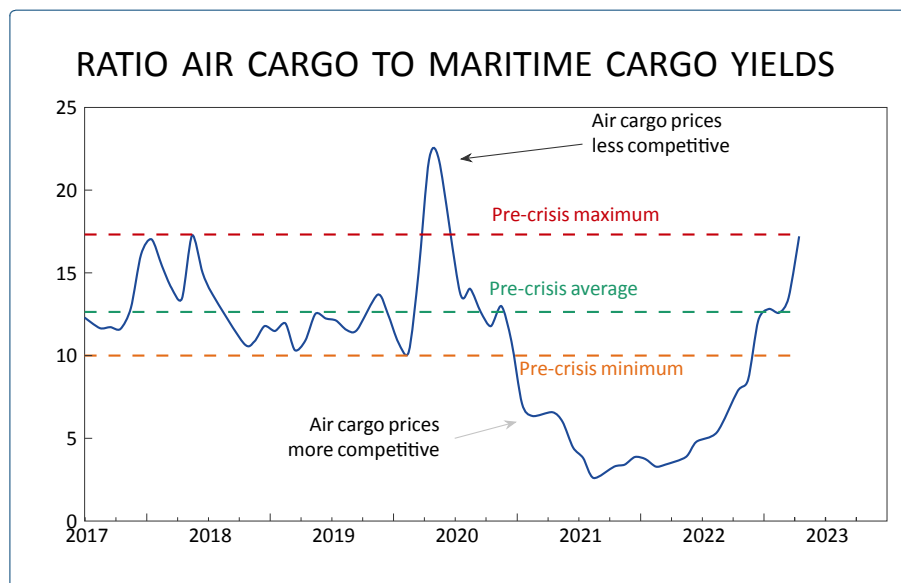
- ✈ There was a surge in demand for time-sensitive medical goods and other equipment as well as internet-ordered consumer items.

- ✈ With most passenger widebodies grounded, bellyhold capacity was taken out of the market and overall cargo capacity was tightly constrained.

- ✈ Maritime containerships ran into major logistical constraints particularly at US West Coast ports, which resulted in a near quintupling in freight rates, which in turn had the effect of bolstering airfreight rates; the graph

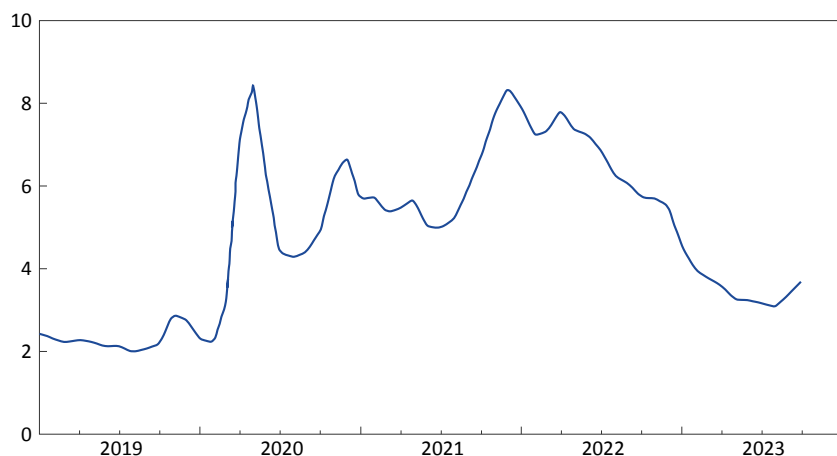
below illustrates how air cargo became more competitive relative to maritime cargo rates (a ratio of about 4 air to sea against pre-pandemic average of about 12).

The airfreight boom was essen-



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AIR FREIGHT SPOT RATE (US\$/kg)



Source: Xeneta

tially a boom in yields rather than volumes. In 2021 demand (CTKs) was about 6.8% higher than in 2019 but supply (ACTKs) was 13.1% lower. 2022 and particularly 2023 saw a re-balancing of the market. Supply was boosted by the return of bellyhold capacity so that the equal balance of freighter/bellyhold capacity was restored in 2023 to around 50/50 from 61/26/13 in 2021 (the 13 being pfreighters, passenger aircraft being used solely to carry cargo). Demand

was suppressed by the slowdown in global trade, the late re-opening of the Chinese economy and the sharp rise in fuel prices.

Consequently, towards the end of 2023 global demand was estimated to be 2% below 2019 levels while supply was estimated at 3% above, with the Cargo Load Factor down 2.4 points to 45.2%. As an aside, precisely identifying global CTKs and ACTKs is not simple: the ton or tonne in the ATKs might not be a weight measure-

ment, it might be volumetric (40 cubic feet in the US version), so presumably volumes are impacted by packaging practices, which have inflated noticeably in recent times.

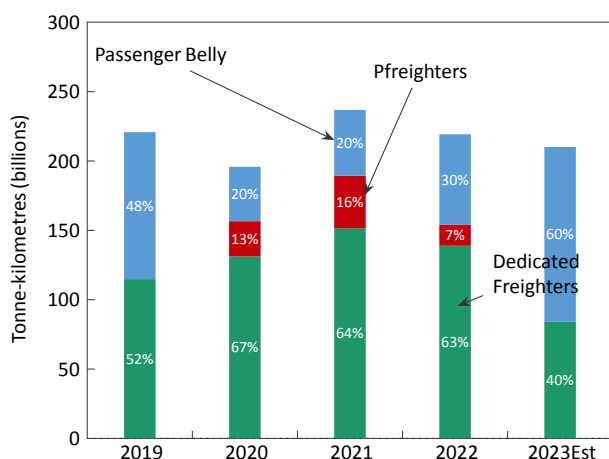
However, the data on yields is firm, and shows an extreme volatility: -8.2% in 2019, +54.7% in 2020, +25.9% in 2021, +7% in 2022, -32.2% in 2023. IATA's official view is yields will continue to decline in 2024 but volumes will rise so that cargo revenue will be about 11% above 2019.

This is generally encouraging for specialist airlines like Cargolux which has warned about 2023 results, having reported recorded profits of US\$1.6bn on revenues of \$5.1bn for 2022. But It is also concerned about the emergence of new multi-modal competitors.

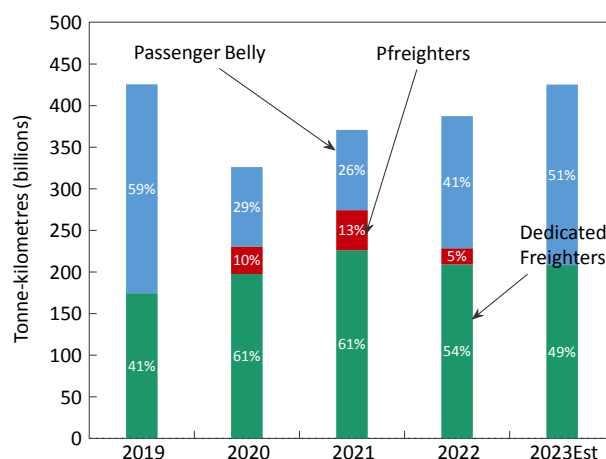
The big new competitor is Amazon. Amazon Prime Air now has 110 freighter aircraft in its fleet, including 10 new A330-300Fs operated by Hawaiian Airlines. Its major US hub is at Cincinnati and its European hub at Leipzig/Halle Airport in Germany. Partly as a consequence of Amazon's expansion, both the major

AIR CARGO TRAFFIC AND CAPACITY

Traffic CTKs



Capacity ACTKs

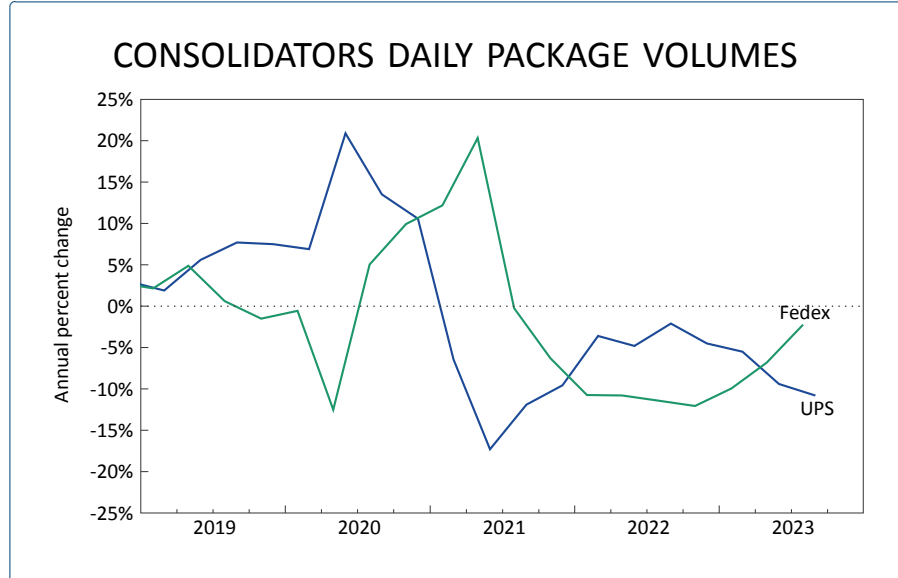


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integrators — FedEx and UPS — have experienced negative growth in their daily package volumes since the end of 2021 (see graph) and are implementing rationalisation/cut-back programmes.

It is just possible that air cargo market conditions in 2024 will be better than expected. Unfortunately, this will be as a result of more geopolitical conflict.

In December there were attacks on commercial shipping in the Red Sea on containerships heading to/from the Suez Canal, leading to major containerlines considering rerouting via South Africa. At the same time, traffic through the Panama Canal has been slowed by exceptional low water following drought in the region. The impact on ocean freight rates has been immediate: after hovering



around \$1,500/FEU for the past year, Drewry's Global Container Index jumped by 80% to \$2,700 at the end of December.

As the pandemic made clear, supply problems in the maritime sec-

tor translate into higher yields and greater profitability in the air cargo sector — unless the Canal situation also seriously impacts the global economy.

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Musings of an Aviation Investor

ACHASM appeared across the Atlantic over the Summer financial quarter in terms of airline financial performance with yield falls suffered in the North American domestic market contrasting to continuing robust fares in Europe as demand held up there for a second year post-Covid.

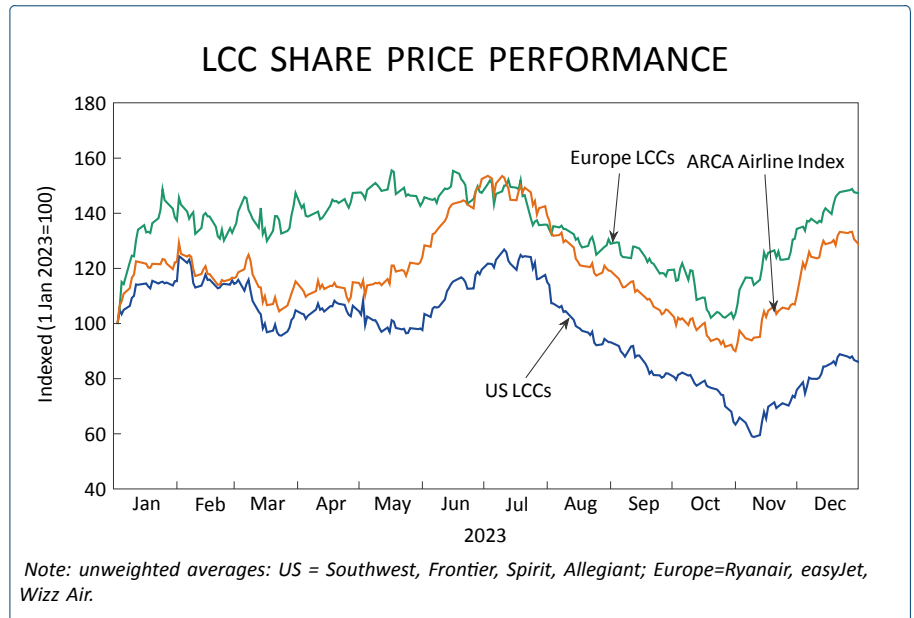
The drop in domestic US yields was dramatic, at c15%-20% for the LCCs, with unit revenues down so dramatically that they fell below the averages achieved by their European peers, whereas in recent years US airlines had realised generous premiums.

Non-US carriers were exposed to a very high US Dollar in 2022 but were assisted by a 9% YoY dollar weakening, with consequential benefits to margins from lower Dollar-linked costs (ownership, fuel, maintenance, insurance, etc) in 2023.

The outcome was that some European LCCs achieved record profitability, while the main US LCCs fell into losses in a seasonal period when margins are usually high..

Stock prices plummeted for the likes of Spirit Airlines, Southwest and Frontier and despite some recovery in November remain well below yearly highs. In Europe, LCC share prices performed better but remain subdued as investors remain highly wary of the sector due to global political risk considerations in the light of the Israel/Gaza situation.

North American hardships were blamed by some of the carriers on a demand shift from domestic to international. While international travel



was indeed up, this should not be viewed as the principal reason for the dramatic yield fall. The likes of Spirit (14% higher capacity YoY) and Frontier (+21% capacity) have huge order books for new aircraft and 2023 saw a big slug of deliveries, many consisting of high-gauge A321s.

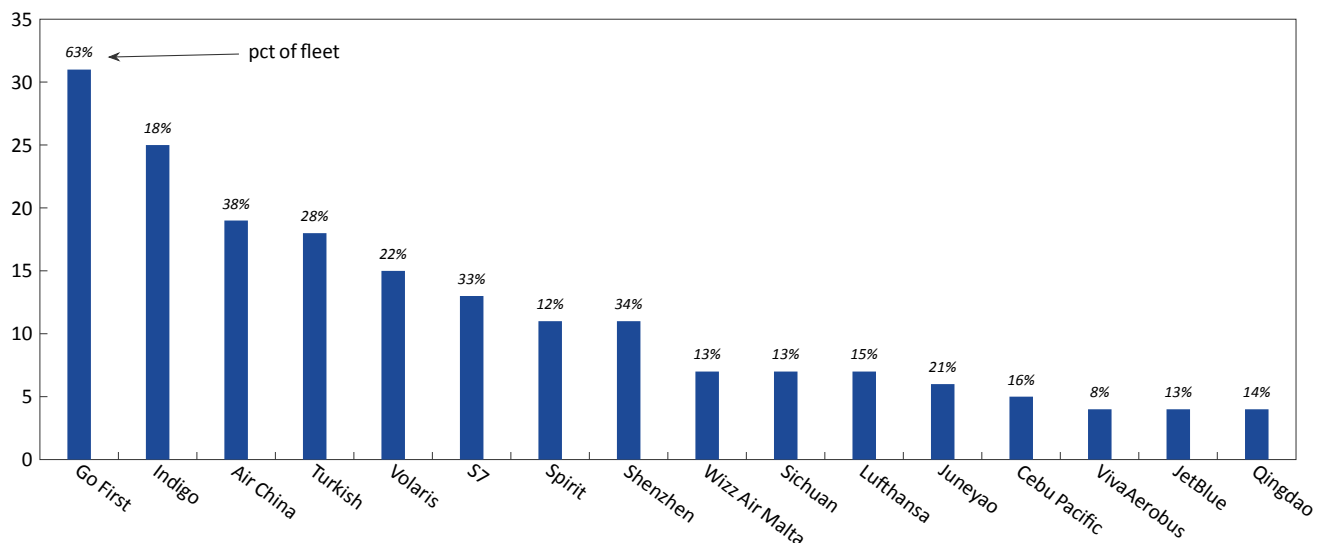
The market simply became saturated proving unable to absorb these seats with airlines forced to drop fares to uneconomic levels to push up load factors. Headwinds from seemingly uneconomic labour pay awards, which in the US have been far more generous than in Europe driven by material pilot shortages, have placed US carriers at further disadvantage at a time of falling unit revenues.

Capacity restraint in Europe assisted yields. Failed/restructured airline capacity that was removed (Alitalia, SAS, Norwegian) has not been replaced in full, while other European carriers scheduled seats still remain

below pre-Covid levels (Lufthansa Group, TAP). Key players such as easyJet (c8%) and Ryanair (c10%) moderated capacity increases for the Summer YoY, much less than the substantive rises of the US based LCCs. Impressive summer profit margins enabled several European airlines to reinstate and initiate dividends (eg, easyJet, Ryanair, Norwegian), shoring up share prices.

Notwithstanding summer earnings, the topic at the top of investor interest for the last six months and heading into the winter and 2024 is the continued deterioration in Pratt & Whitney Geared Turbofan (GTF) technical woes. Highlighted in the Aviation Investor piece (see *Aviation Strategy*, May 2023) as an issue to keep a close eye on, the maintenance fixes required to remedy the most recent "powder metal" defects will impact a far higher proportion of the engine population base, with longer

PW1100G AIRCRAFT OUT-OF-SERVICE



Source: Barclays, 28/11/23.

Notes: Aircraft out of service for less than a year. Percentages refer to operator's fleet of PW1100G powered aircraft.

times in shops and a considerably larger hit to airline capacity than had otherwise been anticipated.

Two big operators (Wizz, Cebu Pacific) of the A320 family of aircraft powered by the GTF have announced up to a whopping 25% of their fleets will be grounded in 2024 as a result of the enforced engine shop visits.

Perverse implications

So, what does this mean for near-to medium term airline financial performance? It would be easy to conclude a negative outcome because of lower seat availability. However, this could be too simplistic, ignoring the idiosyncrasies of complex air transport interactions. GTF induced capacity constraints (combined with other supply side new aircraft delays) may in fact produce yield support over the coming year assisting revenues across the sector, including a benefit for those airlines not directly exposed to GTF operations.

Those with GTF fleets and grounded aircraft will also have a benefit of (generous) compensation from RTX (P&W owner) receiving a double financial advantage. Conversely, such airlines conceivably could be better off next year than otherwise might have been the case.

Another consequence of the GTF saga although in this case to the slight negative, will be upward momentum of lease rates as carriers seek alternative capacity. Lessors will be sure to take full advantage pushing for longer lease terms for lease extensions and leases of older generation single aisle aircraft such as the A320ceo, a boon for older aircraft that many thought post-pandemic may have witnessed premature retirements well ahead of 25-30 year useful life expectations. Such on top of the headwind of higher interest rates to aircraft ownership costs, the sector will face higher lease rate factors from these excess aircraft demand pressures.

By The Irrational Investor.

Above not intended to be investment advice and should not be taken as such and readers should ensure that they take independent advice prior to investing and to be aware of all the risks of equity investing, including the possibility of losing all invested capital. The writer takes no responsibility for the accuracy of the information contained.

Singapore Airlines: The Support of Temasek

QUITE extraordinary! Singapore Airlines appears to have emerged from the pandemic in better financial health than it had before the onset of the existential threat to the industry provided by Covid-19.

For the two years that Singapore's borders were effectively closed, SIA's passenger business evaporated and it lost a total S\$3.1bn at the operating level over the period, and reported net losses of S\$5.2bn.

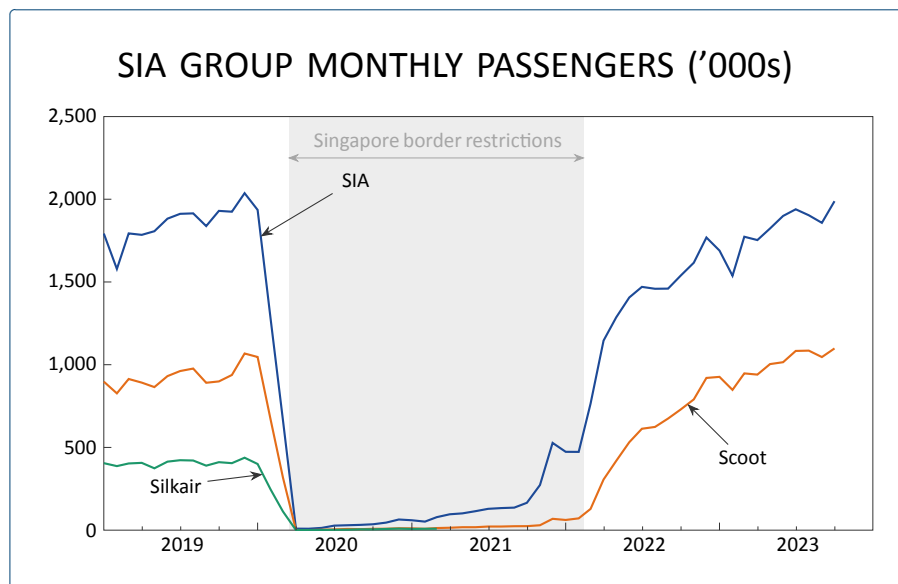
Traffic and capacity levels are now approaching pre-pandemic levels. The group's aircraft fleet is fourteen units larger than it was at the beginning of 2020. Its gross long term debt and lease liabilities on the balance sheet of S\$12bn (US\$8.9bn) at the end of March 2023 was 50% higher than in March 2020, but its near S\$17bn (US\$12.2bn) of cash gives it an unusual apparent year-end net cash position.

For the year to end March 2023 SIA reported a record level of revenues, 10% above its previous peak, and record operating profits of S\$2.7bn; net profits of S\$2.2bn didn't quite reach the peak reported in 2007, but were three times the average annual net income produced during the 2010s. And then for the six months ended Sept 2023 it reported record half year results.

How?

Maybe Singapore, and the SIA management, with its experience of the 2003 SARS epidemic, recognised the signs before most others.

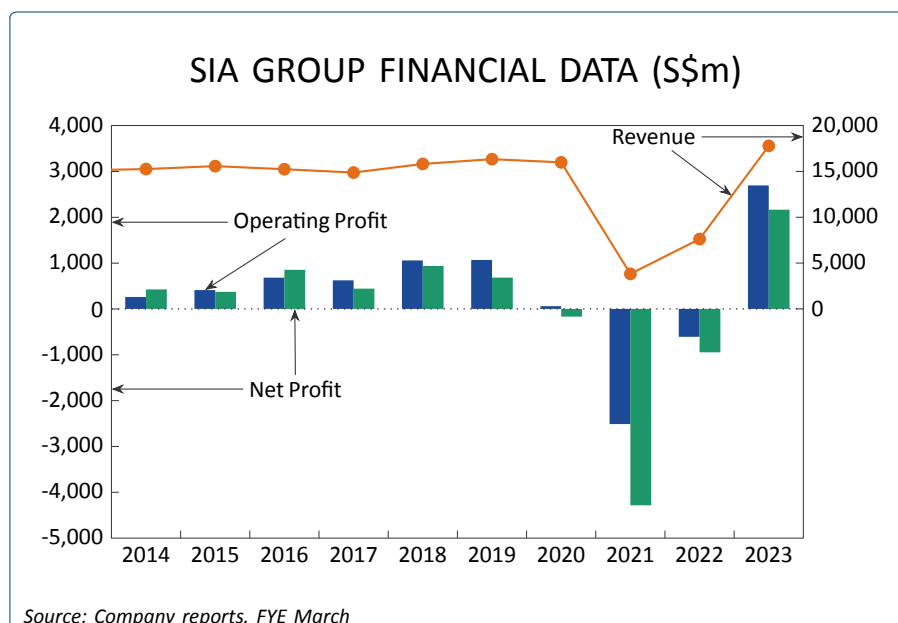
The country registered the first



Covid-19 case outside China on 29 Jan 2020 and flights to Wuhan were curtailed.

Demand dropped precipitously, even before the World Health Organisation (WHO) declared a state of pandemic, and SIA scrambled to cut capacity as passengers stayed at

home. In January 2020 SIA Group airlines (Singapore Airlines, Silkair and Scoot) had carried 3.4m passengers. The WHO declared the pandemic on the 11th March; Singapore introduced border restrictions on the 15th. In April of that year the SIA Group carried a mere 10,800 pax.



SIA GROUP FINANCIAL DATA

FY end March (S\$bn)	2019	2020	2021	2022	2023	@end March	2023	2020
Turnover	16.32	15.98	3.82	7.61	17.77	Fleet and property	27.69	26.96
Net income	0.72	(0.17)	(4.28)	(0.95)	2.16	Other long term assets	2.11	1.91
Operating cash flow	2.80	2.73	(3.09)	3.04	9.13	Current Assets	19.30	4.84
Net Capex	(5.41)	(4.94)	(1.47)	(2.11)	(0.13)	of which Cash	16.73	3.11
Free cash flow	(2.61)	(2.21)	(4.56)	0.93	9.00	Current liabilities	(13.67)	(11.00)
Debt financing	3.40	2.32	0.93	(1.04)	(2.05)	Borrowings	(12.17)	(8.63)
Equity raised (dividends paid)	(0.47)	(0.39)	8.81	6.20	(4.16)	Other long term liabilities	(3.01)	(4.35)
Increase in cash	0.32	(0.27)	5.18	6.09	2.78	Equity	20.25	9.73

Note: S\$1=US\$0.73

For the financial year to end March 2020, SIA Group reported the first annual net loss in its history of S\$169m (mostly from the write-down of investments in Vistara and Virgin Australia, and ineffectual fuel hedges).

In the company's recent results presentation, covering the six months to end September 2023, SIA's CEO, Goh Choon Phong, emphasised that from the very early stages of the crisis the company had pursued three main priorities: boost liquidity, care for customers, and preserve core capabilities.

→ Boost liquidity

Singapore Airlines went into the pandemic reasonably well placed with S\$3bn in cash — equivalent to nearly three-months' normal revenues — but saw that this could disappear quickly.

It started discretionary expenditure cuts early in February 2020, and (after lengthy negotiations with the manufacturers) deferred over S\$4bn of near-term capital expenditure.

It was useful to have its freighter fleet. With the diligent use of passenger aircraft to carry cargo the group was able maintain and increase total freight carried, and take advantage of the strong increase in cargo

yields during 2020 and 2021. Cargo revenues in its financial year to end March 2022 were double that of pre-pandemic levels (and accounted for 60% of group revenues).

It was one of the first carriers to tap the equity markets for liquidity in the crisis: in March 2020 it announced an emergency rights issue to raise a massive S\$15bn (US\$11bn) — a year's worth of turnover — fully underwritten by the island state's holding company (and 55% majority owner) Temasek. The funds were raised in two tranches: S\$8.8bn in FY2021 and S\$6.2bn the following year. Of the total S\$5.3bn was vanilla equity, the remaining S\$9.7bn was in the form of zero-coupon "Mandatory Convertible Bonds" (MCB), which because of the peculiarities of accounting could be treated as equity on the balance sheet.

In total since the start of the pandemic Singapore Airlines states that it raised over S\$23.5bn in liquidity. We estimate that at least S\$7.6bn, over a third of the funds, was provided by state holding company Temasek.

→ Care for Customers

Excellence in customer service has been a tenet of SIA's operating philosophy throughout its existence, and Singapore Airlines has consistently

been ranked as a five-star airline by Skytrax since 2006, and regained its accolade of "World's Best Airline" in 2023 — for the fifth time. At the same time, SIA's low-cost subsidiary Scoot was named "Best Long Haul Low-cost Airline", and ranked second in the "World's Best Low-cost Airlines" category.

It may have been difficult to continue that service orientation when there weren't any customers, although Goh's first example under this heading was to state that the company honoured ticket refunds, despite the cash burn. (In the US during the pandemic, customer complaints to the DoT trebled from normal times; and the top complaint was "not getting a refund".)

He also stated that the company had reviewed the full customer journey and had enhanced over 100 "customer touch points". When pre-departure Covid-19 testing was required, Singapore Airlines and Scoot pioneered a one-stop digital online solution. Among other things this contributed to another five-star award to the group from Skytrax for Covid-19 safety.

In the depths of the crisis, in September 2020, the company "engaged customers" through initiatives

SIA GROUP FLEET

		In service	Parked	Total	Δ v March 2020	Avg Age	On Order	Options
Singapore Airlines	A350-900WB	61	2	63	↑15	4.8	2	
	A380	11	1	12	↓7	9.8		
	777-300				↓5			
	777-300ER	19	4	23	↓4	13.6		
	777X						31	6
	787-10	21		21	↑6	4.1	12	6
	747-400F	7		7		20.0		
	777F	5		5	↑5	0.7		
	A350F						7	5
	A319				↓2			
	A320				↓6			
	737-800	7		7	↓10	8.8		
	737MAX8	16		16	↑16	4.4	13	
	Total SIA	147	7	154	↑6	7.1	65	17
Scoot	E190-E2						9	
	A320	15	5	20	↓6	11.2		
	A320neo	5	1	6	↑3	3.7	12	11
	A321neo	9		9	↑9	2.2	6	
	787-8	11		11	↑1	6.7	3	
	787-9	10		10		7.2	1	
	Total Scoot	50	6	56	↑7	7.4	31	11
	Group Total	197	13	210	↑15	7.2	96	28

dubbed “Discover Your Singapore Airlines”. These created a number of creative revenue streams (and Frequent Flyers could use their miles):

- **Restaurant A380@Changi** — using a parked A380 as a restaurant selling inflight dining experience (diners getting special gifts if they turned up in traditional heritage wear);

- **SIA@Home** — First and Business Class home meal deliveries, some including 22-piece silver place settings, Wedgwood china and Lalique crystal (one of the options included “Book-a-Chef” — mirroring its normal inflight “Book-a-Cook” service — providing a private chef to reheat, plate and and serve);

- **Inside Singapore Airlines** — an exclusive behind-the-scenes tour of the company’s training facilities with a wide range of activities for the entire family — kids having the option to

dress up and role play as cabin crew, and take home their very own SIA sarong kebaya uniform, adults given premium in-flight wines, let loose on the flight simulators (although probably not in that order), and attending a grooming workshop.

More prosaically, in October 2020, Singapore Airlines rolled out its Kris+ mobile application: a digital “lifestyle” payment and rewards system linked to the KrisFlyer frequent flyer programme. It also introduced a new online travel-planning and booking platform named Pelago.

➔ Preserve Core Capabilities

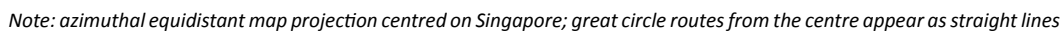
In his presentation, Goh firmly asserted “our people are our most valuable asset” — in 2023 Singapore Airlines once again was awarded the accolade of “Best Cabin Staff” as one of the five prizes it achieved in the annual Business Traveller Awards.

In 2020 the group implemented a hiring freeze, pay cuts, voluntary and compulsory no-pay leave. But it had to cull 15% of its 27,000 strong group workforce. Half of the 4,000 job cuts went through early retirement and natural wastage; the remainder through redundancy packages.

The Singapore Government provided job support covering 75% of the wages of locally employed staff. Goh proudly stated that over 2,000 of the airline crew took up voluntary positions in key community sectors such as healthcare, transport, and test-and-trace.

And the group supported staff in training and retraining through an “UPLIFT” programme to ensure the the group “lead the pack when travel recovery eventually occurs”. 28,000 courses were taken.

SINGAPORE AIRLINES ROUTE MAP



Despite the pandemic SIA remained committed to its long-standing strategy of buying and operating new generation aircraft — the fleet has an average age of only 7.2 years (half the industry average).

In the widebody fleet (see table on page 10), Singapore Airlines got rid of seven 10-year old A380s early in 2020 (five of these have since been broken up), and disposed of nine 777s, but since the start of the pandemic took delivery of 15 A350s and six 787-10s. It also acquired five 777Fs, mostly leased from and operated on behalf of DHL.

On the short haul former Silkair fleet (now merged into Singapore Airlines) it disposed of the remaining eight A319/320 aircraft and 10 737NGs, but replaced them with the delivery of 16 737MAX8s (it has another 13 on order).

Low cost subsidiary Scoot meanwhile disposed of six A320s replacing them with 12 A320XLRs and added one 787 to its widebody fleet.

Somehow the group managed to keep its aircraft and crew current through the two years of Singapore's border restrictions. When the country removed all restrictions at the end of March 2022, 90% of the pre-pandemic aircraft, and 90% of crew resources were available to go straight back into work.

"First off the blocks"

When the country's borders did open fully in March 2022 — Singapore was the first country in the Asia/Pacific region to remove restrictions — the group had built capacity back to around 50% of pre-pandemic levels (even though load factors were excruciatingly low at 55%). Other countries in the region began to follow suit gradually through the year.

China however — which had provided the majority of growth in the region in the previous decade — did not abandon its zero-Covid policy until the end of 2022, and only really started to relax travel restrictions from the beginning of 2023.

SIA prides itself on the fact that it could accelerate the re-introduction of services and take an advantage against its regional competitors in restoring "normal" activity (see chart below).

Record profitability

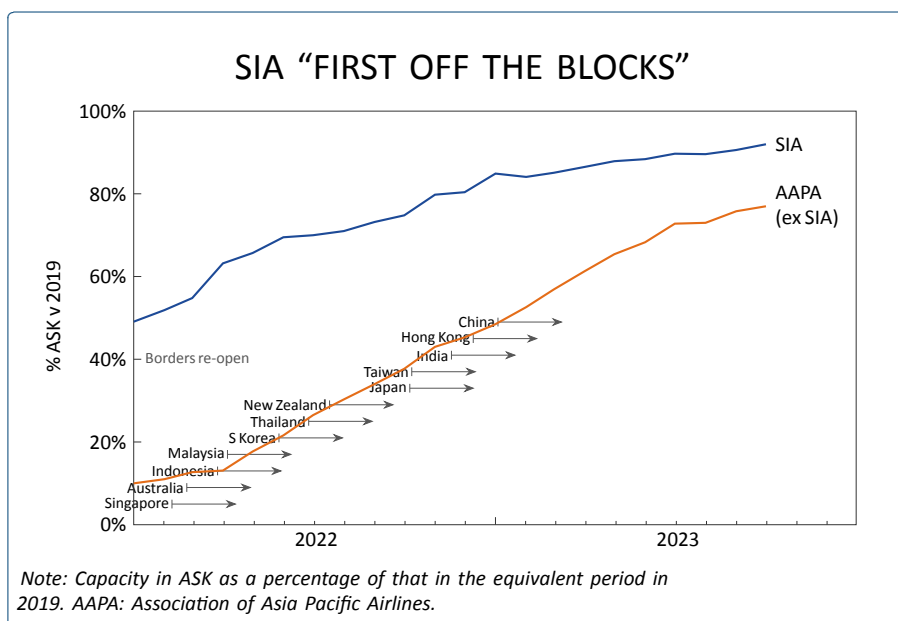
For the six months ended September 2023, this preparation to be the first mover in the region's recovery paid handsomely. SIA Group reported multiple broken records: its highest load factors (88% at Singapore Airlines, 91.3% at Scoot); highest half-year Group turnover in its history at S\$9.2bn; an operating profit of S\$1.6bn, 60% more than it had reported for the whole of FY2019; and a net profit of S\$1.4bn aided by net interest income and associate company profits reversing prior year net interest charges and losses.

SIA and Scoot carried 17.4m pas-

sengers in the period, up 52% from the prior year, and only 9% below pre-pandemic levels: Scoot's traffic of 6.2m pax was, perhaps surprisingly, 12% higher than in the same period in 2019.

The company attributes the strong results to "a robust demand" for air travel, led by a rebound in passenger traffic on North Asian routes following the full reopening of borders in China, Hong Kong, Japan and Taiwan. Cargo operations — which had been a life-saver for SIA during the pandemic — were muted: demand was down by 6% year-on-year; load factors dropped 8 percentage points (to 53%) as more bellyhold capacity in passenger aircraft was on offer; and yields fell by 46%. Compared with the pre-pandemic period in 2019, cargo loads are 20% lower but yields are still a third higher.

The Group took the opportunity of the strong results to redeem half of the MCBs that had been issued in 2021 for S\$3.4bn. This had the effect of reducing net shareholders' funds by S\$2.5bn to S\$17.3bn and increasing the Group's debt-equity ra-



tio from 0.77x to 0.85x. Since the period end SIA announced the intention to redeem a further tranche of half the remaining the MCBs for another S\$1.7bn in December.

It also announced an interim dividend of 10S¢ a share.

Strategic positioning

From the start of the pandemic, SIA was looking in depth at what the post-Covid travel and aviation markets could look like: changes in consumer behaviour, business travel trends, supply chain disruption, and the very structure of the airline industry. As the Group CEO, Goh bluntly stated in his presentation on the FY 2020 results: "This is an opportunity to strengthen our position as a global aviation leader".

He had already streamlined the group structure and branding.

SIA Cargo, which had been a separate legal entity from 1988, was re-absorbed as a division of Singapore Airlines in 2018. In the same year SIA announced that Silkair, its full service narrowbody regional feeder subsidiary would refit its fleet with new lie-flat business class seats and seat-back entertainment systems, to align the inflight product more with the parent widebody operations, before merging it into SIA as its short-haul operation. This was completed in 2021.

SIA's two low cost carriers — Tigerair (short-haul narrowbody) and Scoot (medium-haul widebody) — were merged in 2017 with all flights operating under the Scoot brand. SIA views Scoot as enabling the Group to "participate directly in the low cost travel segment, bringing value and greater connectivity to our customers".

Not that Scoot fits into the classic LCC model. It has a mixture of aircraft

types — 35 A320s, 21 787s with nine Embraer 190s due from 2024 "to expand regional secondary and tertiary markets". It offers through-ticketing for connecting flights in Changi, intra-line onto its own flights, and inter-line onto SQ and other codeshare partners (currently Virgin Australia) — which adds complexity. (It also operates some very long haul flights: eg Singapore to Athens tagging on to Berlin — see map on page 11.)

But it does operate a complementary network. Of the 23 destinations in China operated by the Group (down from 25 pre-pandemic), Scoot has 16 unique points, SIA's six and there is only one common airport. In SE Asia the Group flies to 35 points, six unique to SIA, 18 to Scoot, and they both serve 11 common destinations.

The Singapore Airlines Group consequently now primarily consists of the full service network carrier parent airline, the no-frills brand Scoot, and SIAETC (its MRO operation).

Historically well-run and profitably managed, SIA seems well-placed to benefit from its emergence from the pandemic as one of the best capitalised airlines and operationally prepared, and financially astute in

the region.

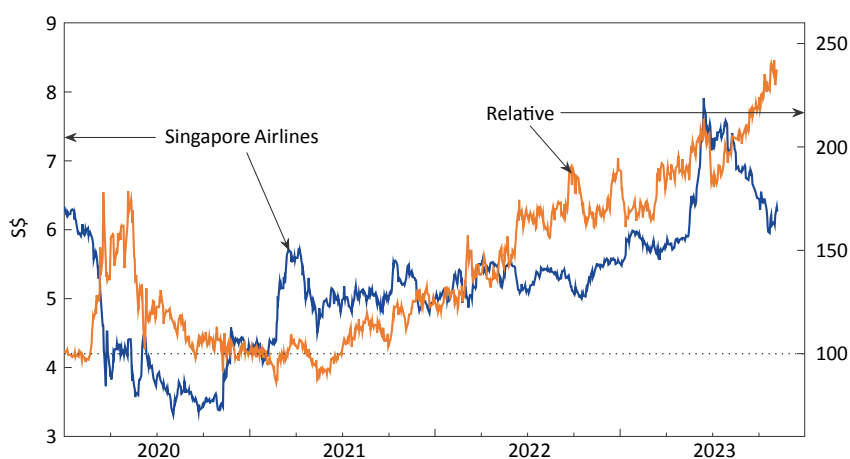
But it has its weaknesses. It is based in an island state with a small population of only 5.4m. There are strong O&D traffic flows — growing as Singapore encroaches on Hong Kong's position as the region's financial centre. To maintain the network structure and connectivity the country wants, SIA needs to continue to operate its sixth freedom connecting hub as it has done since the 1970s.

One of the strange consequences of the post-pandemic industry restructuring has been to give the airline a new avenue of growth, and support to the idea that SIA has a multi-hub strategy. And this is in India.

National flag carrier, Air India was sold to the Tata Group in 2021 during the depths of the pandemic (see *Aviation Strategy* March 2023). Tata is merging it with its two existing airlines including Vistara (its loss-making joint venture with Singapore Airlines).

The result of the merger should give SIA a 25% in the Indian flag-carrier. It may help that the CEO of the new Air India is Campbell Wilson, formerly VP Sales & Marketing at SIA, and CEO at Scoot.

SINGAPORE AIRLINES SHARE PRICE PERFORMANCE



Note: Relative = SIA relative to ARCA Global Airline Index (1 Jan 2020=100)

Volaris: Circumstances Beyond its Control

AS THE aviation industry emerged from pandemic in 2022 one of likely winners seemed to be Volaris, which had developed a very effective operating model, was in a strong competitive position, and was highly rated by the US equity analysts. Its fundamentals remain the same, but circumstances have conspired against the Mexican ULCC.

Volaris's share price has consistently underperformed the North American average since 2021 — see graph on page 18 — and at the end of 2023 the airline was valued in the equity markets at \$1.04bn, which seems rather modest compared to Wizz which is valued at \$3.0bn on the London stock exchange. Both ULCCs use the same basic operating model, having been incubated by Indigo Partners, and it could be argued that growth prospects for Volaris in Central and North America are better than those for Wizz in Eastern and Western Europe.

Volaris has been listed on the Mexican Stock Exchange and the NYSE since its IPO in 2013, with Indigo Partners, the founding entity, retaining a minority stake, around 16%. Enrique Beltranena has been CEO of Volaris since March 2006, and is highly respected throughout the industry. It is the only publicly quoted airline in Mexico. Its ULCC rival Viva Aerobus is privately owned by IAMSA, Mexico's largest bus company, with the joint founder Irelandia, the ULCC investment fund, having sold its 49% stake in 2016. Plans for an IPO on the Mexican and New York exchanges have been mooted for at least 10

years, but CEO Juan Carlos Zuazua, does not seem particularly interested at this time.

Aeroméxico, Mexico's semi-flag-carrier, is majority owned by Apollo Management, the New York-based private equity giant, following an extensive Chapter 11 bankruptcy reorganisation designed to rejuvenate the carrier as an efficient full-service operator. Its shares have been suspended since the end of 2022, but the CEO Andrés Conesa has indicated that a relisting could be implemented in 2024.

Financials

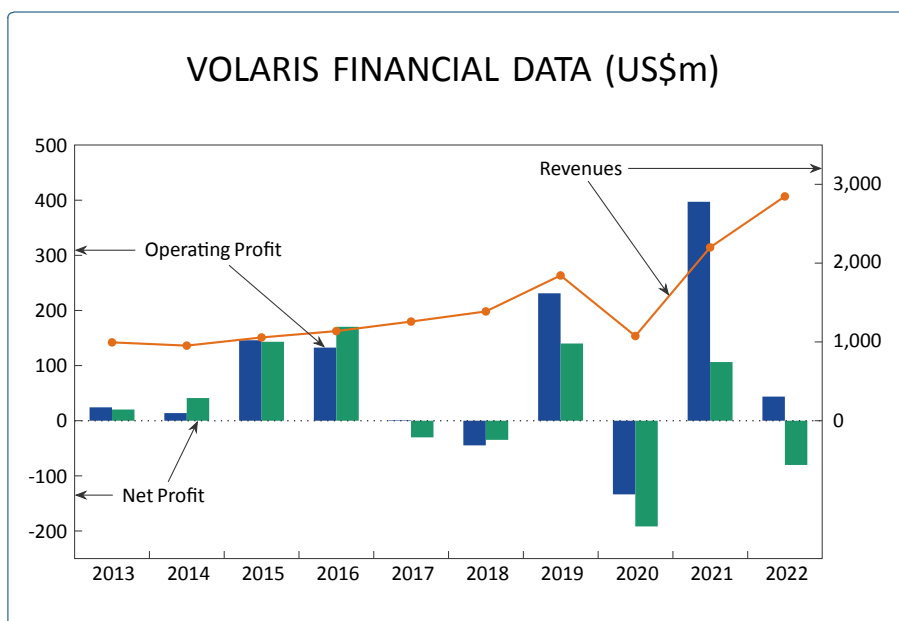
After a very strong performance in 2021 Volaris's financials for 2022 were hit badly by a 68% increase in its unit fuel price at the same time as its yields came under pressure as capacity rapidly returned to the Mexican domestic and international markets. Its total revenues rose by

VOLARIS FLEET		
	In Service	On Order
A320ceo	43	
A321ceo	10	
A320neo	51	26
A321neo	21	119
Total	125	145

Note: 16neos temporarily grounded

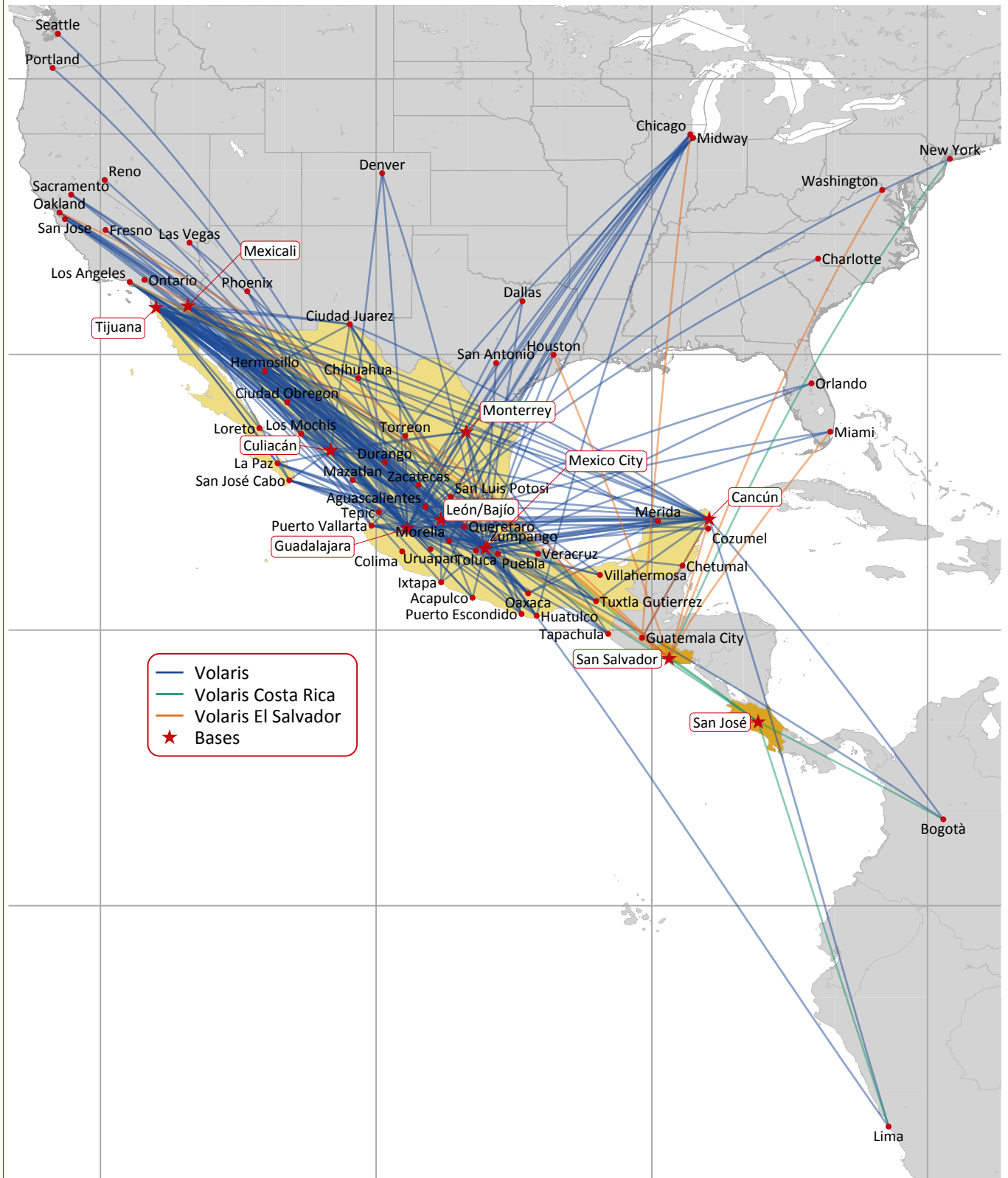
29% to US\$2.85bn but operating costs rose 55% to \$2.8bn, cutting operating profit to \$44m from \$397m. A net loss of \$(80m) was reported compared to the previous year's \$106m profit.

For the first nine months of 2023 revenues were up 16% to \$2.4bn, driven by 15% RPM growth and a 4% increase in total revenue per passenger, which in turn was the result of a 10% decline in average fares and a 24% increase in unit ancillary revenues. But operating



Aviation Strategy

VOLARIS ROUTE NETWORK



VOLARIS FINANCIALS (US\$ Millions)

FY (Jan-Dec)	2019	2020	2021	2022	Jan-Sep		At end Sept	2023
					2022	2023		
Revenues	1,844	1,111	2,200	2,847	2,027	2,302	Fleet and other fixed assets	3,815
Net result	140	(215)	106	(80)	(104)	(58)	Current Assets	430
Operating Cashflow	500	198	785	614	446	513	Cash and equivalents	764
Capex and Investments	(99)	(3)	(135)	(131)	(27)	(350)	Total Assets	5,009
Free Cashflow	401	195	651	483	419	163	LT debt and leases	3,207
Financing (inc Lease payments)	(275)	(287)	(435)	(513)	(411)	(132)	Current liabilities	1,671
Equity raised		149					Total Liabilities	4,878
Total Change in Cash	126	57	216	(30)	8	31	Shareholders' Equity	131

costs rose by 13%, largely caused by the impact on labour costs from an unexpected appreciation of the Peso — from an average of Mex\$20.7 to the Dollar in 2022 to Mex\$17.6 in 2023. In 2022 Volaris switched from reporting its financials in Pesos to Dollars, which meant that its mostly Peso-based labour costs inflated by 38% when translated into Dollars, wiping out gains from falling kerosene prices. With an increase in depreciation/amortisation charges, the reported net result was a loss of \$(104m) for January-September 2023, a margin of -4.1%. For the full

year, Volaris guides to revenues of \$3.2bn, a 13% increase on 2022, but with a downgrading in the projected EBITDAR margin, it looks likely that there will be another deterioration in the net result. The balance sheet shows long-term debt of \$3.2bn against shareholders' funds of only \$131m, but most of the debt is in the form of capitalised leases. Liquidity at \$764m looks fine.

The 2023 financials will be a disappointing contrast to the post-pandemic optimism of 2021 when Volaris was able to claim one of the highest net profit margins in the

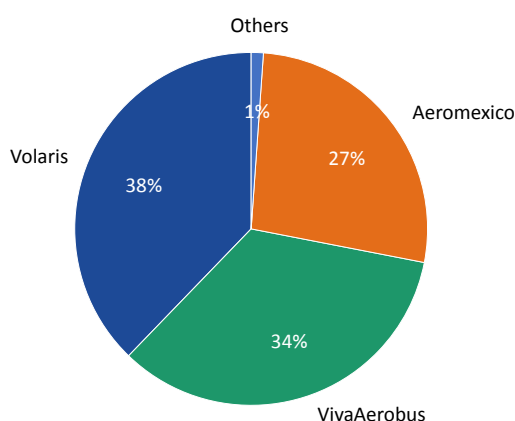
world. The airline has had to deal with two external events — the GTF crisis and AMLO politics.

GTF crisis and opportunity

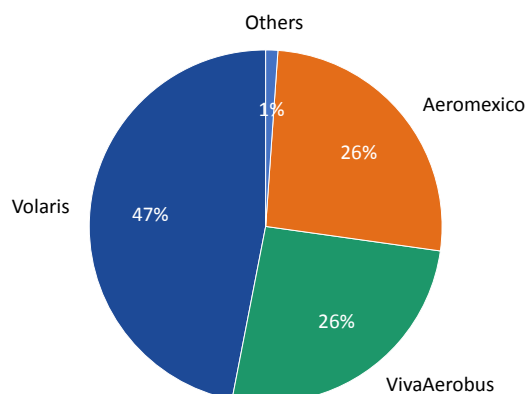
Firstly, there is the industry-wide problem caused by faults in GTF engines manufactured by Pratt & Whitney, requiring accelerated replacement of PW1100G rotors and hubs. This impacts the global A320neo-family of which Volaris operates 72 units with another 145 aircraft due for delivery over the next three to four years.

The AD issued by the FAA means

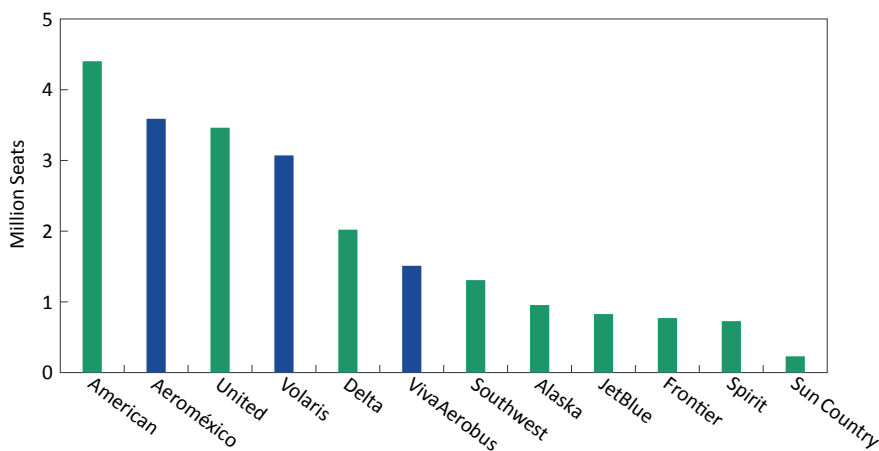
DOMESTIC MEXICO MARKET SHARES (Aug 2023)



ESTIMATED MARKET SHARES ON VOLARIS DOMESTIC NETWORK



US-MEXICO CAPACITY 2022



that aircraft will be taken out of operation for inspections and part replacement, totalling 250-300 work hours per unit, on a rolling basis depending on age and cycles. As at November Volaris had 16 aircraft grounded, which means that the airline's annual capacity growth will be zero in the fourth quarter, and overall annual growth for 2023 will be around 10% against a targeted 13%. For 2024, there is likely to be no seat capacity increase.

P&W has allocated \$6-8bn to resolve the problem which is comparable to the financial cost of the 737 MAX crisis. Of this total, 20% is for parts and labour (\$160,000 per engine) and 80% for compensating airlines for lost revenue.

In December Volaris announced that a "compensation and support package" had been signed with P&W, the details of which are for the moment confidential, but which should cover the fixed costs of the grounded aircraft.

Volaris has outlined a strategy to cope with the impact of the A320neo groundings, which it expects to continue through to 2026. In 2020/21 Volaris set out to turn the Covid cri-

sis into an opportunity, and it seems to be doing something similar with the GTF crisis, with the overall aim of pushing up unit revenues. The strategy includes four main items:

- ➔ Rationalising the domestic route network, cutting capacity on weaker routes and building frequencies on the stronger routes, a plan that, however, has been complicated by political interference at the Mexico City airports (see below).

- ➔ Focusing on ancillaries, the aim being to increase the proportion of ancillaries from 42% to 50%. As well as the usual splitting out of baggage fees, branded credit card, etc there is one innovation: VPass, a membership club that charges a monthly fee in return for guarantees of access to the lowest fares.

- ➔ Extending leases on A320ceo aircraft rather than returning them to the lessors at the end of the lease term; but the unexpected demand for A320-family CEOs, as a by-product of the NEO groundings, has allowed the lessors to increase rates for these types.

- ➔ Importantly, Volaris has been able to redeploy capacity to Mexico-US routes following the restoration

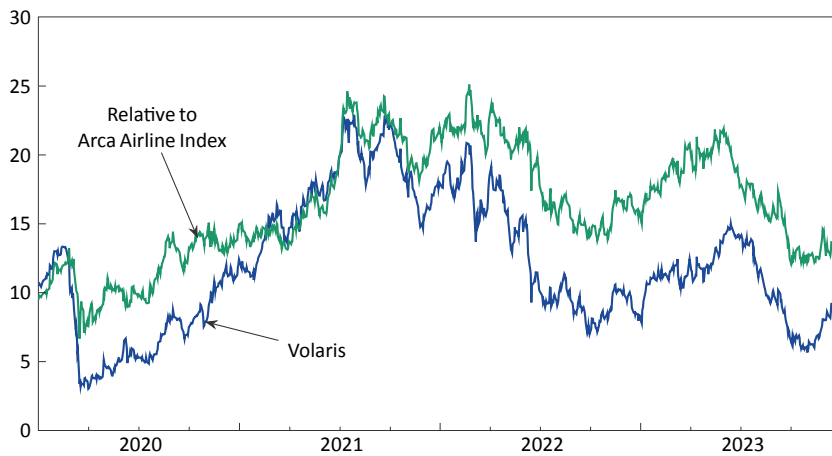
in October by the FAA of Category 1 status, permitting Mexican airlines to again add new flights and routes to the US, and for US airlines to sell tickets on Mexican-operated flights, which will allow Volaris to fully reinstate its codesharing alliance with Frontier, another ULCC whose performance has not met expectations in recent months.

As the graph above indicates, US carriers controlled two thirds of trans-border capacity in 2022, a gap which Volaris and the two other Mexican airlines are determined to close. Also, Volaris claims that it will be able to expand into the US without excessive competition from the US Majors because they concentrate on different markets — Volaris focusing on Mexican-heritage VFR markets and the US airlines on mass tourism markets.

It is likely that the GTF crisis will remove or at least greatly reduce the threat of overcapacity in the Mexican markets in the next two years. All three Mexican airlines have been pumping capacity into the market post-pandemic: in the first nine months of 2023 Volaris increased its total ASMs by 14.4% compared to 2022, Viva Aerobus by 19.4% and Aeroméxico by 11.7%. Both the ULCCs are heavily exposed to the GTF grounding — Volaris currently operates 72 NEOs out of a total fleet of 125 and Viva Aerobus 46 NEOs out of 78 and both have large NEO backlogs, 145 and 115 units respectively. Aeroméxico is a Boeing operator, but it does not have any significant new capacity on order.

From Volaris's short-term perspective the supply constraint plus the P&W funds might just be a welcome development. In the first three quarters of 2023 it was financially outperformed by Viva Aerobus

VOLARIS SHARE PRICE PERFORMANCE



which increased revenues by 35% to \$1.37bn and reported an operating profit of \$157m, representing a margin of 11.5% (compared to Volaris' 2.5% margin at this level).

Aeroméxico's financials are less transparent, but it too has reported results that appear better than Volaris's: for the nine months, revenue was \$3.54bn, 35% up on the same period in 2022, and a net profit of \$179m was claimed against a net loss of \$(235m) in 2022.

AMLO and the new airport

While Volaris's problems with P&W are being constructively addressed, the same cannot be said of its (and most of the Mexican commercial airline industry's) relations with the country's President, Andrés Manuel López Obrador (universally known by his initials AMLO). In power since 2018 AMLO, has pursued an anti-corruption agenda, which is highly admirable given the pervasive narco-economy, but has also promoted populist and increasingly eccentric economic policies.

In 2019 AMLO cancelled the new six-runway Mexico City airport initiated by his predecessor to replace the

centrally-located but very congested Benito Juárez International Airport (MEX). The cancelled project, designed by Norman Foster Associates, was one third constructed and was expected to cost \$13bn. Instead, a former military airport, called Felipe Ángeles (NLU), was converted to commercial use and opened in 2022 with the military in charge of its operations.

Unfortunately for AMLO, airlines were less than keen to relocate to Felipe Ángeles, which is located over 40km from the city centre with poor transport connections — this summer passenger throughput was about 250,000 passengers/month, 12% of the volume at Benito Juárez.

AMLO decided the solution was to be old-style command economics. Freight operations at MEX were halted by presidential decree, and airport charges at MEX were increased and decreased at NLU (these are pass-through charges added to ticket prices so do not directly impact airlines' revenues or costs).

Most critically, severe slot restrictions were imposed by the government on passenger flights at MEX: in late 2022 the number of hourly slots

was cut from 61 to 52, and in January 2024 there will be a further restriction bringing the maximum hourly slots down to 43. In effect, the capacity of MEX has been arbitrarily cut by 30% in one year. Although it has eight operating bases, MEX is Volaris's main hub where it accounted for about 22% of total ATMs in 2022. Aeroméxico accounts for just over half of MEX's slots and Viva Aerobus 17%.

All three airlines plus industry bodies, travel agencies and pilots unions have protested loudly. Peter Cerda, IATA's regional vice-president summarised the airlines' position: "Making the unilateral decision of just pushing capacity somewhere else... without good analysis, particularly without collaboration, [means] ... less availability of flights, fewer destinations and higher prices." At one point the airport situation threatened the restoration of Mexico's Category 1 rating, with US officials strongly objecting to the limits placed on cargo and passenger flights at MEX.

AMLO has shown some degree of flexibility by postponing the reduction to 43 hourly slots from October to January in the low season, but he seems determined to press ahead with the forced shift from MEX to NLU, so this policy will continue at least until November 2024 when the next elections are due.

Meanwhile, AMLO's next move was to set up a new national airline, or rather resurrect a defunct flag-carrier — Mexicana — which stopped operating in 2010 and has been in bankruptcy protection since then. The government spent \$43m on buying the Mexicana brand, the money going to several trades unions that were creditors of the bankrupt carrier.

So far, the set-up of the new carrier, administered by the military, has been a mess. The Defence Ministry has reportedly budgeted \$300m for the venture and aimed for a September launch but as of the beginning of December it had not obtained an AOC, largely because it had no aircraft. The original plan was to lease 10 737-800s from a US company called SAT Aero Holdings, which would also provide maintenance services and source flying crew, but this arrangement appears to have collapsed, leaving Mexicana searching for 737NG equipment.

AMLO's stated aim for Mexicana is to offer fares 20% below the local competition. Given that Volaris has one of the lowest unit operating costs in the Americas — CASM of US\$4.3 ex-fuel in 2022, very close to that of Wizz — the Mexicana strategy seems highly implausible.

Volaris management is dismissive of any competitive threat from Mexicana but the militarisation of Mexico's aviation infrastructure is worrying. The army and navy now control 23 airports, including the two Mexico City airports and the just opened Tulum Airport on the Yucatán peninsula.

Fundamentals

Looking beyond the external problems, Volaris's fundamentals still look very promising (as do those of Viva Aerobus which shares many of Volaris's characteristics).

➔ Volaris remains Latin America's biggest ULCC with about 34m passengers in 2023. It has embraced all the key elements of a Ryanair-type ULCC model — yield-driven demand, flexible asset location, high productivity, rigorous cost control, clear decision-making processes, concentration on VFR and Leisure segments, 50% revenue from ancillaries, etc.

More importantly, there is a stable, long-established management team under CEO Enrique Beltranena, and it has Indigo Partners, led by Bill Franke, as its strategic partner.

➔ Volaris's CASM (ex-fuel and adjusted to a 1,000km trip) of US\$4.3 compares to US\$6.9 for the US ULCC Frontier, US\$9.7 for the US LCCs as a group and US\$14.0 for US Legacies — so an operating cost advantage of 40-60% against the main rivals; however, Viva Aerobus's CASM is approximately the same.

➔ In spite of the current hiatus, Mexico's air travel market has the potential to grow rapidly. Domestic trips per capita doubled between 2006 and 2019, and if Mexico were to achieve the same ratio as Chile, an additional 47m passengers would be generated. 51% of Volaris's routes compete solely against buses, and if Volaris were to convert 10% of the luxury bus segment it would double its domestic passenger volume.

➔ International expansion is mainly focused on the US following the restoration of Category 1 and the codesharing alliance with Frontier, but Central and South American markets, where ULCC penetration is very low, are also promising. Volaris expects these markets to account for 14% of its network in the medium term against 6% currently.

➔ Despite the GTF crisis growth plans remain centred on the A321neo: by 2027 contracted deliveries will build the planned fleet up to 162 units, 98% of which will be 239-seat A321s. Volaris has a built-in cost advantage due to the unit pricing achieved by Indigo Partners when it placed its mega-orders for 430 units in 2017 and 382 units in 2021, of which 80 and 64 respectively are allocated to Volaris.

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