

Global Distribution Systems: Facing up to revolution

DISTRIBUTION of airline and travel products is in the process of a major revolution, which could be highly disruptive to existing players. There are three companies that dominate as global distribution systems to the industry — Amadeus, Sabre and Travelport — with some 90% of the market. Some have described them as outdated dinosaurs, who charge too much, unfairly make huge profits, and whose time has come.

The three GDSs emerged from individual airline computer reservation systems in the 1970s and 1980s with a role of combining schedules, prices and availability of airline seats from different sources and provide this information to travel agents in real time.

With the development of the internet, new online travel agents and price comparison websites emerged, while start-up new business model airlines could reduce cost of distribution by accepting bookings only through their own websites, avoiding paying either travel agent commissions or exorbitant GDS fees.

The increased visibility of pricing provided by the internet accelerated the commoditisation of the business. The Legacy carriers followed suit: cutting travel agents' commissions, pushing bookings through their own websites and other direct channels.

However, an airline still needs to maximise its bookings, and with some exceptions maybe, cannot afford to turn off the tap to any source. An IATA survey in 2016 found that while 47% of ticket bookings were made through direct channels (33% through the airline's own website, 2% through its mobile app and 12% via other direct

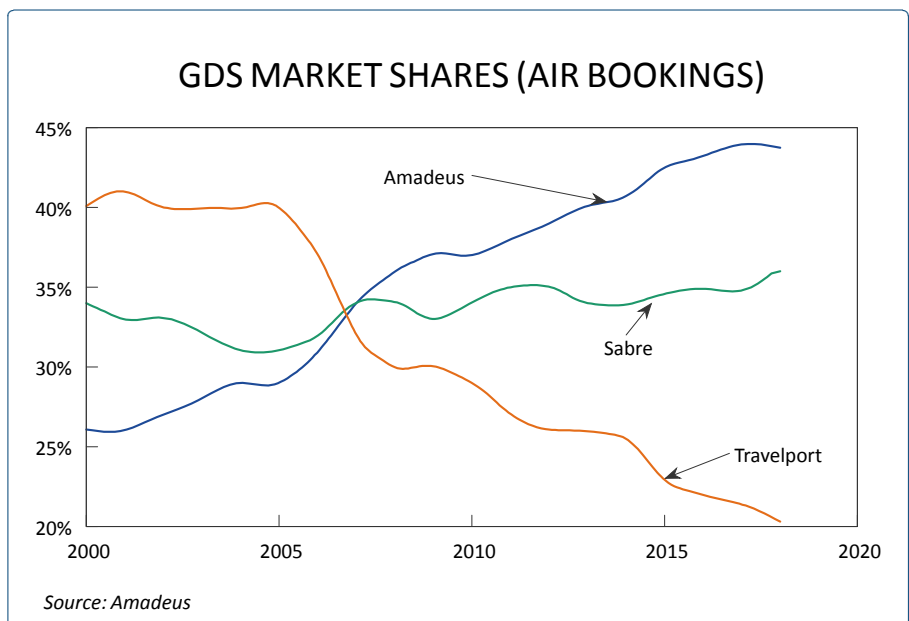
channels such as call-centres), 20% still came from retail travel agents, 11% from online travel agents (OTA) and 20% from travel management companies (TMC).

Increasingly, airlines seem frustrated at the seeming inflexibility of the GDSs. The distribution systems' linear flight shopping processes have hardly changed since the regulated era of the 1970s when the first generation of CRSs emerged. They were designed when all seats in a cabin were equal; luggage, seat reservations, legroom, food and drink were all included in the ticket price; and

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un-bundling, ancillary sales and up-selling were a long way in the future.

The GDSs have invested in various solutions and agent tools to help airlines sell their new products, but some travel agents and airlines continue to express dissatisfaction — the services aren't yet quite good enough for the modern airline market.



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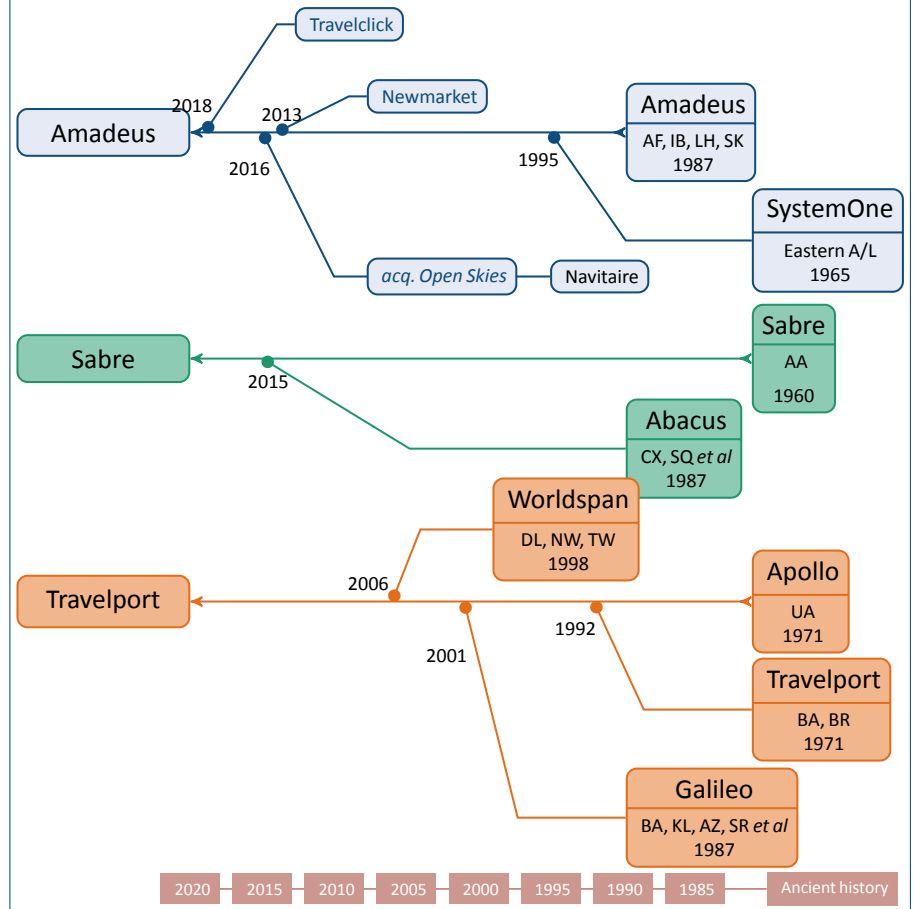
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GDS CONSOLIDATION TIMELINE



What is this revolution?

It is remarkable how slow the international airline industry can sometimes be at adapting to technological change. The method of communication for passenger booking data has hardly altered in the past fifty years: it is based on arcane teletype messaging, with fixed fields of coded information and limited adaptability.

Now, under an IATA initiative, a new system of communication, dubbed the New Distribution Capability (NDC) is being introduced based on the new fangled XML (extensible markup language, first developed in 1998 and similar to the HTML that powers the content of world wide web). This is not a platform

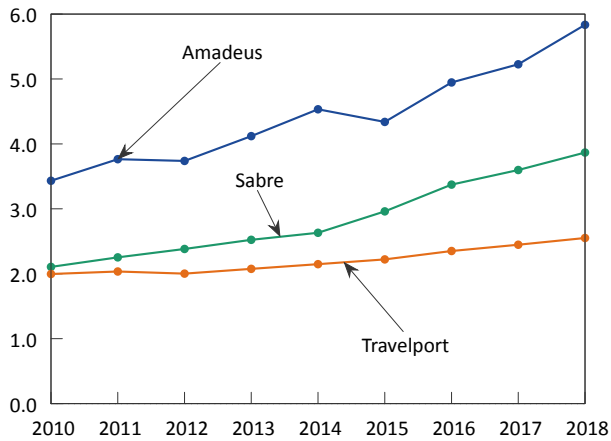
but the definition of a “shopping” standard that can be understood and implemented in APIs (application program interfaces—a set of defined routines, functions and tools allowing computer programs to talk to each other) by any travel distributor with the capability, and can easily evolve as the industry develops. IATA describes it as a standard designed to *enhance* distribution.

Alongside this, IATA has developed another initiative, One Order, to create a single unified customer order record (that contains much more data than can currently be presented in the PNR). One Order is described as providing the capability to hold all the data elements associated with a traveler’s purchase, including base

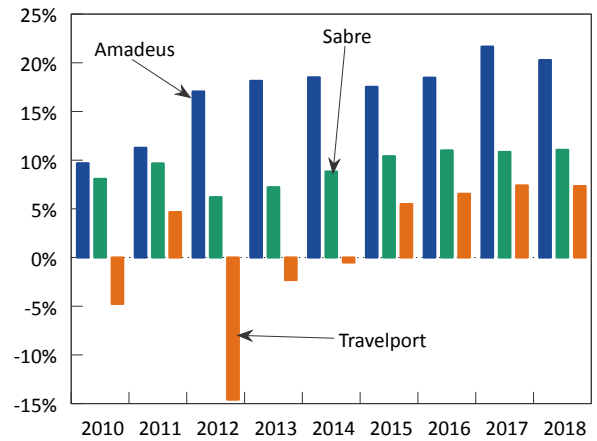
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GDS FINANCIAL DATA

Revenues (\$bn)



Net Margins



and ancillary products, across channels and purchase sessions, so the airline can track and fulfil what the traveller buys; and to *simplify* distribution.

IATA has a catchy target of 20-20-20: meaning it would like 20 airlines to be producing 20% of bookings through NDC by 2020. It looks as if it

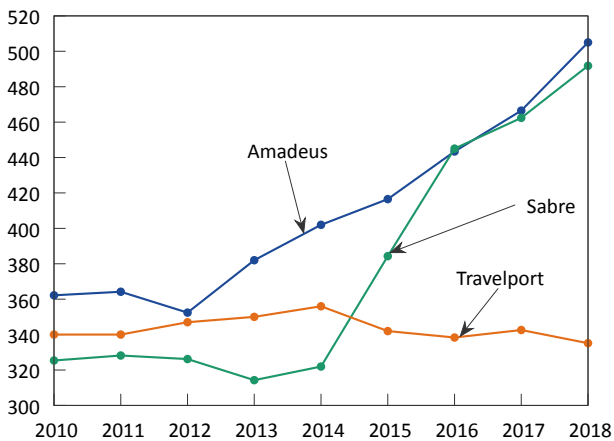
will achieve the target.

The opportunity that NDC presents includes direct API connections between airlines and third-party retailers (Travel Management Companies and Travel Agents — both retail and online) bypassing the GDSs completely — Lufthansa already offers a “direct-connect”

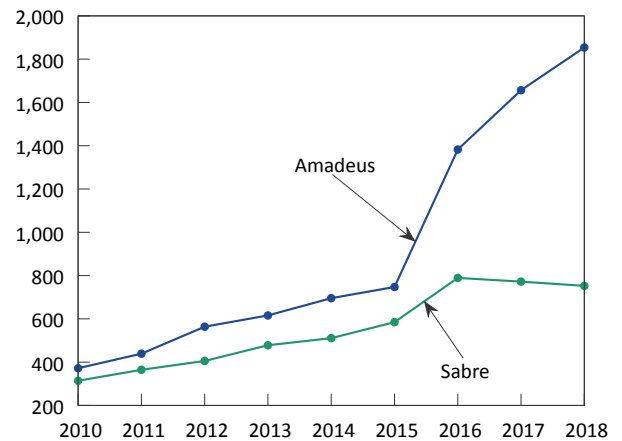
platform to retailers which allow them to avoid its €16 charge for GDS bookings. It has stated that customer access and multi-channel push are key to its distribution policy and that it already achieves 50% of its bookings from direct and NDC methods. Other airline groups, such as IAG, which is already NDC-certified,

GDS OPERATIONAL KPI

Air Bookings

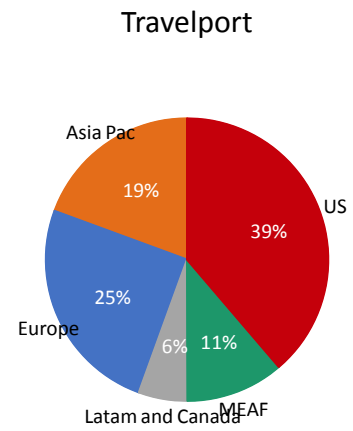
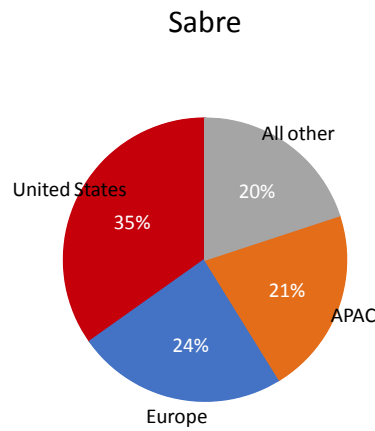
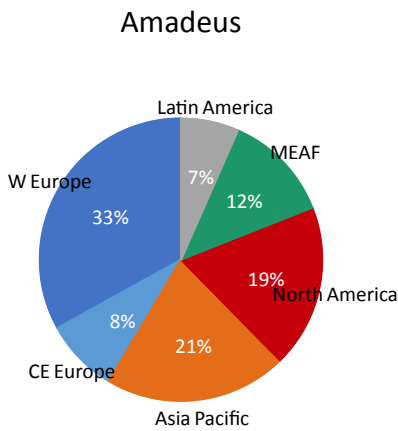


Passengers Boarded



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GEOGRAPHICAL DIVERSITY



offer similar products.

NDC also gives rise to targeted and personalised marketing, the sale of ancillary services on different airlines on a ticket that involves a transfer; and the harnessing of AI (Artificial Intelligence) and Big Data. This eases further access for new technology companies into the travel market.

GDS Evolution

Things are changing, but, this does not necessarily mean that the GDSs' days are over. The three are embracing new technology and NDC — albeit slowly and painfully — while book-

ings continue to be made (see chart on the preceding page — the jump in Sabre's bookings data followed its acquisition of Abacus in 2015). And Amadeus and Sabre have been minimising risk by migrating their fixed data centres to cloud hubs throughout the world. (Travelport notes that is still exposed to risk with its massive ex-Delta data centre in Atlanta).

Apart from anything else, distribution is not just about data and schedules. The GDSs also offer solutions that cover a whole range of simultaneous transactions, such as payment platforms, reporting, mid-

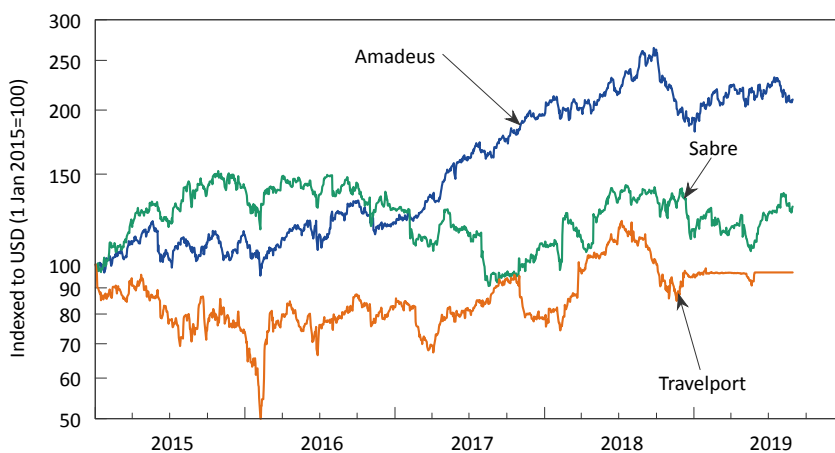
and back-office systems. Travelport has placed great emphasis on developing its eNett B2B payment system.

Further, they have all diversified into other segments of the travel distribution chain. Amadeus and Sabre offer detailed IT Solutions for airlines — passenger service systems which offer full reservation, inventory and departure control capabilities. These systems, like the booking product, charge on a transaction basis, measured in the number of passengers boarded (see chart on the previous page).

Amadeus, Sabre, and Travelport have each taken different paths in recent years, and seem capable of exploiting rather than being disrupted by the Distribution Revolution. They are planning to remain entrenched in the travel marketplace.

These three are high tech software and data companies that generate strong levels of cash flow, have high levels of R&D spend. This can be attractive — Travelport was recently bought out by private equity players Siris Capital and Evergreen in a \$4.4bn deal.

GDS SHARE PRICE PERFORMANCE



Cathay Pacific: CAAC's "insular possession"?

HONG KONG has been shaken by civil unrest over protests against legislative change, which morphed into demands for democratic reform, in the former British colony. The "One country, two systems" accord agreed in at the time of the 1997 British hand-over is being tested, and Cathay Pacific has been caught in the middle as the PRC attempts to impose control.

CEO Rupert Hogg nobly replied to a demand from the Civil Aviation Administration of China (CAAC) for a list of Cathay employees who had taken part in "illegal" protests by submitting a letter containing only his own name. A couple of days later Hogg was replaced by Augustus Tang, who had been CEO of HAECO, another Swire Pacific company.

John Slosar, chairman of Cathay and board member at Air China, issued this statement: "Recent events have called into question Cathay Pacific's commitment to flight safety and security and put our reputation and brand under pressure ... We therefore think it is time to put a new management team in place who can reset confidence and lead the airline to new heights."

We can add little to the interpretation of Hong Kong politics and the sensitivities of Sino-British disputes over the "insular possession" that the British seized in the 1840s, partly as a base for the opium wars, but we can throw some background light on the complexities of the present Chinese aviation market.

Nothing is more complex than the Chinese ownership web — shown on

the following page. Although CAAC is the all-powerful regulator, almost the controller, of Chinese civil aviation, the Chinese ownership structure is centred on SASAC (State-owned Assets Supervision and Administration Commission of the State Council), a state holding company which has stakes in just about every Chinese industrial group except banking. It has approval power for board appointments and mergers and take-overs. It may be the largest single entity in the world with assets estimated tentatively at the equivalent of US \$30 trillion.

Its ownership of the major Chinese airlines is complicated as shareholdings are routed through various subsidiary holding companies, but it does have majority positions in the Big Three — Beijing-based Air China, Shanghai-based China Eastern and Guangzhou-based China Southern. It has a much smaller stake in Hainan Airlines which is part of the Hainan

Province's empire. HNA is in the process of selling its low cost subsidiary HK Express to Cathay, though Cathay CCO Paul Loo who was in charge in the transaction was exited at the same time as Hogg.

Cathay is linked to the official flag-carrier Air China (and hence to SASAC) in three ways — a shareholder agreement between Cathay's parent Swire Pacific and Air China; a direct 30% stake in Cathay by Air China and a complementary 18% holding in Air China by Cathay; and a 49/51% joint ownership of Air China Cargo.

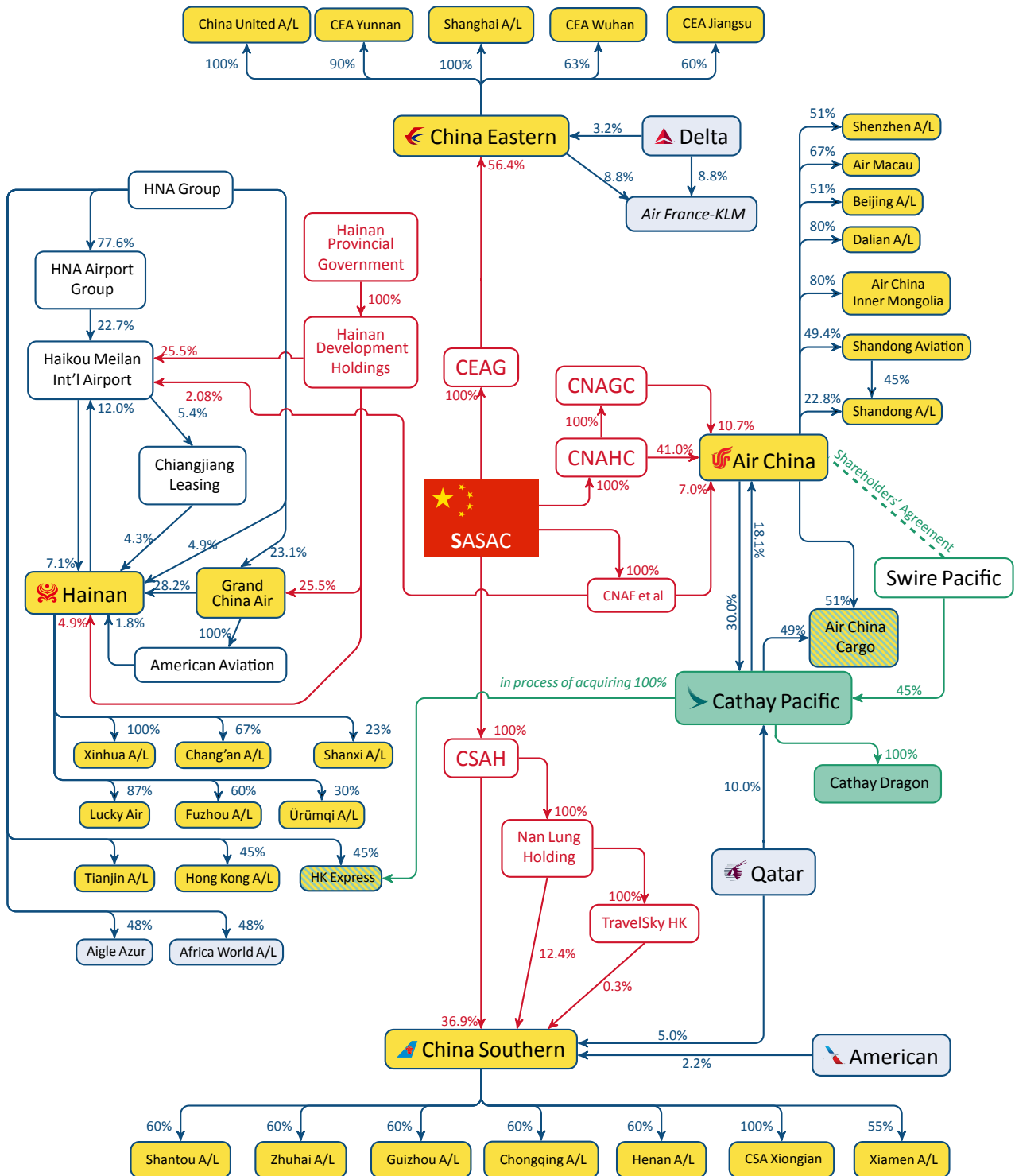
Western carriers are on the periphery of the web — American with a small stake in China Southern, Delta with a similar investment in China Eastern, which in turn has a stake in SkyTeam partner Air France. Qatar, naturally, has bought into region, with a 5% stake in China Southern and 10% in Cathay, a share which it has just stated it would like to increase.

The balance of economic power



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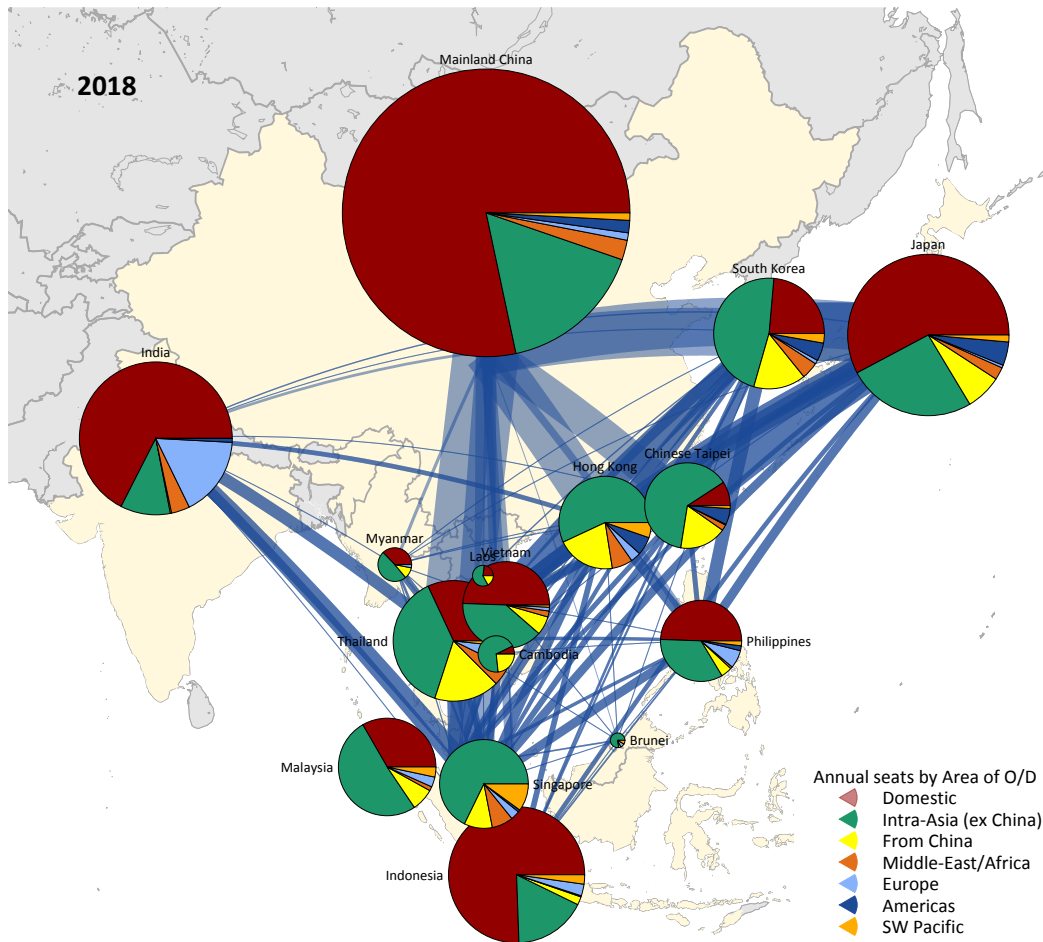
TANGLED WEB OF OWNERSHIP



Notes: SASAC=State-owned Assets Supervision and Administration Commission of the State Council; CNAHC=China National Aviation Holding Company; CNAGC=China National Aviation Group Company; CSAH=China Southern Air Holding; CEAG=China Eastern Airlines Group; CNAF=China National Aviation Fuel Company; CEA=China Eastern Airlines; CSA=China Southern Airlines; A/L=Airlines.

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TRAFFIC FLOWS IN ASIA



has shifted markedly mostly because of PRC's super-growth but also a lacklustre performance by Hong Kong in recent years: at the time of the handover, Hong Kong's GDP was about 20% that of the mainland, now it is about 2%. Although volatile, the share price performance of the Big 3 relative to Cathay (see chart on page 5) reflects the Big 3's expansion versus Cathay's stagnation.

Measuring by stockmarket capitalisation reveals how Cathay is now eclipsed by the Big 3: as at late-August Cathay was valued at US \$5.1bn, its partner Air China at US \$15.0bn, China Southern at US \$10.0bn and China Eastern at US \$9.2bn.

Ironically, Cathay's restruc-

turing and expansion programme implemented under Rupert Hogg's management team (see *Aviation Strategy*, March 2019) had started to show results. One of Hogg's last tasks was to announce a net profit of HK \$615 (US \$74m) for the first half of this year compared to a loss of HK \$904m in the same period of 2018. At the same time, Air China reported a net profit of RMB 3.1bn (US \$434m) for the for the first half 2019.

More perspective

To put China's aviation importance into perspective, this map above shows intra-Asia seat capacity in 2018; the thickness of the lines and the area of the pie charts are directly

related to the number of seats operated between the countries and to/from/within the country.

China dominates: the volume of Chinese traffic is more than three times that of Japan or India; its intra-Asian traffic is more than the whole of South Korea's domestic and international traffic. Moreover, Chinese routes have, along with the emergence of Asian LCCs, been the key element in traffic development in fast-growing markets like Thailand and Indonesia and mature markets like Japan. Hong Kong is still very significant though the opening of Cross-Straits access between the PRC and ROC (Taiwan) has cut previously large volumes of transfer traffic.

Ryanair Holdings: An exercise in de-branding

RYANAIR has been Europe's most successful airline post liberalisation, in terms of traffic growth, profitability, and shareholder returns as well as, it claims, punctuality and environmental responsibility. It has, of course, also succeeded in attracting a regular stream of negative publicity over customer service and personnel relations. Its new Holdings structure looks like a brave attempt to overcome Ryanair brand problems, through the management are reluctant to present this strategy in this way. More fundamentally, it also has to address negative cost and profit trends.

Results for FY 2019 were well down on the previous year. Net profit (after tax) was €885.0m (including Laudamotion losses of €139.5m), 29% below FY 2018, despite traffic growing by 9% to 142m and total revenues by 7.6%. The net profit margin of 11.5% in FY 2019 was in sharp contrast to the 19-20% margins achieved in recent years. The profit outlook for this year is flat — Ryanair has issued guidance in a wide range, €750-950m for FY 2020 net profit, implying another decline in profit margins.

Management changes

The question of succession, an issue for institutional investors, is being resolved. After 25 years of being in total charge of the airline, Michael O'Leary is moving up, rather than on, to become CEO of Ryanair Holdings while Eddie Wilson has been appointed as CEO at Ryanair DAC (Des-

ignated Activity Company, the Irish equivalent of Ltd), ie the main airline. This was a somewhat surprising move — Eddie Wilson has been in Personnel throughout his 22 years at Ryanair and held the title of Chief People Officer. He has led the many negotiations with the unions, but has not been associated with the core LCC activities at Ryanair.

COO Peter Bellew had been favourite for this role but he is leaving for easyJet, assuming that Ryanair's lawyers, currently examining the non-compete clauses in his contract, don't get in the way. Other leading internal candidates for CEO were CCO David O'Brien and Neil Sorahan, CFO.

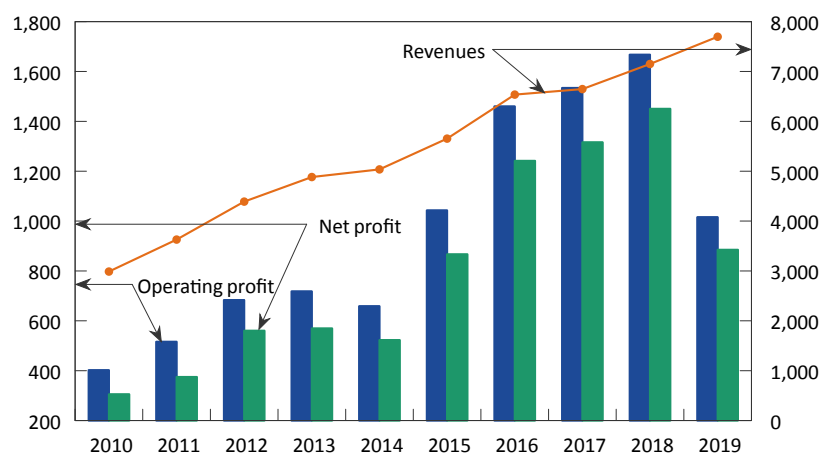
David Bonderman, the Ryanair chairman for 25 years and founder of Texas Pacific Group and LCC guru, will be stepping down in 2020, having faced increasing criticism from investors, specifically for not rectifying poor labour relations at the

SPOT THE RYANAIR PLANE



company. Also, he will be 77 years old next year. He will be replaced by

RYANAIR FINANCIAL DATA (€m)



Note: FY end March

RYANAIR SHARE PRICE PERFORMANCE



Deputy Chairman by Stan McCarthy, the former CEO of Irish agriculture and food corporation Kerry Group.

O'Leary remains committed to Ryanair, as far as one can tell from the outside, though some commentators believe that he is developing his own exit strategy. In April he signed a new five-year contract as Group CEO. He agreed to halve his basic pay to €500,000 and his annual bonus also to €500,000 in return for a major incentive: 10m share options at a strike price of €11.12 (Ryanair currently trades at €8.5 though it peaked at €18 in 2017) if the net profit of Ryanair Holdings exceeds €2bn in any year to 2024 and/or the share price of Ryanair exceeds €21. O'Leary doesn't need the money but a bonus of €100m or so would be satisfying for his ego.

Group rationale

The question is whether Ryanair's group strategy is likely to produce a more than doubling of its net profit in the target time period. Ryanair's strategy has been based on simplicity and a laser-like focus on its low-cost operating model. But the evolution into a group structure has been ac-

companied by some statements that would normally be associated with a traditional carrier; is O'Leary's assertion that Ryanair will emulate IAG's multi-airline model valid?

The Ryanair Group now comprises: Ryanair DAC, Buzz (formerly Ryanair Sun), Laudamotion, Malta Air and Ryanair UK (which is a backstop in the case of a Hard Brexit, which unfortunately is looking more likely).

Malta Air

Malta Air is set for a major expansion, although it has only recently received its Maltese AOC. The CEO has just been appointed — Diarmuid O'Conghaile, for the past three years Head of Public Affairs at Ryanair. Again, to outsiders at least, a surprising move — like Eddie Wilson, O'Conghaile clearly had an important role at Ryanair, but not one associated with core LCC management. Perhaps there is a pattern here.

Six 737-800s have been or are being transferred to Malta Air, but the startling statistic is that Ryanair plans to increase the fleet to 50-60 units.

Ryanair has had a productive relationship with Malta, going back 15 years when the Maltese government

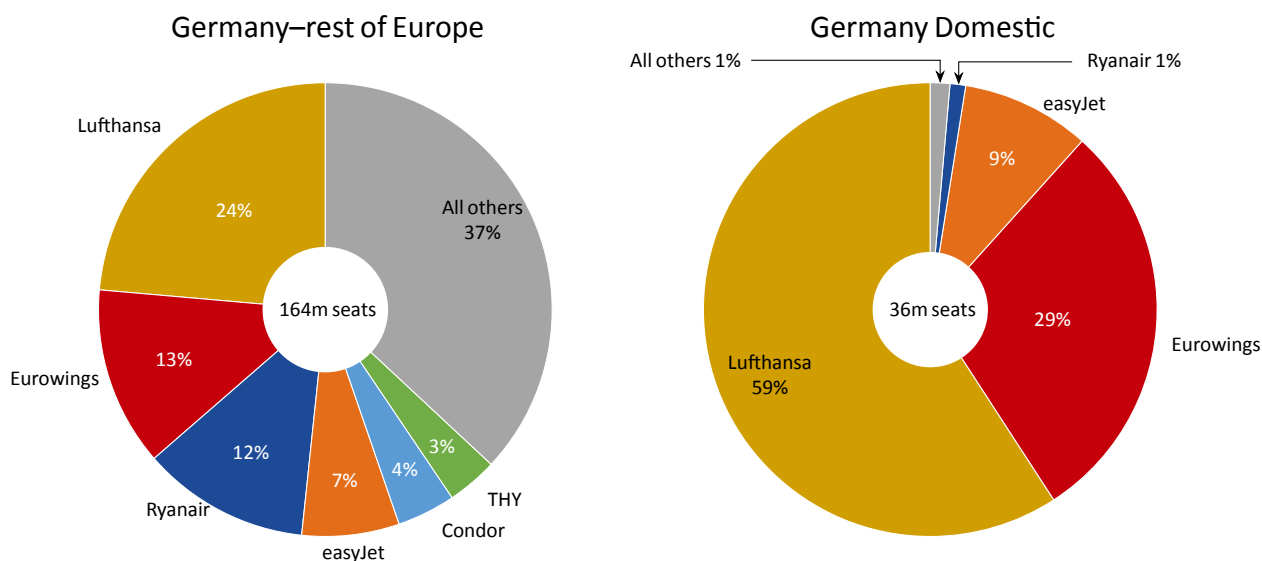
in effect subsidised Ryanair to operate to Valetta in order to boost tourism. But tourist arrivals on the small island totalled only about 2.5m last year. And the main carrier to the island is still the flag-carrier Air Malta; the Maltese Prime Minister has confidently stated that Malta Air will not have an impact on, and presumably will not be confused with Air Malta, as they serve different markets, which sounds a little hopeful.

At the Q1 results presentation Ryanair talked about potential routes to North Africa and the Middle East that could be served from Malta. But how this would work without a connecting operation at Valetta is unclear.

In reality, Ryanair's operation to/from Malta would require only six or so full full-time aircraft. More than 40 of the aircraft will be immediately deployed in continental European markets under the Malta Air rather than the Ryanair brand. At the Q1 results presentation Ryanair referred to this obliquely, noting that German, French and Italian crew members would now pay national taxes rather than Irish taxes, which would comply with new union agreements but would apparently result in lower costs for Ryanair.

What Ryanair appears to be doing, though it is difficult for the Irish company to say it explicitly, is to disguise its brand in certain markets, particularly German speaking markets where it has found it difficult to find acceptance. In terms of seats offered Ryanair accounts for just 1% of the (large) German domestic market compared to 88% for Lufthansa/Eurowings. Ryanair is the third largest carrier in the Germany-Rest of Europe market, but its share, 12%, contrasts with 37% for Lufthansa/Eurowings. Only 10% of its

GERMAN SEAT CAPACITY 2018 BY CARRIER



revenues are generated from sales in Germany, compared to 19%, for example, in Italy.

The Malta Air colour scheme is reddish and white rather than blue and yellow at Ryanair, and the Irish harp is replaced by the Maltese cross — in other words, no sign of the owner. One question is: how do the Germans feel about Malta?

However, the basic idea is intriguing — the airline should be able to retain Ryanair standards of low-cost operating efficiency (high utilisation and load factors, seating density, rapid turn, airport churn, lean management, low capital costs, etc) and at the same time project a new image suited to customers who are unhappy with Ryanair's reputation (whether not this perception is justified) in particular markets.

On the soft spec side of the brand, there is not going to be any significant change in onboard service (Ryanair standard is now universal intra-Europe). But there are other service elements that will have to be

changed, which will likely have an impact on costs. These might include removing things that passengers really do not like, such as seat allocation charges and excessive change fees. Customer service lines will have to be properly manned. The new airline may have to provide guarantees that it will sort problems out effectively in cases of cancellation or delay (even if it is the fault of air traffic controllers) — something similar to Aer Lingus's operating approach. Customer acceptance may influence airport choice — more primary airports, for instance.

Buzz

Buzz is new name for Ryanair Sun, a charter carrier based at Warsaw Modlin airport and operating under a Polish AOC. Its fleet consists of 25 737-800 repainted from Ryanair colours to a buzzy yellow and white with a bee on the tail. (Buzz was the name of the KLM low-cost subsidiary Ryanair bought in 2003, a transaction that turned out to be a bit of a finan-

cial disaster for Ryanair.)

Chairman of Buzz is Juliusz Komorek, who is also Ryanair's Legal Director and has been at the company for 15 years, while the CEO is Michał Kaczmarzyk. The model to date has been business-to-business, either flying sun charters or wet leasing out 737s to tour operators, though the airline will evolve into scheduled services, probably taking over all of Ryanair's Polish operations and possibly expanding into the Czech Republic and the Baltic states.

The website is pretty basic at present, but the intention is to list both Buzz and Ryanair flights — there does not seem to be the same necessity to diverge completely from the Ryanair brand in Central Europe. And, in the short term at least, network and pricing policy will be controlled by Dublin. According to an interview with Kaczmarzyk, Buzz will establish its independence in operations and marketing. Buzz was marginally profitable in FY2019, according to Ryanair.

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Laudamotion

The rationale for Ryanair's 2018 investment in Laudamotion was partly to boost Ryanair's Airbus credentials. By operating A320s for the first time — and announcing a plan for expanding rapidly from the current 16 units to at least 35 — Ryanair's idea is to create real competition between the two manufacturers for its future business.

At the end of 2018 Ryanair increased its share in Laudamotion to 100%, the whole transaction costing €98.5m in cash and assumed debt. For this it acquired negative net assets of -€1.1m and slots at Vienna and Dusseldorf and elsewhere which it valued at €99.6m.

Presumably the slots were very important for Ryanair. More worrying is Laudamotion's P&L. For FY 2019 Laudamotion contributed revenues of €134.5m to the Ryanair Group but reported an operating loss of €172.9m (the net loss was less, €139m, because of deferred tax credits and other adjustments). Ryanair attributed the huge loss to start-up costs but has not provided a detailed break-down, though it has pointed unhedged fuel costs and high 737 lease rates from Lufthansa, aircraft which have now been replaced. Still for any LCC start-up, this loss figure seems extraordinary.

Andreas Gruber, the CEO, has forecast FY 2020 losses of €50-70m,

which is still a loss margin of around 25-35%. Vienna is probably the most intense LCC market in Europe, with Laudamotion, Wizz, Level and Eurowings all basing aircraft there, attracted by generous incentives from the airport authority which until recently has positioned itself predominantly as the network hub for Austrian. At Vienna, Ryanair finds itself in the interesting position of having one of its units undercut on costs, probably substantially, by another LCC, Wizz.

Operating red and white livery A320s and using the name of Austria's most famous sportsman (the late Niki Lauda) the airline is completely differentiated from Ryanair. The laudamotion.com website avoids any mention of Ryanair, other than hidden away under General Terms and Conditions section (incidentally, lauda.com which Ryanair refers to in its latest financial report leads to a totally different company). This isn't the only brand issue for Laudamotion — the airline evolved from the original Lauda Air to Niki, a subsidiary of Air Berlin, and displayed Air Berlin's logo on its tails, until their bankruptcy and the takeover by Lufthansa, which then offloaded the carrier to Ryanair.

What is Holdings all about?

From the review above it is apparent that Ryanair's Group strategy is in an early evolutionary phase — nowhere close to IAG's five-airline

group. In 2020 75%-80% of Ryanair Holdings' capacity will still be with old-fashioned Ryanair and 20-25% with the new-fangled carriers. But it also now possible to discern a coherent strategy for Ryanair Holdings — debranding Ryanair. And a clearer role for the new CEO of Holdings:

➔ Like Willy Walsh at IAG, Michael O'Leary's key function as CEO of Holdings must be to manage competition between the airline units and allocate capital between them. For comparison, IAG sets a trigger of 15% anticipated RoI to justify capital for expansion at BA, Iberia, Vueling, Aer Lingus and Level.

➔ A specific Ryanair function will be to decide the balance between policy decisions made in Dublin and those delegated to Valetta, Vienna and Warsaw (and presumably at other European bases of other Ryanair Holdings airlines).

➔ Similarly, there will be questions about how much each airline is allowed to deviate from the core Ryanair low-cost operating model in order to establish its own new brand.

➔ Finally, there is question of closures — Ryanair has been brutal in closing non-performing routes and bases; how long will the Holdings CEO tolerate, to take the obvious example, the extent of losses at Laudamotion? A more difficult question now because of the sunk costs.

MAX situation

Ryanair and Southwest are Boeing's most important customers for the 737 (although others — Lionair, Fly-Dubai, VietJet, for instance — have placed nominally larger orders for the MAX). O'Leary says that they are talking to Boeing daily, that PDPs have been frozen and compensation claims are being prepared. The first of

RYANAIR GROUP FLEET PLAN

	2019	2020	2021	2022	2023	2024
737-800	455	444	414	384	356	340
737 MAX		20	80	137	186	210
A320	16	35	35	35	35	35
Total	471	499	529	556	577	585

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the 197-seat 737 MAX-8s were due to arrive this spring but the forecast delivery date is now January/February 2020 (in reality no one can be sure).

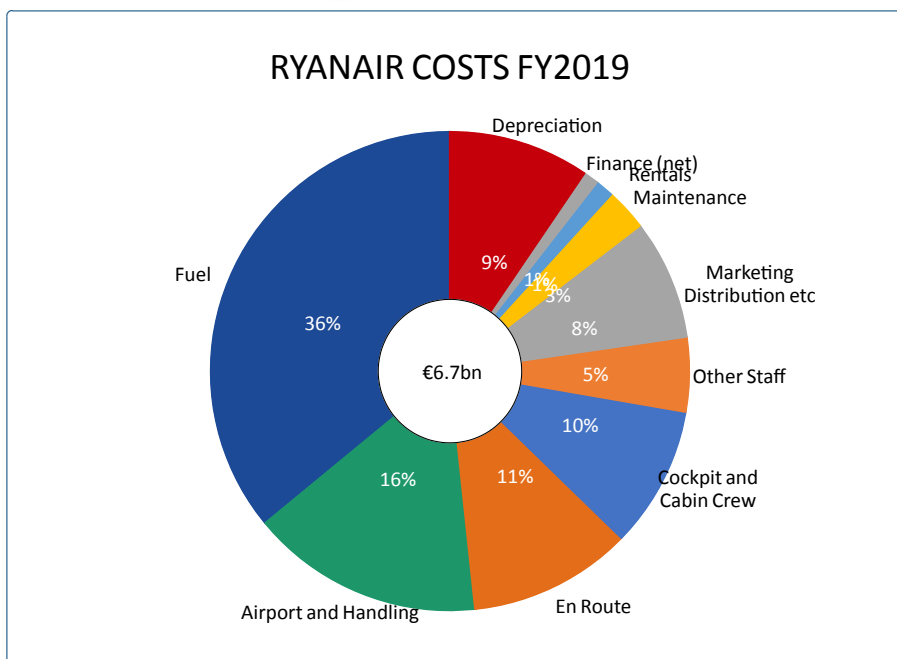
The Ryanair Group's official fleet plan is summarised in the table on the previous page but will have to be adjusted for MAX delays — 58 deliveries were expected before summer 2020, now that is down to 30 aircraft. However, Ryanair is sticking to the overall numbers — a net increase of 114 aircraft between FY2019 and FY 2023 which will drive total traffic from 142m passengers in FY 2019 to a firm target of 200m in FY 2024.

The MAX has been described by Ryanair as a “game changer”, mostly because of a promised 16% reduction in unit fuel costs, and the type's introduction will be needed to counter-balance the negative unit cost trends outlined below. By FY 2024 the MAX will account for 37% of Ryanair's total seat capacity with 737-800s down to 57%, and the remaining 6% A320s.

Ryanair is left with an invidious choice if the MAX is delayed further. It could postpone the retirements of its 737-800s — 115 are scheduled to go — but this will push up the average age of the fleet and will impact its fuel and maintenance costs. Obtaining delivery slots from Airbus in the required time period will be difficult especially if Ryanair expects the discounts that it has achieved historically at Boeing.

Incidentally, to meet the FY2024 traffic target of 200m passengers Ryanair will have to add another 60-odd units to its fleet (calculated by applying current load factor, current utilisation ratios and projected average seat capacity to the passenger target volume).

These extra aircraft would also make O'Leary's target profit figure to trigger his big bonus more attainable. Using our adjusted fleet plan



the €2bn net profit figure equates to about \$3.5m per aircraft in, say, FY 2024, but Ryanair's average profit per aircraft during 2013-19 was \$2.7m, and only in one year, FY 2016, did it surpass €3.5m.

Fundamentals

There are important issues to address with Ryanair's fundamentals. The charts on the facing page and on page 14 trace key revenue, cost and profit trends.

The most worrying chart for Ryanair is the first, which shows not only the marked convergence between revenue per passenger and cost per passenger but also fact that ex-fuel unit costs have been rising since FY 2017.

Over the past six years Ryanair has averaged 10% passenger growth, largely through stimulating traffic in new markets. It has pushed average load factors up to 96%, a level once regarded as inconceivable. The strategy of yield neutrality — adjusting price to generate the required traffic to fill the aircraft — has led to a fall in yield has every year — from €48.20 per

passenger in 2013 to €37.10 in 2019.

But the idea that it would somehow be acceptable for prices to slide towards zero as revenue would be generated from other sources now seems implausible. Ancillary revenue per passenger did grow substantially in FY 2019, having been fairly level previously, but still only accounts for 31% of total revenue. And the reason for the increase was simply more fees for seat allocation and priority boarding. RyanairRooms (competing with Booking.com, and other online agencies) and RyanairLabs (new apps and other IT) were supposed to be important innovations but seem to have faded from the picture.

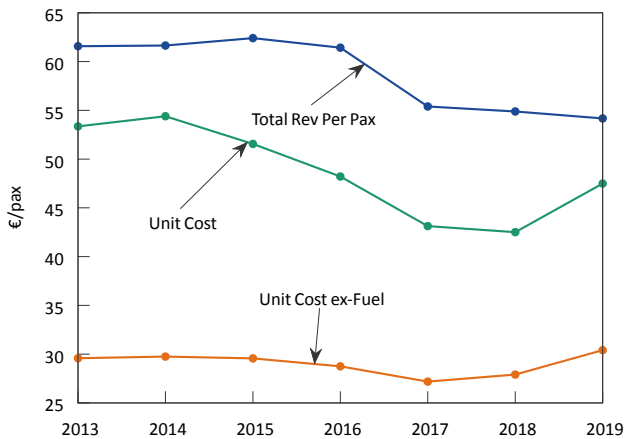
The recent efficiency gains have all been made through the load factor, which of course leaves passengers feeling cramped, while average aircraft utilisation (flight hours per day) has been declining since FY 2016, which is at least partly due to ongoing labour conflicts.

In 2017 and 2018 Ryanair has made some major concessions in its newly unionised world: 20% salary increases for pilots, making

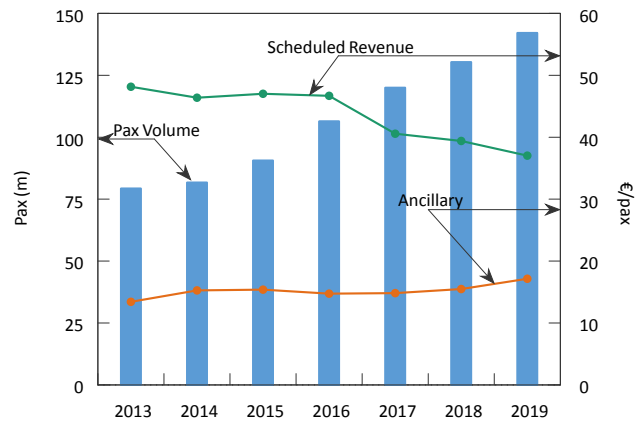
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RYANAIR UNIT REVENUE AND UNIT COST TRENDS

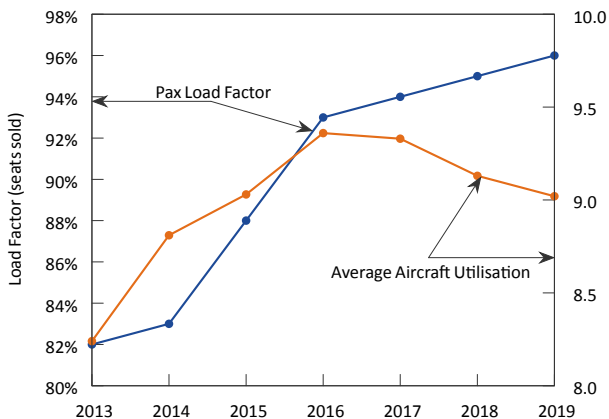
Unit Revenues and Unit Costs Converge, Non-fuel Costs Rise



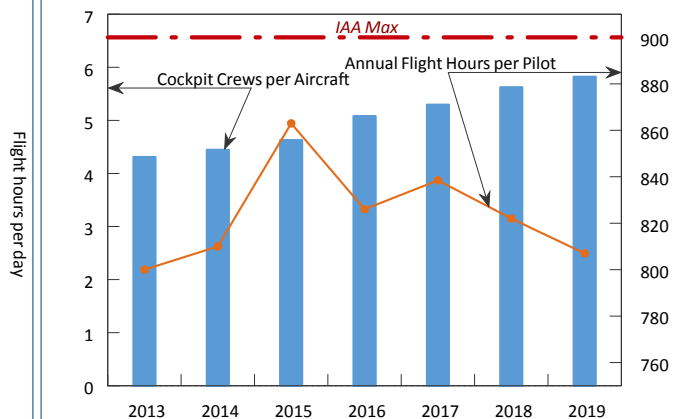
Pax Up (+10%pa), Yield Down (-4% pa), Ancillaries Stable



Load Factor at Maximum, Utilisation Slips



Cockpit Crews per aircraft increase, Pilot utilisation falls



Source: Company Reports. Note: FY to end March

Ryanair rates better than its benchmarked rivals (Jet2 and Norwegian) according to its own assessment. Yet conflict continues: at present, a legally blocked Irish pilots' strike, an announced UK pilots' strike, an upcoming cabin attendants strike in Spain, and threatened action by Spanish pilots.

Two key productivity indicators of labour efficiency — cockpit crews per aircraft and flight hours per pilot — have both been going in the

wrong direction since 2015. Also, the number of employees per aircraft has moved up from 30 to 36 during 2013-19 while employment costs as a percentage of total non-fuel costs, previously steady at around 19%, jumped to 23% in FY2019.

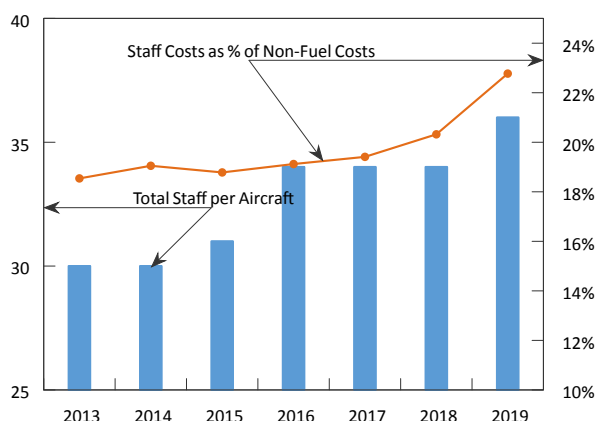
In negotiating with its unions Ryanair has stated that it will take strikes if its fundamental model is threatened and it still has the option, though probably to a lesser extent than before, of churning aircraft

among its 86 bases. How the splitting of Ryanair into separate airline units will affect that policy is unclear at present.

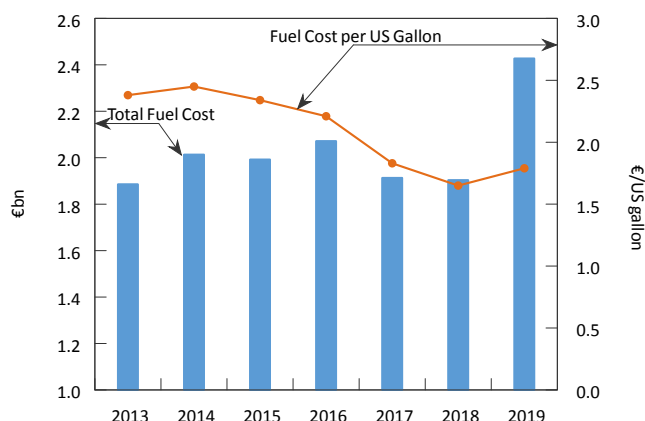
In FY 2019 higher fuel prices and capacity growth added about €525m to its costs, and another €450m is expected for FY2020. Oil prices are well down this year — currently trading under \$60/bbl on Nymex — but Ryanair's 90% hedging programme is based on a price of \$63/bbl. Fuel accounts for 36% of Ryanair's cost base,

RYANAIR UNIT REVENUE AND UNIT COST TRENDS

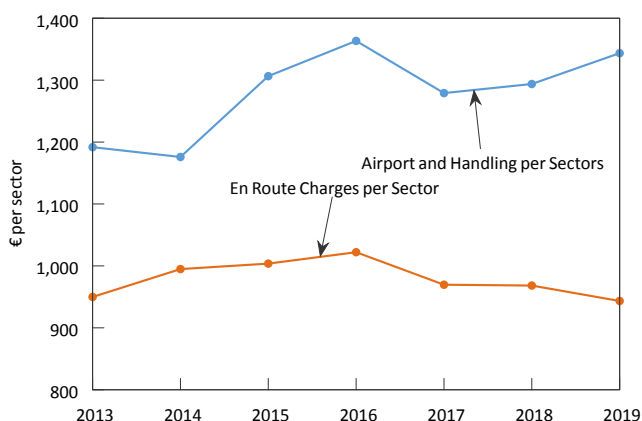
Relative Staff Costs increase as does Employee/Aircraft Ratio



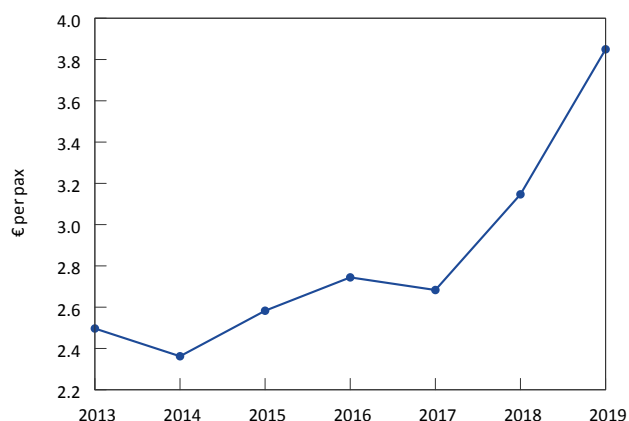
Negative Impact from Fuel Price Rebound



Airport Costs per Sector Rise



Marketing, Distribution & Other Costs Rise Sharply



which emphasises the need for getting the MAX into service.

Airport charges and ground handling accounted for 16% of Ryanair's costs in FY 2019. Its airport model — guaranteed traffic growth for discounted per passenger costs — has been put under pressure as it has encountered EU legal challenges to alleged subsidisation at regional airports and as it has moved more and more into primary airports. It had contained its per sector airport costs, largely because of the growth deal it

struck with MAG, the owners of its largest base at London Stansted, but average charges per turn have been moving up over the past two years. Again, how exactly the new Ryanair airlines will negotiate with their airports is unclear.

The cost item which is clearly expanding at Ryanair is Marketing and Distribution. This is attributed to the costs of providing ancillary services and, specifically, the EU 261 Regulation, mandating compensation to passengers for flight delays. If the

new-branded airlines are to shift further away from Ryanair's austere passenger service standards, then this cost element must continue to increase.

All in all, the multi-airline, multi-brand strategy somehow seems so unRyanair, but it could work. One thing is unchanged, however — Ryanair hasn't wasted any money on employing design consultants for the new liveries.

Euro-Majors: IAG leads, Lufthansa unifies, Air France reforms

OVER THE past month the three top European network carriers, IAG, Lufthansa Group and Air France-KLM, have published their first half 2019 results. There are clear differences, but the figures show a strong element in common: unit revenues are under pressure, but unit costs even more so.

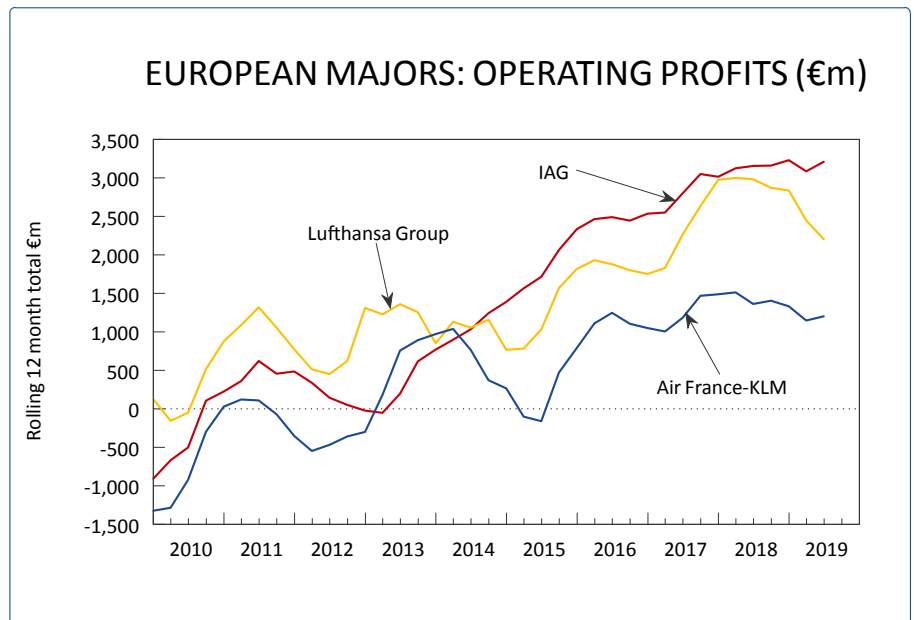
As a group, total capacity and revenues grew by just under 5% year-on-year but operating profits slumped by 36%. A main reason behind this was fuel prices: the total fuel bill was up by 18% year-on-year. This reflects the fact that 2019 fuel supplies were bought at, or hedged at, 2018 prices. Since then the spot price of oil has fallen (-15% on an annual basis in August) but this decline has not benefited airlines as yet.

As the chart right shows, on a twelve month rolling basis, IAG has maintained a run-rate in group operating profits at around the €3bn level since mid-2017; Air France-KLM has seen profitability dip slightly over the same period but in broad terms flat-lined at the €1bn level; while the Lufthansa Group has seen group operating profits down by a third.

IAG — leading the pack

IAG is the smallest of the three in terms of total group revenues but by far the most profitable. In many ways its first half results showed a process of “continue as normal”.

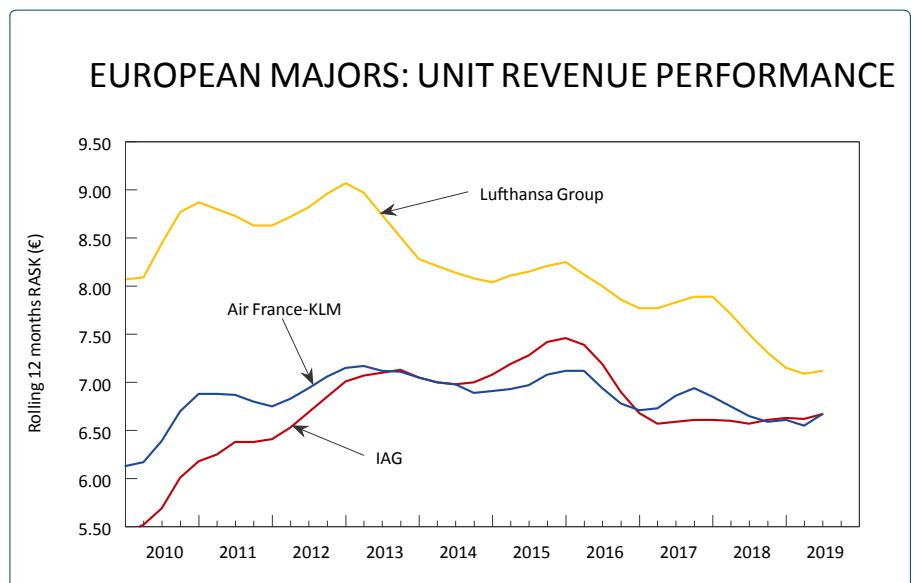
Group revenues were up by 8% to €12bn with total capacity up by 5.7% while unit revenues increased by 1.3%. Total fuel costs touched €2.9bn, 20% higher than in the prior



year period, and with non-fuel unit costs up by only 1.3% operating profits before exceptional items were some 12% lower at €1.1bn. The second quarter itself showed some positive notes with operating profits up by 6% to €960m.

Each of the four main airlines in

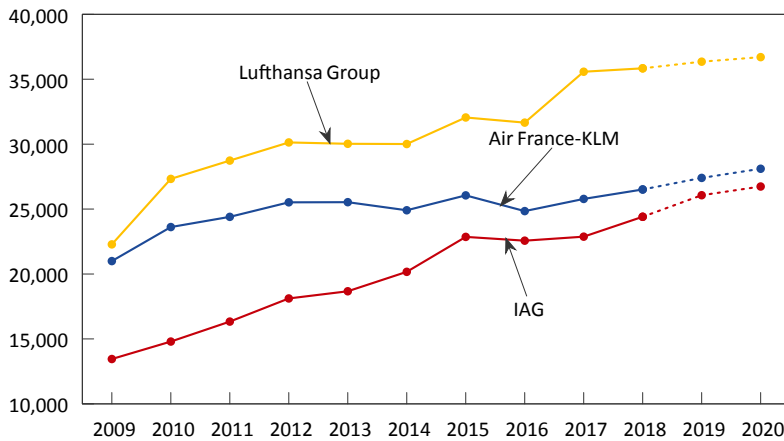
the group (British Airways, Iberia, Aer Lingus and Vueling) saw operating profits down in the first six months — the company had neglected to separate the individual airline results in the first quarter (when only British Airways had a positive operating margin) — but the management notes



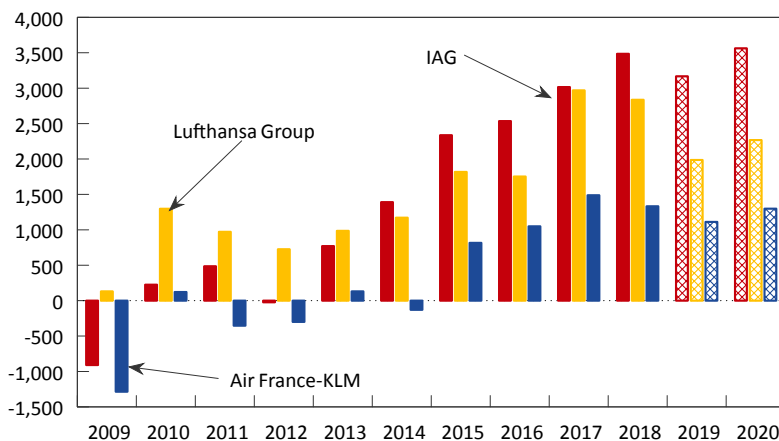
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EUROPEAN MAJORS: FINANCIAL RESULTS (€m)

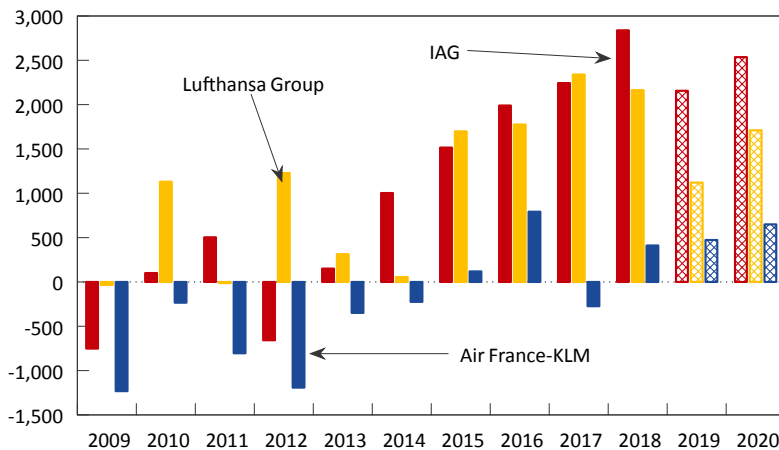
Revenues



Operating Profit



Net Profit



that results were “strong” in the three months to end June, and that RoIC on a trailing twelve month basis showed improvement at both Iberia and Vueling and at the group level remained above its 15% target. The fifth airline in the group — Level — does not report results separately and for the moment is consumed within Iberia.

IAG is unique. Late to the consolidation game, it was able to create a structure in the 2011 merger between BA and Iberia that avoided the mistakes it saw in the creation of its rival European groups. The two legacy network airlines in its portfolio each have strong positions in their home markets in London and Madrid; the LCCs — Aer Lingus, Vueling and Level — provide it with growth potential that seems divorced from cannibalising its network carriers’ traffic. (One limitation on expansion may be that Vueling’s AOC requires its pilots to speak Spanish.)

Further, the holding company maintains a strong discipline as the arbiter of the allocation of capital to its operating subsidiaries according to the returns each can achieve to maintain a corporate target of a sustainable 15% RoIC.

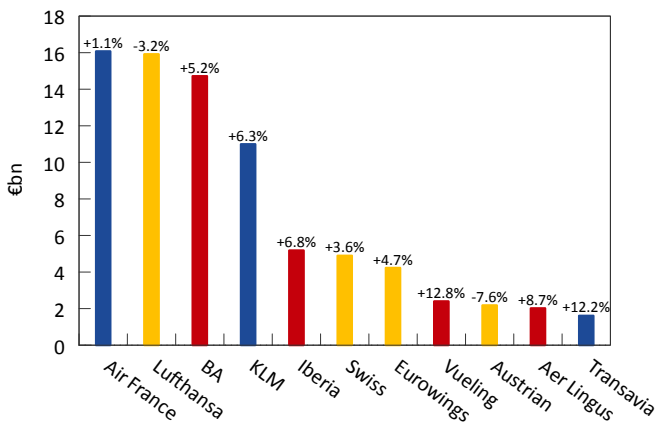
Alone among the three majors IAG saw no reason to change its former guidance that full year operating profits would be similar to those of 2018.

The stock markets however have not treated the group kindly, with the shares down some 60% from its peak of £7.27 in mid 2018. A large part of the reason behind this is the extreme uncertainty over Brexit and the increasing likelihood of the UK leaving the EU at the end of October without a deal in place.

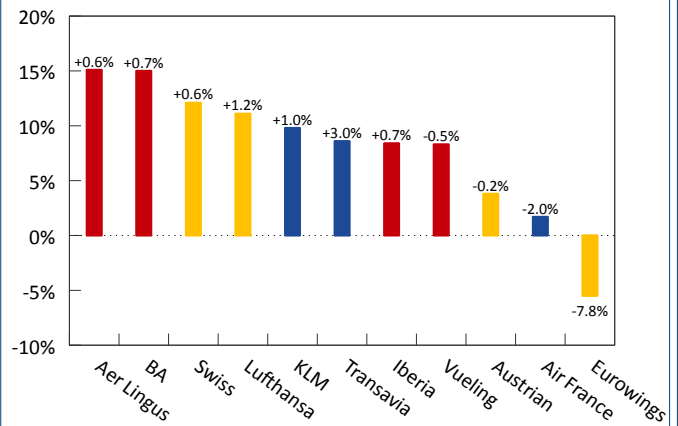
EU airlines must be able to show that they are majority owned and effectively controlled by EU nation-

EUROPEAN INTRA-GROUP ANALYSIS 2018

Revenues



Operating Margins



als (or governments). Like many other listed airline groups IAG has provisions in its by-laws permitting it to limit non-EU shareholders. In February, the group invoked this provision as non-EU shareholders had breached 47.5% of the total, and as a result MSI removed IAG from its global indices.

IAG's CEO, Willie Walsh, is adamant that there is no problem and states that the regulators in each of Spain, Ireland, France and Austria have confirmed that IAG's airlines in those countries would satisfy the EU ownership and control requirements in the event of a no-deal Brexit. But the structure set up in 2011 plays its part:

- ✈ IAG is a holding company that owns share in airlines. It is not an airline.

- ✈ Both BA and IB were merged into IAG in its formation with a legal backstop that "proves" that each is majority owned and controlled by nationals of their home countries. Therefore IB is Spanish and ergo European

and BA is British and non-European post Brexit. The UK is abandoning the ownership and control restrictions and turning to a definition of a national carrier as one with its principal place of business based in the UK. If this works for these two, similar legal workarounds can be installed for all its other airlines.

- ✈ The EU interpretation of "ownership" relates to common equity and seems to have no understanding of real "control" in that it has implicitly allowed the Wizz Air ownership structure where Indigo (a US investment company) has had board control and majority capital investment but minority of the direct common equity; AirBerlin and Alitalia remained "European" despite Etihad's obvious "control".

- ✈ The EU has historically allowed Monarch (Swiss owned) and Thomson (Canadian) to be treated as European.

- ✈ If all else fails IAG may be able to persuade Qatar (which owns 20% of

IAG) to place its IAG holding into a European based investment fund. (The EU is blinded by its view of legality, and can only consider the nationality in which an investment is legally based).

The unknown and rather important detail is how IAG will have to treat its UK shareholders.

Lufthansa Group — unifying Germany

Lufthansa meanwhile published results for the first six months sharply down on the previous year. Revenues grew by 3% to €18.2bn on the back of a 4.7% growth in capacity and a 1.6% decline in unit revenues. Total fuel costs rose by 16% to €1.8bn, unit costs excluding fuel grew by 2.5% and total group operating profits slumped to €418m down from €1.05bn.

Among its individual airline brands Lufthansa saw its own operating profits fall by two-fifths to €403m and Swiss by a relatively modest 25% to €215m; but Austrian dipped into

Aviation Strategy

an operating loss of €53m from a profit of €5m in the prior year period and Eurowings managed to generate an operating margin of a negative 14%, and a mammoth operating loss of €273m (€220m).

Lufthansa is fiercely protective of its position in its core teutophonic markets in Germany, Austria and Switzerland. The demise of Air Berlin allowed it to consolidate non-hub domestic German flying into its “Low Cost” subsidiary Eurowings.

However, Eurowings is not really low cost — with a unit cost at legacy levels (see table below) and an unwieldy and complicated structure of multiple AOCs. It even managed to achieve a negative operating margin of 7.8% for the full year 2018 (see chart on the preceding page).

Secondly, the demise of Air Berlin allowed easyJet to gain significant presence in Berlin Tegel, and spurred accelerated development of services by Laudamotion (aka Ryanair), Level, Wizz and Vueling at Vienna. This it appears has had a deleterious impact on yields at Vienna with the disastrous impact on Austrian seeing unit rev-

enues fall by 7.4% in the period.

All this has prompted Lufthansa to make a strategic *volte face*. Eurowings will revert to be a short haul point-to-point airline, cancelling long-haul flights and restricting capacity growth.

The restructuring of Eurowings is paramount. Having increased capacity by an average annual rate of 19% since 2015, eliminated losses on the old Lufthansa non-hub flying but generated significant losses on the integration of the Air Berlin business, current plans point to capacity growth of a mere 1%pa up to 2022, a streamlining of the business to have a single AOC, simplification of the fleet structure removing turboprops, wet-leases and aged aircraft, and intriguingly a reduction in unit costs towards an almost LCC level of 5.2€¢ by the end of that year.

Brussels Airlines will come out from under the Eurowings umbrella (why they thought it would fit in the first place is incomprehensible). Since Lufthansa acquired majority ownership in 2017 the performance and results have not been separately

disclosed. But it remains structurally loss-making, and provides little benefit to the group’s multi-hub network strategy, with the exception of some routes possibly into francophone Africa; and no doubt is a distraction to Eurowings’ point-to-point and single AOC strategy. Recent Belgian press comments suggest that the Belgian flag-carrier also is about to undergo major restructuring.

On the Q2 results’ conference call the management emphasised that “yields in Europe, particularly in Germany and Austria remain under pressure, because of market-wide overcapacities, aggressive competition and increasingly price sensitive demand”, and that it expects the condition to continue for some time. It “will fight off” the LCC competition to protect its core markets.

Lufthansa held an investor day in June. There had been some hopes that the group would look to realign its corporate structure to mimic that of IAG: a holding company that impartially looks to returns from its subsidiaries and allows them to compete for capital. However, the manage-

EUROPEAN MAJORS: FIRST HALF RESULTS 2019 BY AIRLINE

	Revenues		Operating Profits		Operating Margins		ASK		RASK		CASK	
	2019	% ch	2019	2018	2019	%pt ch	bn	% ch	€cents	% ch	€cents	% ch
IAG	12,089	+7.9%	1,095	1,240	9.1%	-2.0%	163,431	5.7%	6.52	1.3%	6.75	4.3%
British Airways	7,381		871	906					8.00		7.06	
Iberia	£6,446	+5.3%	761	797	11.8%	-1.2%	92,170	2.0%	6.99	3.2%	6.17	4.6%
Aer Lingus	2,636	+13.8%	109	147	4.1%	-2.2%	34,804	9.1%	7.57	4.3%	7.26	6.8%
Vueling	971	+8.1%	78	106	8.0%	-3.8%	14,198	7.4%	6.84	0.6%	6.29	5.0%
	1,077	+7.1%	5	22	0.5%	-1.7%	18,084	4.4%	5.96	2.5%	5.93	4.3%
Air France-KLM	13,036	+4.9%	97	228	0.7%	-1.1%	160,793	3.8%	7.28	1.6%	6.82	-0.3%
Air France	7,982	+6.7%	(113)	(164)	-1.4%	0.8%	85,840	5.1%	6.65	1.0%	7.01	-0.4%
KLM	2,899	+2.0%	202	388	7.0%	-6.7%	59,599	0.5%				
Transavia	748	+8.7%	(19)	3	-2.5%	-3.0%	15,353	10.1%	4.83	-0.4%	4.95	2.6%
Lufthansa Group	18,599	+3.2%	418	1,052	2.2%	-3.6%	174,860	4.7%	7.51	-1.6%	7.34	2.4%
Lufthansa	7,758	+3.5%	403	703	5.2%	-4.2%	99,216	4.1%	7.82	-0.6%	7.41	4.0%
Swiss	2,447	+6.3%	215	280	8.8%	-3.4%	30,951	7.4%	7.91	-1.1%	7.21	2.7%
Austrian	982	-2.6%	(53)	5	-5.4%	-5.9%	13,561	5.2%	7.24	-7.4%	7.63	-1.9%
Eurowings	1,942	+0.4%	(273)	(220)	-14.1%	-2.7%	31,132	3.8%	6.24	-3.4%	7.11	-1.0%

Source: Company reports, Aviation Strategy analysis.
Notes: †BA in pounds and pence

ment saw significant legal complexity in trying to restructure Lufthansa AG to achieve that. There had also been hopes that Lufthansa would consider reducing capital intensity by increasing the ratio of leased aircraft in its fleet.

Fat chance: Lufthansa likes to own aircraft — only 6% of its 763 strong fleet at the end of 2018 were leased. However, it is in the process of a major spending spree. Its current fleet plans suggest that it will acquire 234 new aircraft by 2023 but in the process retire 220 leaving a net addition of 32. This will bring substantial improvements to the fleet structure and fuel efficiency: it will be trimming the number of fleet types in the long haul fleet from 14 to eight; it has ordered 128 A320/A321neo for the short haul fleet with a single common specification (in the past it has had 28 separate subfleet types).

This refueling will cost. Capex will be rising from the current €3.5-€4bn a year, and some analysts have expressed doubts that the group will achieve its target of €1bn free cash flow before 2022. But the group has signalled its intention to sell its catering arm LH Sky Chefs.

Air France-KLM — the Smith era

Similarly, Air France-KLM produced a disappointing first half result. Group revenues grew by 4.9% to €13.0bn, but operating profits fell to €97m from €228m in the prior year period: fuel costs had risen by 16% to €2.6bn. And this was in spite of a comparative period last year with substantial strike action at Air France.

The French flag-carrier itself saw capacity up by 5% and an increase in revenues of nearly 7%, an improvement in operating margins of 1.4 percentage points but still produced an operating loss of €113m. In contrast, KLM's result were sharply down at €202m because of the increase in fuel prices: capacity was flat and unit revenues marginally up. The group's low cost arm Transavia gained a near 9% increase in revenues on a 10% growth in capacity but operating losses reached €19m, an off-season negative margin of 2.5%.

The Franco-Dutch group has been seen as the sick man of the European airline sector since the global financial crisis in 2008. But maybe things are about to change.

In August last year the group ap-

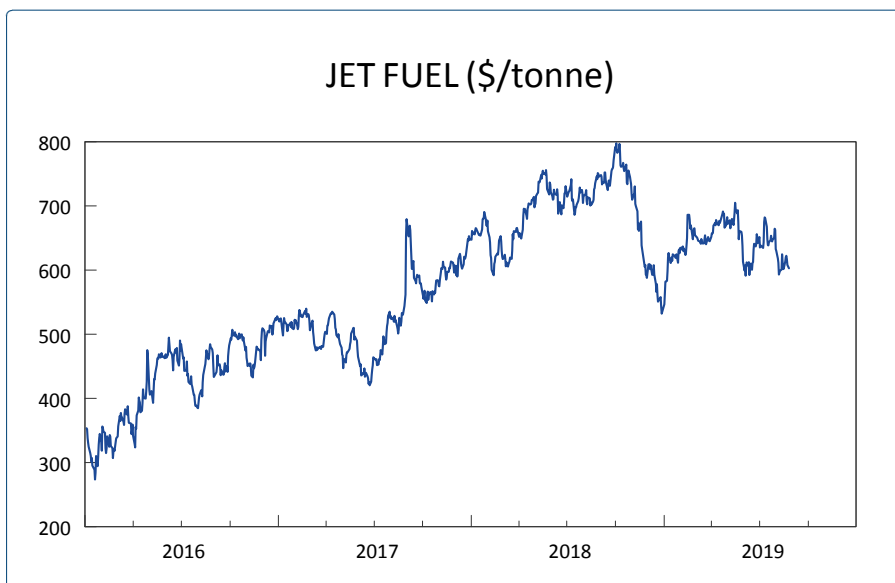
pointed a new CEO — Ben Smith — remarkably a Brit, ex-Air Canada, and not an alumnus of ENAC. He was charged with the task "as a priority to revitalise Air France, to give a new strategic impulse to the Group and to work on a new leadership approach with all Air France-KLM's teams".

He acted quickly. By October he had managed to agree a pay deal with the Air France cabin crew and ground staff unions; in January he killed off the Joon project (an ineffectual and ill-thought attempt to introduce B-scale wage structures through establishment of a new airline brand); in February he managed to come to an agreement with the belligerent SNPL pilots' union; and in July managed to get the French unions to agree to lift the cap of 40 aircraft in the Transavia France fleet, and remove limits on stage length use of narrowbody aircraft in the Air France operations.

What his actual strategy is is as yet unclear. The Group will be holding a capital market's day in November where all may be explained. In the meantime the Q2 results' presentation gave a few clues of the direction — with an emphasis on simplicity.

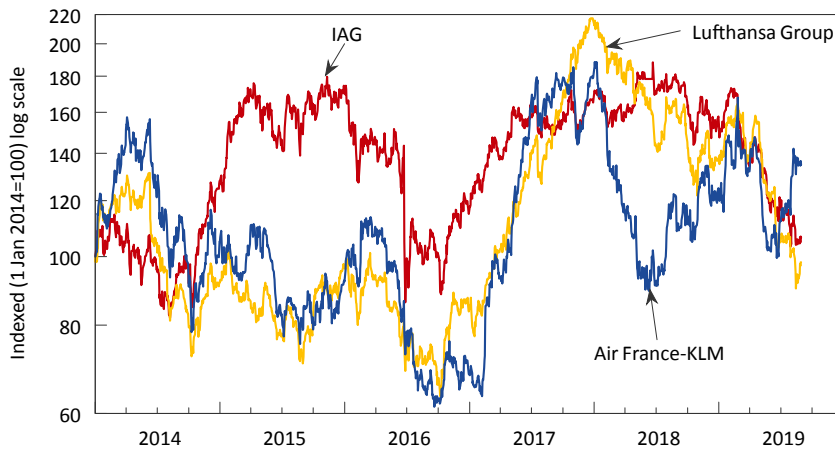
Air France's short haul fleet is aging — by 2024 half of the fleet of A320 family aircraft will be more than 20 years old — and is in need of replacement. As a start the group announced an order for 30 new A220s plus 20 options, presumably to replace its A318s and A319s. This will be a slightly lower capacity aircraft but one with higher efficient range and may prove a better fit for the feed requirements to the hubs at Roissy and Amsterdam.

Secondly, the group is simplifying its existing long haul fleet: it will reduce the number of 777 subfleets from seven to three, will dispose of the remaining five A340s in the next



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EURO MAJORS' SHARE PRICE PERFORMANCE



Ben Smith summarised the corporate thinking by saying: “The A220 is a great tool. HOP! needs to be restructured. Our position at Orly is key and the future number of aircraft we can operate at Transavia all plays into how we will optimise the French market.”

Much of the comment at the Q2 results conference referred to Air France, with little mention of KLM. One further issue the Group has yet to address is that of corporate governance. In February, the Dutch government bought a 14% stake in the Air France-KLM group, which it said it viewed as a “fundamental step towards protecting Dutch interests”. This came as a surprise to the French Government which has a similar stake — but, because of the *Florange* law (which gives double voting rights to long term shareholders) the French state has 23% of the voting rights, and the Hague will have to wait to 2021 to achieve parity.

Perhaps the new CEO’s progress so far has been the easy bit.

two years and standardise the configuration of other types. It has further decided to simplify the structure at the individual brands: KLM will take Air France’s 787 orders and Air France KLM’s A350s. In addition it announced that it will dispose of its 10 A380s by the end of 2022 (by which time they will have an average age of just over 10 years), avoiding ex-

pensive product upgrade and mid-life maintenance costs, replacing them with no more than nine new generation wide-bodies (with fewer seats and lower trip-costs).

The company did not address its plans for its French domestic and non-hub point-to-point network, which remains heavily loss-making, saying that it hasn’t fully decided yet. But

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