

Global Aviation

Merge or Die? (Not Exactly). Views on Global Airline M&A

■ Industry Overview

- **Airline consolidation trend hardly uniform** — over the next decade, Citi sees room for airline consolidation in Europe (where significant fragmentation still exists), selective consolidation in India's and Philippine's domestic markets, plus ongoing modest consolidation in most of Latin America. Conversely, US airline consolidation appears to be somewhat late-cycle (as key regional airlines order bigger planes and gradually do more mainline flying). In Asia, home-grown LCCs and some Middle Eastern carriers appear poised to increase competition across much of the region.
- **Caution on large (cross-border) minority stakes** — we have difficulty seeing value in airlines taking large minority stakes, in carriers that operate in geographically distant regions (where the buyer has a minimal operational footprint). For instance, BA's investment in US Air and (Air Canada)-Chorus Aviation's investment in Uruguay's Pluna do not seem to have ended well. Moreover, Singapore Airlines' 49% stake in Virgin Atlantic since 1999 seems to have yielded very few, if any, benefits, either strategic or financial.
- **Target-rich Europe** — Citi identifies 16 (mainly unlisted) European airlines that screen as potentially interesting M&A candidates. In some cases, several governments appear to be in the process of trying to privatize their flag carriers. Although we do not see such activity as imminent, Citi London's Andrew Light highlights the need for further market concentration among Europe's airlines.
- **Asia's shifting power dynamics** — we expect a near- to medium-term proliferation of new LCCs to access Asia's immense hinterland potential, happening alongside some consolidation in India and the Philippines. New partnerships, alliances and strategic shareholdings may accelerate, leading to a shift in power dynamics that threaten the status quo. Air China may become a long-term winner given its leadership position. SIA appears ill-positioned against the ongoing headwinds and its response lacks coordination, in our view. AirAsia possesses *qualities* of a long-term winner though we are cautious on strategy execution. Cathay Pacific and ANA face an interesting blend of positive and negative market forces.
- **N America somewhat late-cycle vs. Latam** — following a decade of big mergers (Delta-Northwest, Continental-United, US Airways-America West, Southwest-Air Tran, etc.) aircraft orders (and other signals) from (former) regional airlines, suggest that the latter group is poised to do more of its own at-risk flying. In Latin America, we see the airline consolidation cycle as still having "legs" over the next few years (with Colombia's domestic market showing the opposite trend). We see these trends as positive for Copa and LATAM Airlines, and neutral for Spirit Airlines.

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Europe

European airlines have already gone through considerable consolidation activity since the 1970s, culminating in the creation of 3 mega-flag carrier groups and 2 largely organically grown pan-European low cost carriers

We estimate that the mega-mergers are boosting operating margins by c.150-250 basis points – which is important in a low margin business such as airlines

The top 5 European airline groups now control c.70% of European airline traffic, leaving some scope for more consolidations – mainly with second and third tier airlines, of which we can identify 16 main ones

But further consolidation activity near-term is likely to be slow due to the losses and restructurings of recent acquisitions and some ownership complexities among some of these 16 airlines

With global consolidation off-limits due to national ownership rules, we expect a continuation of global alliance initiatives, route joint venture with some inward minority stakes being taken by 2 Middle East airlines

European airlines have already gone through a considerable amount of consolidation since the 1970s in 3 waves. First, there was the creation of national champions up to 1990, involving the merging of several airlines within each country. The second wave involved a frenzy of mainly large minority stakes exchanging hands, as national ventured into the rest of Europe, and even the rest of the world, following European aviation liberalisation. Most of these attempts at cross-border consolidation failed. The third wave since 2003 has involved the creation of three pan-European mega airline groupings (Air France-KLM, then Lufthansa's group and then International Consolidated Airlines Group – IAG). In total, we have identified 100 transactions since the mid-1980s of European airline equity exchanges, both majority and minority stakes.

The main rationale for the mega mergers since 2003 has been to extract revenue synergies by strengthening global route networks, to defend existing global alliance benefits, to extract cost synergies from co-operation and to obtain access to runway slots, to enable long-term growth, at increasingly congested European airports. These mega mergers on average aim to boost overall operating margins by 150-250 basis points – driven by revenue synergies equivalent to 1% of combined revenue and cost synergies equivalent to 1.5-2.5% of non-fuel operating costs. European airline mergers have generally been less aggressive than US airline mergers because of the retention of separate brand names and separate operating crews, with mainly back office and marketing/sales operations being combined.

There is still some scope for merger and acquisition activity among European airlines. We estimate that the top 5 European airline groupings accounted for 69% of total European airline traffic (in terms of revenue-passenger kilometers) in 2011 up from less than 60% in 2003, prior to the Air France-KLM merger. We have identified 16 European airlines that could be consolidation candidates. Between them, these 16 generated combined revenue of over €27bn in 2011 – more than the airline revenues of Air France-KLM, IAG and Lufthansa. We would expect most consolidation activity to be along the lines of the existing global alliances due to relationships already in place and the need to preserve alliance synergies already being generated. We continue to expect smaller airlines to fail.

Near-term consolidation, however, is likely to be slow due to: (i) the current mega-groups being too busy restructuring previously loss-making acquisitions and dealing with their own cost and financial restructurings; (ii) the presence of large minority stakes held by non-European airlines unable by EU and national ownership requirements to make full take-over bids; (iii) Government ownership of many carriers, some of whom are unprofitable and financial weak and unlikely to be of appeal to the mega airline groups. The main tasks for Air France-KLM, IAG and Lufthansa are to deliver targeted merger benefits rather than seek out new opportunities.

Global airline consolidation is a long way off, if ever, due to sovereignty and national ownership issues. As alternatives, we expect broadening of the reaches of the main 3 global alliances (oneworld, SkyTeam and Star) – especially to China, India, Middle East and Russia – and the extension of successful North Atlantic joint ventures to other route areas. Large minority stakes have proven generally to have failed but that is not stopping two Middle East airlines (Etihad and Qatar Airways) from pursuing such strategies in order to secure commercial arrangements with selected European and other airlines to boost global connecting traffic through their hubs in the Gulf.

History of European Airline Consolidation – 3 Waves So Far

There have been 100 significant equity combinations involving the main European airlines since the mid-1980s – including 54 involving majority stakes and 42 involving large minority stakes

European airlines have been gradually consolidating since the 1970s but the largest pan-European mergers have been struck only in the last 10 years. Based on our database of European airline combinations, we estimate that there have been 100 exchanges of equity concerning the main listed airlines since 1986. These exclude any transactions in Russia and the CIS and include only scheduled airlines. These comprise of the following types of combination:

- 58 combinations involving the acquisition of a majority stake in a European airline, including 40 domestic mergers/acquisitions and 18 cross-border within Europe transactions but no cross-border transactions involving a non-European airline;
- 42 combinations involving the acquisition of a significant minority stake in a European airline, including only one domestic transaction (Ryanair's purchase of a 29.8% stake in Aer Lingus in 2006), 24 cross-border transactions with Europe, 13 transactions involving European airlines purchasing stakes in non-European airlines and 4 transactions involving non-European airlines buying into European airlines.

There have undoubtedly been many more transactions than these involving smaller, private airlines, including charter airlines but with limited impact on the overall consolidation of the European airline industry.

We identify three major waves of consolidation since the 1970s.

The first wave of consolidation, 1970-1990 – creation of national champions

We identify 3 waves of consolidation since the 1970s – the first wave was the consolidation of airlines within each country in the 1970s and 1980s, followed by a second wave of cross-border minority stakes in the 1990s and finally a third wave of major airline mergers from 2003 to 2011

The first wave took place in the 1970s and 1980s and up to 1990, even while most airlines were majority owned by their national governments. British Airways, for example, was formed by the merger of British European Airlines (BEA) and British Overseas Airways Corporation (BOAC), both government-owned entities, in 1974. Likewise, government-owned Air France acquired the other 3 government-owned airlines – Air Charter, Air Inter and UTA – in 1990. The objective of this first wave of consolidation would appear to create national airline champions that were much stronger combined than the previous fragmented structure.

The second wave of consolidation, 1990-2002 – cross-border follies ending mainly in tears

Most of the minority equity stake purchases in the 1990s have since been disposed and there have been several bankruptcies – suggesting that consolidation in this period was not a success

The second wave would appear to have been various attempts to venture into other European countries, and even further afield, in the 1990s.

British Airways started off the process by buying a 49.9% stake in TAT European Airlines, France's leading independent airline, in 1992, which it increased to 100% in 1996. BA also established Deutsche BA (DBA) in Germany by buying 49% of Delta Air Regionalflyg in 1992, later increased to a 100% holding in 1998. The strategy was to exploit the European airline deregulation from 1993 when EU (European Union) airlines were allowed to operate anywhere in the EU area,

although they were still restricted on routes to/from outside the EU area. BA also acquired stakes outside of Europe – including 25% of Australian airline, Qantas, in its privatisation in 1993 and also acquired 24.6% of US Airways.

SAS Scandinavian Airlines had earlier purchased a 40% stake in British Midland (later re-named BMI) in 1988, part of which was sold to Lufthansa in 1999. Lufthansa eventually took its stake in BMI to 50% in 2007 and 100% in 2009.

Swissair's parent, SAir Group, was the most aggressive acquirer of large minority stakes in this period (e.g. Sabena, AOM, Air Littoral, LOT, Cargolux, Austrian Airlines).

This round of consolidation ultimately failed, with most acquired airlines shut down or large minority stakes sold on – e.g. Lufthansa selling BMI to IAG in 2012 after 12 years of losses. Its acquisition strategy helped to bankrupt SAir Group in 2001 due to the financial burden incurred. Despite being the number one airline at home, being number two in another country has proven to be highly loss-making, especially as most acquisitions focused on short-haul operations that have been perennially loss-making for most European flag carriers.

The 1990s also witnessed some European airlines taking stakes in airlines outside of the region (e.g. BA in Qantas and US Airways, KLM in Kenya Airways and Northwest and Iberia in 3 Latin American airlines). With the exception of KLM's investment in Kenya Airways, all of these transactions have been reversed. We estimate that 35 of the 100 total combination transactions that we have identified since 1987 have been disposed and another 8 went to zero due to bankruptcies.

The third wave of consolidation, 2003-2012 – pan-European mega-mergers

The most meaningful consolidations started with the merger of Air France and KLM in 2003, the acquisition by Lufthansa of Swiss in 2005-07 and the merger of British Airways and Iberia to form International Consolidated Airlines Group (IAG)

The third wave has taken place since 2000 and on a much larger scale involving the merger of the number one airlines in two or more European countries in order to create pan-European airline groups. This idea has been first mooted by a project called Alcazar in 1993, in which four European flag carriers (Austrian Airlines, KLM, SAS and Swissair) studied the possibility of a merger. Alcazar never took off because of various management, control and legal complexities but it represented a clear acknowledgement by several airlines that they were sub-scale and could not sustain themselves independently.

KLM had repeatedly sought out a suitor since 1993, eventually merging with Air France to form Air France-KLM in 2003.

This was followed by the acquisition of Swiss (restructured following the bankruptcy of parent, SAir Group) in 2005 by Lufthansa, which subsequently went on to take majority stakes in Austrian Airlines and BMI (before selling it to IAG in 2012) and a 45% stake (with an option over the remaining 55%) in Brussels Airlines.

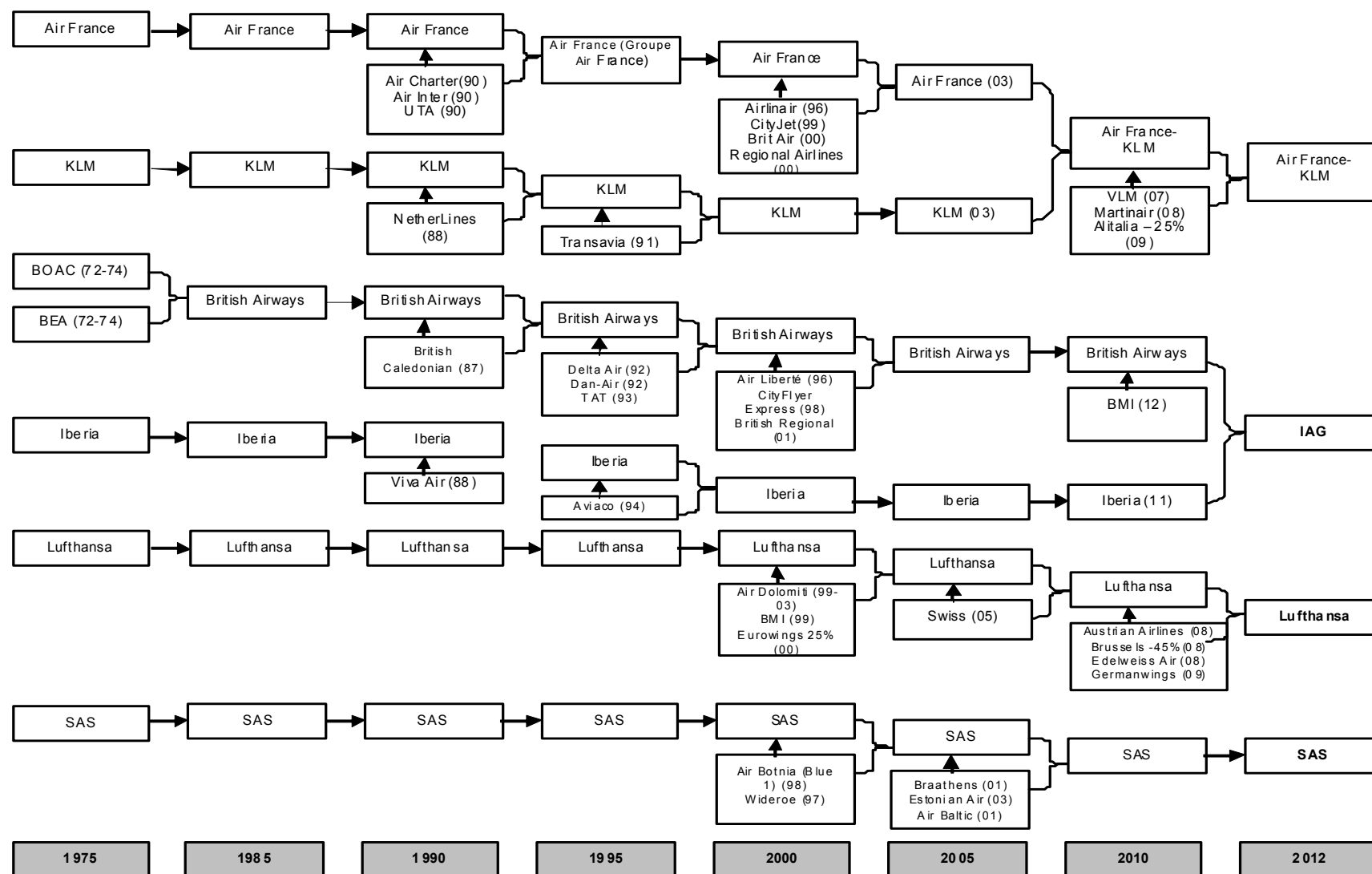
The most recent major consolidation was the creation of International Consolidated Airlines Group (IAG) through the merger of British Airways and Iberia in early 2011, to which BMI was added in April 2012.

There have been few mergers among low cost airlines – with acquisitions by easyJet and Ryanair aimed at gaining runway slots at key airports – the exception being hybrid carrier, Air Berlin, who has grown via several acquisitions

There have also been consolidation attempts by various low cost airlines, mainly with the intentions of gaining access to attractive runway slots at key airports – e.g. easyJet's purchase of Go from 3i in 2002 and GB Airways in 2007. Go offered a substantial number of slot at London Stansted airport and GB Airways similarly at London Gatwick airport. Ryanair also bought Buzz from KLM in 2003 for its slots at London Stansted, Ryanair's main base at that time. Clickair and Vueling, both of Spain, merged in 2008, resulting in Iberia (part of IAG), which established Clickair, taking a 45.5% stake.

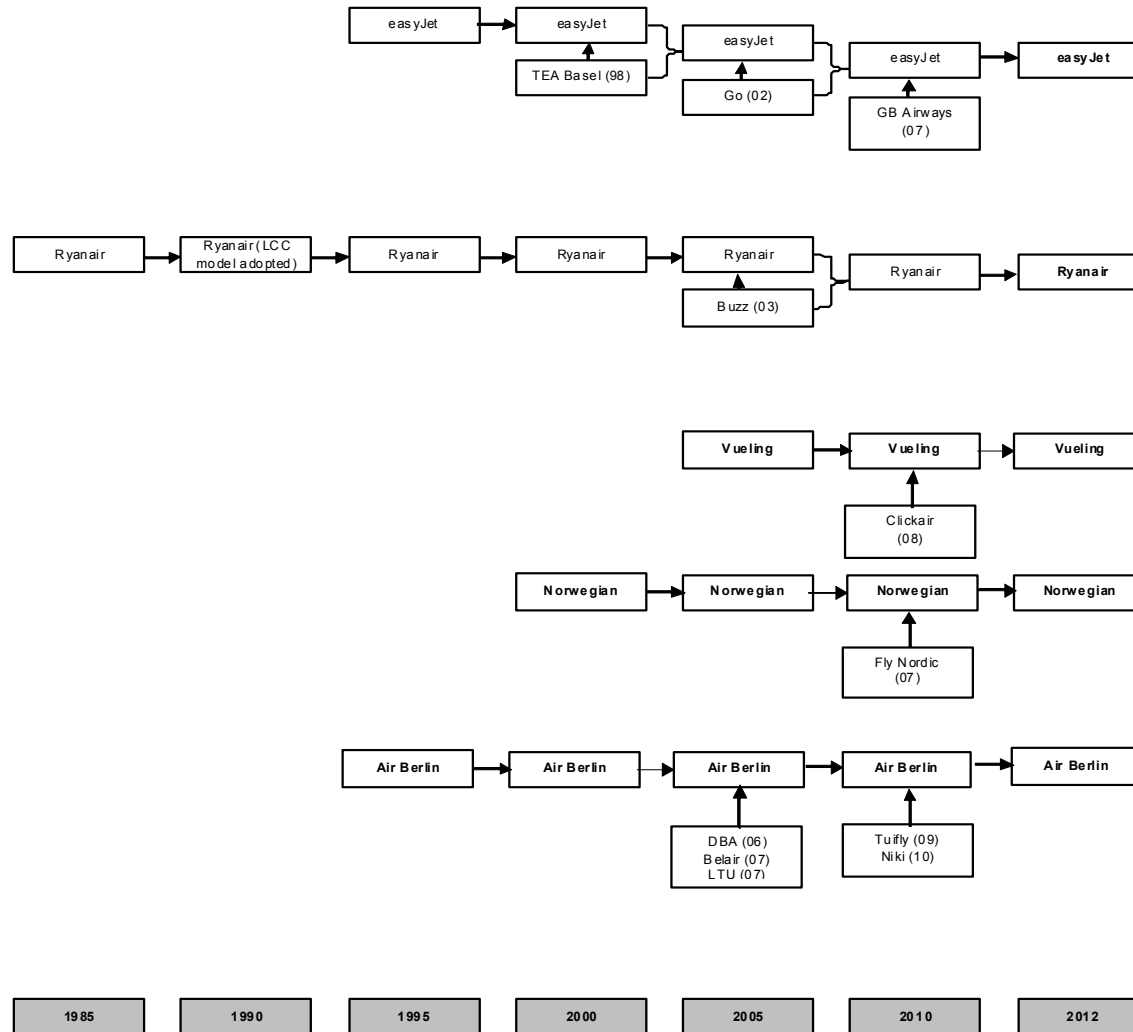
Hybrid full-service low-cost airline, Air Berlin, is itself the result of mergers of Air Berlin, LTU of Germany, DBA of Germany, TUIFly of Germany, Belair of Switzerland and Fly Niki of Austria.

Figure 1. European Flag Carrier Groupings – Consolidation Activity, 1975-2012



Source: Citi Research

Figure 2. European Low Cost Carriers (LCC's) – Consolidation Activity, 1985-2012



Source: Citi Research

Main Reasons for European Airline Mergers

We have already identified that the main reason for the first wave of consolidation in the 1970s and 1980s was to combine relatively weak fragmented national airlines into a strong combined national entity. The main reason behind the second wave – mainly consolidation via purchasing large minority stakes in second-tier airlines in other countries – would appear to have been to build strategic footholds in these other EU countries as European aviation liberalised. Some European airlines even extended this rationale to take large minority stakes in airlines outside of Europe, such as BA and KLM in their US airline alliance partners. As we have already noted, many of these transactions have been reversed or disposed after not meeting their objectives.

The rationale for the latest third wave of pan-European consolidation would appear to be more meaningful and larger scale than previous waves:

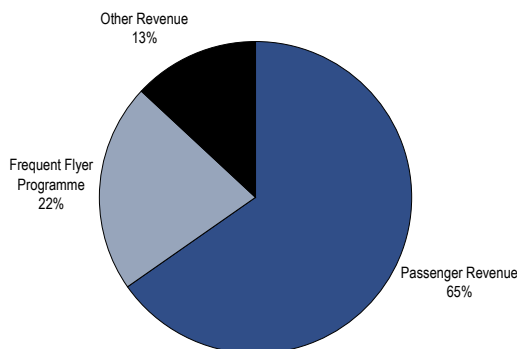
The rationale for mergers and acquisitions concern the strengthening of their combined route networks (to attain scale and reduce competition), to protect revenue synergies from existing alliances, to achieve cost synergies and to gain control of runway slots at congested airports

1. **To strengthen their global route networks** centered on Europe to generate substantial market share gains and revenue synergies by offering an improved route network offering to their customers –e.g. in terms of breadth of destinations and frequency of services. In the case of Air France-KLM, the merger offered not only a reduction in competition among these two, closely-located, network carriers but also the opportunity to co-ordinate their networks and schedules in order to offer more connections to more destinations than the prior two individual networks. For example, to many Asian cities, the combined airlines offer c.4 flights per day from their combined Amsterdam/Paris hubs, timed throughout the day in order to be as attractive as possible to premium business travellers, in particular. In the case of IAG, the networks of BA and Iberia are complementary, with minimal overlap, unlike Air France-KLM and Lufthansa-Swiss. BA could never afford to develop an extensive Latin American route network and nor could Iberia do so in Asia, for example.
2. **To defend existing global alliance benefits** by ensuring an alliance partner is not acquired by an airline in another alliance, which would have resulted in a defection and loss of existing synergies. The best example of this was Lufthansa's purchase of Austrian Airlines in 2010. In the two years prior to the acquisition, Lufthansa had said that it did not need to take-over Austrian because it was already receiving revenue benefits from Austrian's membership of the Star Alliance – e.g. in terms of long-haul feeder traffic from Austria to its hubs at Frankfurt and Munich. However, when the Austrian Government openly sought offers from other airlines, including Air France-KLM, Lufthansa was forced to come to the table and make a winning bid. A similar logic could be applied to SAS, also a Star Alliance member, should its Scandinavian 50% government owners offer their combined stakes for sale.
3. **To achieve cost synergies**, especially in back-office and ancillary activities. In the case of IAG, cost synergies from 2015 are targeted to be 54% of total synergies (€270m p.a. out of a total target of €500m p.a.). Sources of cost synergies are expected to come mainly from IT systems integration (28%); maintenance (24%); combining back office activities, sales forces, call centres and airport operations (21%); procurement (16%) and optimising aircraft fleet procurement (11%). We believe that cost synergies could theoretically be higher because, in all of the large airline mergers in Europe, the core flight operations will not be merged and each airline will retain its own identity. This would be unlike a US airline merger, where brand names disappear (e.g. Northwest in the case of the Delta-Northwest merger) and flight operations

combined. Unlike in the US, airline brands tend to be country-specific and different regulations and operating procedures in Europe, as well as the unions, make it more difficult to combine flight operations. This may come in time but not for a long while.

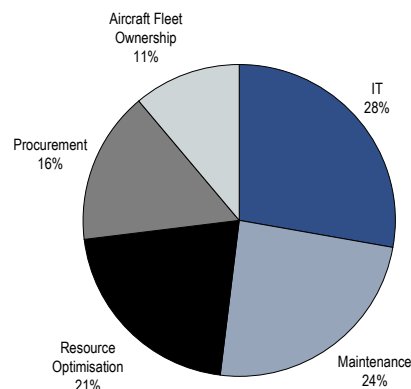
4. **To obtain access to runway slots at increasingly congested European hubs** in order to ensure long-term growth potential despite these constraints. The best example of this was IAG's purchase of BMI from Lufthansa earlier in 2012 for its slots at Heathrow. IAG had no interest in the BMI brand name and not much in its, mainly short-haul, destinations. Instead, the real jewels of BMI are its 56 daily runway slot pairs at London Heathrow (less 14 that may have to be surrendered to competitors on certain BMI routes), at least one-third of which IAG intends to switch from short-haul to long-haul routes, where revenue per slot is 2.5 times greater than for short-haul. IAG targets €100m of annual synergies by 2015 for a purchase cost of €445m (€205m purchase price, €90m restructuring costs and €150m first-year operating loss).

Figure 3. IAG – Revenue Synergy Sources by 2015 (Total = €230m p.a.)



Source: Company Reports

Figure 4. IAG Cost Synergy Sources by 2015 (Total = €270m p.a.)



Source: Company Reports

Quantifying Merger Synergies

The European merger experience is that operating margins have been boosted by c.150-250 basis points – driven by revenue synergies equivalent to 1% of combined revenue and cost synergies equivalent to 1.5-2.5% of non-fuel operating costs

We estimate that the consolidation experience in Europe has boosted operating margins by 150-250 basis points. This may not seem very high but it is when considering the average flag carrier operating margin has been around 3% since the early 1990s.

We have based this 150-250 basis point improvement in operating margins upon various estimates and targets provided by Air France-KLM, IAG and Lufthansa, as shown in the figure:

- **Air France-KLM** claimed that it realised €260m revenue synergies (1.1% of revenue) and €265m cost synergies (1.5% of non-fuel costs) by March 2007 after 3 years of implementing its merger (total synergies equivalent to 2.2% of revenue). At the time it targeted total merger synergies of €1bn by 2011, equivalent to an estimated 4.2% of revenue. However, we do not believe that Air France-KLM ever achieved €1bn of merger synergies because it made heavy

losses in that year and the group has ceased reporting on merger synergies since 2007.

- **Lufthansa** claimed it achieved synergies of €234m from its acquisition of Swiss (1.3% of their combined revenue).
- **IAG** is targeting merger synergies of €500m annually by 2015 – i.e. within 5 years – which would be equivalent to c.2.6% of revenue (see Figure 3 and Figure 4 for detailed sources of synergy targeted). Targeted synergies from the integration of BMI into British Airways of €100m by 2015 would be equivalent to 0.8% of their combined revenue. However, these synergies would be equivalent to 10% of BMI's annual revenue.

Merger synergies have been roughly 50:50 revenue: cost

Analysing these consolidations, we would conclude that merger synergies are evenly split 50:50 between revenue and cost synergies, with the revenue synergies equivalent to c.1% of total combined revenue and cost synergies equivalent to c.1.5% to 2.5% of non-fuel costs.

The problem with assessing merger synergies is that airline earnings are notoriously volatile, making it hard to separate merger synergies from the overall declining trend in margins over the last decade. We would note, though, that the primary reason for declining margins is the tripling in the price of jet fuel.

Figure 5. Merger Synergies Targeted of Selected European Airline Consolidations (local currency in millions per year)

Airline Group	Merger/ Acquisition	Target Year	Revenue Synergies	% of Revenue	Cost Synergies	% of Non- Fuel Cost	Total Synergies	% of Revenue	Comments
Air France- KLM	AF-KLM	2011	€ 443	1.9%	€ 557	3.1%	€ 1,000	4.2%	% of combined Air France-KLM revenue and cost
IAG	BA-Iberia	2015	€ 230	1.2%	€ 270	2.3%	€ 500	2.6%	% of combined BA-Iberia revenue and cost
IAG	BA-BMI	2015	€ 50	0.4%	€ 50	0.7%	€ 100	0.8%	Cost estimated base on 1,200 job losses; % of BMI and BA revenue and cost
Lufthansa	Swiss	2010	€ 122	0.7%	€ 112	0.9%	€ 234	1.3%	% of combined Lufthansa and Swiss revenue and cost
Lufthansa	Austrian	2010	0	0.0%	€ 130	1.2%	€ 130	0.8%	% of combined Lufthansa and Austrian revenue and cost
easyJet	GB Airways	2008	£20	0.8%	£15	1.0%	£35	1.5%	% of combined easyJet and GB Airways revenue and cost
Average				0.8%				1.5%	1.9% Average merger synergies c.2.0% of combined revenue

Source: Company Reports and Citi Research Estimates

Scope for Possible Further Consolidation

Appetite for Further Consolidation by Leasing Carriers - Waning

After 100 M&A transactions since the mid-1980s, including 3 mega deals, we see scope for up to c.16 more, but mainly of second and third tier airlines

We believe that most consolidation among the European airlines has already happened and that there will be relatively little further activity in the short term, for several reasons.

1. The largest 7 flag carrier airlines have already merged into 3 major groupings plus THY Turkish Airlines (Europe's sixth largest airline and fourth largest flag carrier airline group), leaving only relatively small players potentially up for sale;
2. These three groupings are unlikely to have much appetite for more acquisitions because they are still in the throes of digesting recent acquisitions – some of which, like Austrian Airlines, BMI and Iberia, are heavily loss-making and in need of considerable turn-around effort;

At the moment, the three largest flag carrier groupings have limited appetite and financial resources for further merges and acquisitions in the short term

3. Air France-KLM, in particular, is unlikely to have much appetite for acquisitions because of the weak financial situation of Air France and its relatively stretched balance sheet;
4. THY Turkish Airlines clearly has ambitions to become a major force in Europe, and has studied various acquisition opportunities, but it is handicapped by its non-EU status, in terms of its ability to gain control and majority ownership of a EU airline;
5. The two largest low cost airlines, easyJet and Ryanair, already account for over 50% of low cost traffic in Europe and have taken share largely at the expense of smaller airlines, rather than via acquisition (except in 3 isolated incidents in order to acquire slots at congested airports), and this is likely to continue;
6. The acquisition of large minority stakes in airlines has proven in Europe to have generally failed to boost shareholder returns.

We therefore expect that most future consolidation in the near term will occur by the smaller airlines down-sizing further with many likely to exit the industry via bankruptcy, such as Cimber Sterling, Malev and Spanair earlier this year.

The Need for Further Market Concentration

Despite few transactions expected in the short-term, however, we would expect Europe to eventually consolidate over the next 10 years to the extent that the US airlines have done over the last 10 years. We doubt, for example, that the 16 potential acquisition candidates identified in the next section will be independent airlines 10 years from now. We would expect some to be absorbed into the three largest flag carrier groupings and some to fail over the period.

Further consolidation in the long-run is inevitable among European airlines because all except the top 6 (Air France-KLM, easyJet, IAG, Lufthansa, Ryanair and Turkish Airlines) are sub-scale and could eventually fail, as many have already done so

The European airline industry remains too fragmented, in our view, despite the formation of three major flag carrier groupings. It is interesting to note that KLM said back in the early 2000s that it was too small to sustain itself as an independent airline and had to seek out a merger partner in order to attain scale. Those comments were made when it was generating revenue of over €6bn annually. Apart from Air France-KLM, IAG and the Lufthansa group, no other airline in Europe generates annual revenue of more than €6bn, suggesting every other airline is below minimum efficient scale. The exceptions are easyJet and Ryanair, which have a different business model to the flag carriers. Also, THY Turkish Airlines at €5.3bn revenue in 2011, growing rapidly and with a competitive cost structure, is also likely to be at or above minimum efficient scale.

Market concentration of the top 5 airline groups in Europe has increased significantly from 59% market share of passenger traffic (in terms of revenue passenger kilometers - RPKs) in 2003 to 69% in 2011, as a result of the Air France-KLM merger in 2004, the Lufthansa-Swiss-Austrian-BMI-Brussels Airlines consolidation and the creation of IAG from British Airways and Iberia (see Figure 6). In 2011, the top 5 airline groups comprised of:

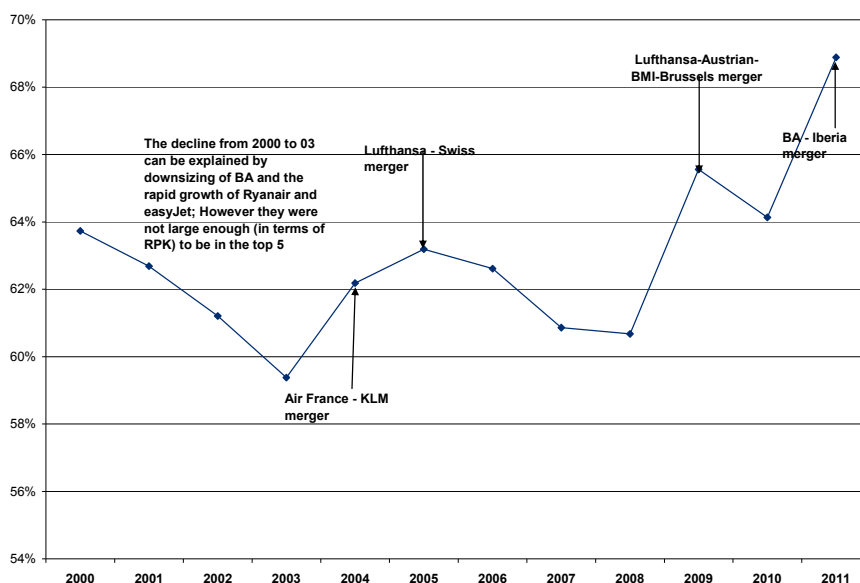
1. Air France-KLM Group (215.0bn RPKs);
2. Lufthansa Group (206.9bn RPKs);
3. International Consolidated Airlines Group – IAG (168.6bn RPKs);
4. Ryanair (91.7bn RPKs);

5. easyJet (61.3bn RPKs).

Running a close sixth was THY Turkish Airlines, which generated 58.9bn RPKs in 2011, accounting for 5.5% points of the 31% of traffic carried by the remaining European airlines. Apart from THY Turkish Airlines, the bulk of the remaining 31% of passenger traffic is carried by the 16 potential acquisition candidates that we identify in the next section.

Passenger traffic market share of the top 5 European airline groups dipped from 64% in 2000 to 59% in 2003 but has since risen to 69% in 2011 as a result of merger activity

Figure 6. European Airlines – Top 5 Airlines Market Share of European Airline Passenger Traffic (% of Revenue Passenger Kilometers)



Source: Citi Research

Figure 7. European Airlines – 16 Potential Consolidation Candidates

Airline (2011 Revenue)	Attractions	Issues
Aegean Airlines (€680m) - Star Alliance	<ul style="list-style-type: none"> - Continues to take market share from Olympic Airways - Good relationship with Lufthansa - Well managed - Competitive cost base - Net cash on balance sheet 	<ul style="list-style-type: none"> - Uncertainty over Greece remaining in the Euro-zone - Very depressed market in Greece - Even inbound tourism is declining - High airport charges at Athens - Recent poor profitability
Aer Lingus (€1.29bn) - Unaffiliated	<ul style="list-style-type: none"> - Good location for and niche on North Atlantic routes - Traffic feed to long-haul routes East and South - London Heathrow slots - Profitable track record - Strong balance sheet 	<ul style="list-style-type: none"> - Large minority stake of Ryanair (29.8%) - Possibility of Etihad acquiring Government's 25 % stake - Uncertainty over a potential pension deficit
Air Berlin (€4.23bn) - oneworld	<ul style="list-style-type: none"> - Number 2 airline in Germany, Europe's largest air travel market - Particular strength in Berlin and Dusseldorf 	<ul style="list-style-type: none"> - Large minority stakes of Etihad (29%) and ESAS (16.5%) - Limited presence in Frankfurt - Legacy labour union issues - Poor financial track record
Air Europa (€1.31bn) - SkyTeam	<ul style="list-style-type: none"> - Strong inbound tourism in Spain - Reasonable profit track record 	<ul style="list-style-type: none"> - Spain a poor market currently with over-capacity - Mainly a leisure airline and owned by Globalia leisure group - Relatively small route network
Alitalia (€3.48bn) - SkyTeam	<ul style="list-style-type: none"> - Largest airline in Italy - Strong inbound tourism - Long-haul traffic feed due to its under-developed intercontinental network - Financially restructured post-bankruptcy 	<ul style="list-style-type: none"> - Historically has lost market share in its home market - Increasing low cost competition from easyJet and Ryanair - Large minority stake of Air France-KLM (25%) - Other shareholders may have unrealistic valuation expectations - Shareholder lock-up until Jan 2014 unless an IPO after Jan 2012 - Legacy union and financial issues
Brussels Airlines (€1.04bn) - Star Alliance	<ul style="list-style-type: none"> - Brussels an attractive niche market for high yield Government-related travel - Strong African network - Relatively strong balance sheet 	<ul style="list-style-type: none"> - Large minority stake of Lufthansa (45% with option to buy remaining 55%) - Unprofitable since 2008
CSA (€620m) - SkyTeam	<ul style="list-style-type: none"> - Inbound tourism - Undergoing re-structuring - East European network from its hub at Prague 	<ul style="list-style-type: none"> - Strong competition from low cost airlines (e.g. Wizz Air) - Revenue decline of 21% in 2011 - EC state aid investigation - Failed sale to Air France-KLM in 2009 - Loss-making
Finnair (€1.97bn) - oneworld	<ul style="list-style-type: none"> - Strong niche on routes to/from Asia - Limited intercontinental competition at Helsinki - In the process of out-sourcing regional and short-haul flying to reduce cost 	<ul style="list-style-type: none"> - Government owns a 55.8% stake, requires parliamentary approval to go below 50% - Weak recent profitability track record
LOT (€770m) - Star Alliance	<ul style="list-style-type: none"> - Access to Polish market - East European network from its hub at Warsaw 	<ul style="list-style-type: none"> - Recent failure to sell a stake to THY Turkish Airlines on EU ownership grounds - Increasing low cost competition from Ryanair and Wizz Air - Unprofitable track record but improving
Meridiana (€860m) - Unaffiliated	<ul style="list-style-type: none"> - Second largest Italian airline after merging with Eurofly and Air Italy 	<ul style="list-style-type: none"> - Mainly leisure focused - Poor financial track record
Olympic Air (€240m) - Unaffiliated	<ul style="list-style-type: none"> - Restructured from old 'Olympic' 	<ul style="list-style-type: none"> - Uncertainty over Greece remaining in the Euro-zone - Very depressed market in Greece - Even inbound tourism is declining - EC prevented merger with Aegean - Continues to lose market share to Aegean - Poor financial track record - High airport charges at Athens
SAS (€4.12bn) - Star Alliance	<ul style="list-style-type: none"> - Scandinavia is an attractive and wealthy market - Successful restructuring - Wideroe Norwegian regional airline very profitable - Tax loss asset 	<ul style="list-style-type: none"> - 50% owned by 3 Governments - Sub-scale intercontinental network - Strong competition from Norwegian and Finnair - Copenhagen only an effective hub for Scandinavia, not pan-Europe - Poor relations with labour unions - Expensive debt
TAP (€2.3bn) - Star Alliance	<ul style="list-style-type: none"> - Strength on routes to/from Brazil and West Africa - Strong inbound tourism - Reasonable profit track record - Strong management team track record 	<ul style="list-style-type: none"> - Poor state of Portuguese economy - Potential for more competition from Iberia's Madrid hub - High level of debt and capitalised leases
TAROM (€270m) - SkyTeam	<ul style="list-style-type: none"> - East Europe route network 	<ul style="list-style-type: none"> - Majority Government owned - Poor financial track record
Virgin Atlantic (€3.3bn) - Unaffiliated	<ul style="list-style-type: none"> - Strong long-haul presence on major routes ex-London - Strong brand name and in-flight product - Not yet a member of a global alliance 	<ul style="list-style-type: none"> - Competition from BA likely to step up following BMI acquisition - Limited ability to grow due to slot constraints at Heathrow - No short-haul presence and limited connecting traffic - Singapore Airlines' 49% stake has used up all of its non-UK ownership allowance - Brand name owned externally and links with Virgin America and Virgin Australia - Historically profitable but very low margins
Vueling (€860m) - Unaffiliated	<ul style="list-style-type: none"> - Strong niche at Barcelona - Strong inbound tourism - Benefiting from collapse of Spanair - Low cost structure 	<ul style="list-style-type: none"> - Spain a poor market currently with over-capacity - Large minority stake owned by Iberia/IAG (45%)

Source: Citi Research

Potential Merger and Acquisition Candidates

We identify 16 possible acquisition candidates, which between them generated €27bn of revenue in 2011 – more than the revenues of Air France-KLM, IAG and Lufthansa

We can identify 16, mainly unlisted, airlines that could be considered acquisition candidates by one of the three largest flag carrier groups. We show these airlines in Figure 7, along with their revenue in 2011, global alliance affiliation, key attractions and key issues. To highlight just how fragmented Europe's airline sector is, between them these 16 potential acquisition candidates generated over €27bn of revenue in 2011. This is larger than Lufthansa's combined airline and cargo revenue of €24.4bn, Air France-KLM's €23.4bn and IAG's €14.9bn.

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Aer Lingus could be of interest to all 3 of the major European airline groupings but is complicated by the ongoing take-over bid by and 29.8% stake of Ryanair and the possibility of Etihad Airways buying the Government's 25% stake

Aer Lingus – Ryanair vs. Etihad, the EC and the UK OFT

Ryanair has already acquired a 29.8% stake in 2006, shortly after Aer Lingus' privatisation. Ryanair has now made three attempts to make a general offer for the rest of the shares, the first two of which were blocked by the European Commission (EC) on competition grounds – claiming that a merged Aer Lingus/Ryanair would control c.80% of the seat capacity at Dublin Airport. Its third offer was made in June 2012. We expect another rejection by the EC. In the mean time, the UK's Office of Fair Trading (OFT) is investigating whether or not Ryanair should be obliged to dispose of its 29.8% stake, a situation that the EC has so far permitted. Aer Lingus claims Ryanair is a disruptive shareholder that is affecting Aer Lingus' ability to compete with Ryanair, its main competitor (and largest shareholder).

Complicating matters is the 25% shareholding of the Irish Government and a recent 2.99% stake taken by Etihad Airlines of Abu Dhabi. Etihad has said that it would be interested in acquiring the Government stake. However, Etihad would be unable to increase its stake above 30% or acquire Ryanair's stake of 29.8% because of a maximum non-EU-ownership limit of 49%. If Etihad took over the Government's stake, the three major European flag carrier groups may become even less interested in acquiring Ryanair's stake (should it be forced to sell it) unless Etihad were to get closer to one of them. Etihad already has a relationship with Air Berlin (see below), who is in the process of joining the oneworld alliance (in which IAG is a dominant member), and it is reportedly in talks with Air France over a code-share relationship.

Etihad is currently not a member of one of the three global alliances and is unlikely to join one, in our opinion. oneworld would be ruled out because of Etihad's 5% stake (and intention to increase this to 10%) in Virgin Australia, the main competitor of Qantas, and Star Alliance would be ruled out because of its 29% stake in Air Berlin, Lufthansa's main competitor. That leaves only SkyTeam Alliance, of which Air France-KLM is a member.

Air Berlin is the largest of our potential candidates and offers attractive German market experience but is complicated by Etihad Airways' 29.2% stake and ESAS' 16.5% stake

Air Berlin – Etihad to the rescue but cannot increase stake further

Air Berlin is potentially an acquisition candidate, as already demonstrated by its willingness to raise equity from other airlines – ESAS, the owner of Turkey's Pegasus Airlines, who owns a 16.5% stake, and Etihad, who owns a 29.2% stake via a €73m equity injection, along with a \$255m loan. But, similarly to Aer Lingus, the presence of Etihad as a large shareholder is likely to deter another major European airline from acquiring a majority stake unless it too had an alliance relationship with Etihad. Should Etihad join the SkyTeam alliance, the 'best fit' given its existing equity stakes in airlines, then this could make Air France-KLM a possible suitor for Air Berlin. But this would be complicated by the fact that Air France-KLM

has limited financial resources and Air Berlin would have to reverse its current process of joining the oneworld alliance.

We would expect Alitalia to be absorbed into 25% shareholder, Air France-KLM, after the existing shareholder 5 year shareholder lock-up ends in 2014 but there could be a valuation issue and Air France-KLM is unlikely to be able to afford to pay cash to Alitalia's other industrial and family group shareholders for their 75% stake

Alitalia – Air France-KLM likely suitor but issues over valuation and financing

We would expect Alitalia to eventually be absorbed by its 25% airline shareholder, Air France-KLM. Air France-KLM originally made an investment of €323m in January 2009 into the 'new Alitalia', the merger of selected assets, routes and staff from the 'old Alitalia' with the second largest Italian airline, Air One. It is the third largest of our identified candidates after Air Berlin and SAS. Alitalia is a member of the SkyTeam alliance, participates in SkyTeam's joint venture on North Atlantic routes and feeds long-haul traffic to Air France in Paris to inter-continental destinations not served by Alitalia.

The other 75% shareholders of Alitalia are various industrial and family groups in Italy. There is a 5 year lock-up on all shareholders until January 2014, unless Alitalia conducts an IPO after January 2012 – which seems highly improbable in current equity market conditions. Therefore, the other shareholders are likely to be looking for an exit from 2014 onwards.

We believe the problem is going to be valuation. Industrial shareholders paid 1x book value for their €847m stake in Alitalia in 2009 and are likely to want to seek an exit at a similar multiple. But currently Air France-KLM cannot afford to pay this amount, given its own stretched financial resources and would find it hard to justify to its own shareholders why it is buying a European airlines at a Price/Book of 1x when its own multiple is 0.2x and the average of the flag carrier airlines 0.5x. We would expect Air France-KLM to offer new shares in itself to these 75% shareholders of Alitalia at an exchange ratio based on its own Price/Book multiple. If this is not acceptable to Alitalia's shareholders, then they might look elsewhere to sell their stakes, a complicated situation given Air France-KLM's 25% stake. Alternatively, Air France could possibly offer some or all of its existing stake in Amadeus, currently worth c.€600m, if it has not already sold it, in exchange for the balance of Alitalia. Anyway, we have almost 18 months to wait before the future of Alitalia's ownership becomes an issue.

We expect Lufthansa to exercise its option to purchase the remaining 55% stake in Brussels Airlines by 2014, assuming that Brussels Airlines recovers its profitability by then

Brussels Airlines – What is Lufthansa waiting for?

Brussels Airlines is likely to be taken over eventually by Lufthansa, currently its 45% shareholder with an option to buy the remaining 55%. Lufthansa originally purchased its stake in 2009 for €65m. The other shareholder is a consortium of Belgian investors. Lufthansa has so far had two opportunities to exercise its option over the remaining 55% stake but has so far chosen not to, most likely because Brussels Airlines has been loss-making and Lufthansa does not want to dilute its own operating profit, especially given the large losses of Austrian Airlines and BMI. Lufthansa has two more opportunities to exercise its options – in spring 2013 and spring 2014. In 2010, Lufthansa claimed joint synergies of €60m p.a. as a result of its partnership with Brussels Airlines, so we would expect it to exercise its option by 2014.

The Czech Government has been trying to privatise CSA Czech Airlines since 2009 but so far there has been little interest due to its losses and an EC investigation into state aid

CSA Czech Airlines – Little external interest

The Czech Government had tried to privatise CSA in 2009 but the selected bidder (Air France-KLM and a consortium of Czech financial investors) pulled out after being selected due to the downturn in the airline sector, negatively affecting both Air France-KLM and CSA. Since then, CSA's profitability has got worse and a restructuring programme is currently being investigated by the European Commission for possible breaches of EU state aid rules concerning a €94m loan from the Government.

Until the EC investigation is finalised and until both Air France-KLM and CSA recover profitability, we do not believe that CSA would be an attractive acquisition candidate by another airline. The other bidding airline in the 2009 privatisation process was Icelandair, who could be interested in combining CSA with Travel Service, the second largest Czech airline, in which Icelandair owns a 30% stake. However, Icelandair sold a 70% stake in Travel Service in 2010, so any decision on a possible combination with CSA would have to be taken by its 70% shareholder, the Unimex Group.

Finnair could be sold by the Finnish Government but we doubt that neither it nor the most likely buyer, IAG, are in a hurry to do so

Finnair – Maybe an IAG target but no one is in a hurry

The Finnish Government could sell all or part of its 55.8% stake in Finnair but we are not aware of any such move, despite it being discussed in the media from time to time. For the state to go below 50% would require agreement in parliament.

If it chose to sell a stake, the most natural purchaser would be IAG, because of Finnair's membership of the oneworld alliance and because IAG has made a stronger presence on Asian routes one of its main acquisition criteria (see Figure 8). Given IAG's current digesting of BMI and Iberia, we doubt it is in a hurry to invest in Finnair, especially as it already receives revenue synergies from their oneworld alliance membership. But, like with the Austrian Government and Austrian Airlines, any attempt by the Government to invite others to bid could force IAG's hands.

The Government's main concern is to make sure that air services to, from and within Finland are maintained by a would-be acquirer. Meanwhile, Finnair is busy trying to outsource various parts of its operation to lower cost providers, including catering, maintenance, regional and short-haul flying (e.g. its JV with Flybe, Flybe Nordic, on regional routes), so that it can concentrate on its most profitable long-haul activities, especially its niche on Asian routes.

Figure 8. International Airlines Group – Strategic Criteria Applied to Potential Acquisition Candidates in Europe

Strategic Objective (in order of importance)	Aer Lingus	BMI	Finnair	LOT	SAS	TAP
1. Leadership in IAG's main hubs (London, Madrid)	Yes (LHR slots)	Yes (LHR slots)	No	No	Partly (LHR slots)	No
2. Leadership across the Atlantic (North, Central and South)	Yes	No	No	No	No	Yes
3. Stronger Europe-to-Asia and Middle East position in critical markets	No	Partly	Yes	No	No	No
4. Grow share of Europe-to-Africa routes	No	Partly	No	No	No	Yes
5. Stronger intra-Europe profitability	No	No	No	No	No	No
6. Competitive cost position across IAG's businesses	Via synergies	Via synergies	Via synergies	Via synergies	Via synergies	Via synergies

Note: Shading indicates positive fit with IAG's key strategic objectives. Other potential airlines would have a similar profile to that of LOT – e.g. Air Berlin, CSA and TAROM. We exclude Virgin Atlantic Airways.

Source: Citi Research

The recent attempt to privatise LOT of Poland has been thrown into disarray following the withdrawal of the selected bidder, THY Turkish Airlines, on grounds of EU ownership requirements

LOT Polish Airlines – Privatisation attempt #3?

The Polish Government has been trying to privatise LOT since 1992, initially selling a minority stake to SAir Group in 1999. However, the stake reverted back to the State when SAir Group went bankrupt in 2001.

The Polish Government initiated a privatisation process for LOT in 2011. LOT is owned 68% by the Government, 25% by a regional economic fund and the balance by management and staff. Turkish Airlines (THY) was selected as the preferred partner, although there did not appear to be much interest from other airlines.

THY in June 2012 decided to withdraw because of EU ownership requirements, which could have inhibited LOT's route rights if THY took a majority stake. THY was reluctant to settle with a minority stake. We are surprised that THY had not been able to get legal comfort on this issue prior to being selected by the Polish Government, suggesting it may have had 'cold feet' on other issues, such as LOT's loss-making track record, at the last moment.

The Government has not yet announced how it plans to continue with LOT's privatisation. Lufthansa has voiced interest in the past but is likely to be unwilling to buy yet another loss-making airline, given its experiences of Austrian Airlines and BMI. At issue is the extent to which Lufthansa values its existing revenue synergies with LOT from its membership of the Star Alliance. A take-over by THY of LOT would have been handy for Lufthansa as it would have kept LOT in the Star Alliance without Lufthansa taking on additional financial risk. Like with Austrian Airlines, Lufthansa could be forced to look at LOT should the Government offer it to sale to an airline in another alliance. However, we would not expect either Air France-KLM or IAG to be interested in LOT.

A Russian airline could possibly be interested in acquiring LOT but it would face the same EU ownership issue as THY faced. Financial Times has reported that the Polish treasury is currently considering an IPO for LOT and a potential investment by Air China.

SAS is a potential acquisition candidate but, up to now, it has generated little interest by other airlines because of its 50% Government ownership (by 3 different Governments) and so far failure to demonstrate meaningful profitability and free cash flow improvements despite years of cost and balance sheet restructuring

SAS Scandinavian Airlines – State of inertia of 3 Government owners

Lufthansa has also been cited by the media as the airline group most likely to be interested in SAS should its three Government owners (Denmark, Norway and Sweden). This is because SAS is also in the Star Alliance and Lufthansa would risk losing its existing Star Alliance benefits should SAS be taken over by another airline outside of the Star Alliance. After Air Berlin, SAS would be the second largest airline acquisition candidate in terms of revenue.

Lufthansa has repeatedly denied its interest, although we note it made the same comments about Austrian Airlines, on the grounds that it already receives revenue synergies from their Star Alliance partnership, right up until it made the winning bid.

SAS underwent two equity rights issues in 2009 and 2010, after which the respective Governments, who participated in full, said that further capital into SAS would have to come from private sources. Both the Norwegian and Swedish Governments have said they would be open to selling their stakes. The most reluctant to do so is the Danish Government, understandably so because SAS's main operating base and hub is at Copenhagen Airport.

Getting three different Governments to co-operate to effect a sale of SAS is therefore likely to be a hindrance and the concern is that they may only feel obliged to sell if and when SAS is in a much more financially critical condition than it is now.

The problem for SAS is that, up to now, there has been little merger interest from other airlines because it has so far failed to demonstrate meaningful profitability and balance sheet, despite years of restructuring and equity injections, and there are worries of over-capacity in Scandinavia due to the aggressive growth ambitions of Norwegian Air Shuttle. We think airlines could become more interested should it start to improve profitability and free cash flow meaningfully, which we expect from 2013.

IAG has become less vocal about its interest in TAP Air Portugal because of LAN's acquisition of TAM providing IAG with oneworld alliance access to Brazil – but Lufthansa could become interested due to the potential loss of TAM from the Star Alliance

TAP Air Portugal – Brazil its key attraction

The Portuguese Government recently appointed banks to help privatise national airline, TAP Air Portugal.

IAG had originally expressed interest in looking at TAP because its routes to/from Brazil and West Africa (i.e. Portuguese-speaking countries) would complement those of Iberia, whose focus is naturally on Spanish-speaking countries. But IAG's CEO has recently made comments, suggesting that IAG is only luke-warm regarding TAP. We think this is because IAG's main oneworld partner in Latin America, LAN of Chile, has recently completed its merger with TAM of Brazil to form LATAM. If the combined entity decides to stay in the oneworld alliance, which we expect, this would mean TAM dropping its Star Alliance membership and thus joining oneworld alliance. This would then provide opportunities for IAG in the Brazilian market. Indeed, if IAG were to proceed in acquiring TAP Air Portugal, there could be regulatory issues because TAM and TAP would have a monopoly on routes between Portugal and Brazil. We note, however, both TAP and TAM are currently in the same alliance anyway and already code-share on each other's services.

Should TAM drop out of the Star Alliance, then we would expect Lufthansa to become interested in TAP Air Portugal in order to help recoup the loss of the Star Alliance's Brazilian exposure. Air France-KLM is unlikely to be interested because it

is already the strongest European airline on routes to and from Latin America, in terms of market share. A Latin American airline could be interested in taking a stake in TAP, especially an entity with important Brazil exposure such as LATAM Airlines of the Synergy Group. However, such a stake cannot be more than 49% in order to meet EU majority ownership requirements, similar to the LOT/THY Turkish Airlines issue discussed above.

Singapore Airlines' 49% stake in Virgin Atlantic has effectively been up for sale for 5 years but has so far attracted little interest

Virgin Atlantic – at a strategic cross-roads

Virgin Atlantic has been reviewing its strategic position for some time now, ever since American Airlines was given anti-trust immunity for its joint venture with British Airways on North Atlantic routes in 2010. Virgin Atlantic's strategic position has also been threatened by the recent purchase of BMI by British Airways, which will enable BA to strengthen its position at London Heathrow and expand its long-haul offering.

A critical issue for Virgin Atlantic is whether it should seek to join a global alliance (either SkyTeam or the Star Alliance) or remain independent.

Complicating the picture is a 49% stake purchased by Singapore Airlines in 1999 for £600m. The partnership has failed to provide much benefit to Singapore Airlines, who has made it clear the stake is for sale and has been so for c.5 years. Singapore Airlines' stake uses up all of Virgin Atlantic's non-UK ownership quota, making it difficult, for example, for Virgin Atlantic to conduct an IPO as only UK investors could participate.

Meanwhile, Virgin Atlantic recently stated that global alliance issues have been delayed until it is known whether it can obtain runway slots freed up by BMI as part of BA's regulatory settlement for its purchase. It is considering operating routes to Aberdeen, Edinburgh, Cairo, Riyadh and Moscow.

IAG's 45% stake in Vueling may be non-core and therefore possibly for sale, although it is not obvious who a potential bidder could be

Vueling – Not obvious who could be interested

Vueling of Spain is a possible acquisition candidate because it is unclear if its relatively new owners, IAG, view this no-frills, low cost carrier (LCC) as a core business. British Airways' favoured approach in the past had been to focus on cost cutting in its core mainline business and dispose of in-house LCCs, such as Go in 2002.

Vueling had temporarily performed some out-sourcing of flying at Iberia's Madrid hub in 2011 but is prevented to do so on a permanent basis by Iberia's labour contract with the pilot union, SEPLA. But this contract did not prevent the establishment of a new airline. Hence, IAG set up Iberia Express to operate many Iberia short-haul services with a lower cost structure and better labour terms. Vueling could therefore be surplus to requirements for IAG.

However, it is not obvious who would be interested in purchasing Vueling. easyJet and Ryanair have only made airline purchases in order to gain runway slots at congested airports. But Barcelona and Madrid airports are not currently slot constrained.

The media have speculated on Qatar Airways being a potential buyer because it reportedly looked at buying a stake in Spanair prior to its bankruptcy earlier this year. But Vueling's no-frills business model is different to the full service model of

Qatar Airways and it is not clear to us what a Barcelona-domiciled airline, either Spanair or Vueling, could offer a Middle Eastern airline.

Near Term Consolidation Activity Likely to be Slow

From the discussion above about potential candidates, we derive the following conclusions that suggest further consolidation activity is likely to be slow:

- Despite 100 equity transactions and airline consolidations since the mid-1980s and despite the formation of 3 mega flag carrier airline groups and two dominant low cost airlines over the last 10 years, the European airline industry remains fragmented and, for many, sub-scale.
- We identify up to 16 potential further transactions, involving the second and third tier airlines in Europe, and no doubt there will be even more at even smaller airlines.

Further consolidation activity in Europe is likely to be slow due to (i) the current mega-groups being too busy restructuring previous loss-making acquisitions, (ii) large minority stakes held by airlines unable by EU and national ownership requirements to make full take-over bids, and (iii) the presence of large Government stakes

- Further consolidation activity, however, is likely to be slow in the medium term as the three mega flag carrier airlines consolidate and restructure their recent purchases and deal with near-term losses rather than taking on new acquisitions.
- The consolidation process could also be slowed and complicated by the existence of several large minority stakes held by airlines that are unable by regulatory reasons to make bids for majority control, therefore potentially thwarting interest from other airline investors – e.g. Ryanair's 29.8% stake in Aer Lingus, Singapore Airlines' 49% stake in Virgin Atlantic and Etihad's 29.2% stake in Air Berlin.
- Most further consolidation activity is likely to be along existing global alliance lines because (i) relationships are already in place, (ii) the 3 mega flag carrier groupings feel obliged to purchase alliance partners, should they be put up for sale, in order to preserve existing alliance revenue synergies, and (iii) some initial minority stakes are already in place with options to take majority control (e.g. Air France-KLM/Alitalia and Lufthansa/Brussels Airlines).
- EU and national ownership requirements could also slow the consolidation process and mean that Governments remain heavily invested in their national airlines in order to ensure majority domestic ownership. Apart from the US, Switzerland and a few selected other countries, most non-EU countries still only recognise specific country, rather than EU, ownership in their bilateral air traffic agreements. Intra-EU (and Switzerland) airline mergers have been made possible by the creation of Boards of Directors that have majority domestic voting control, despite the airline being majority foreign owned. For example, Swiss is majority German owned but its Board has majority Swiss citizen votes. Even in this case, Switzerland's bilateral agreements had to be re-negotiated with many other countries to reflect this. In addition, Government sellers may wish to preserve the routes and activities of their national airlines and make this a pre-condition of any sale, thus reducing the attractiveness to would-be bidders. Non-EU airlines may find investing in EU airlines too much of a legal risk, as THY Turkish Airlines found when it withdrew from its planned take-over of LOT.
- Some airlines may fail to be sold or privatised because of their poor financial situations and Governments are prevented from making further investments on

EU state aid rule grounds. Some airlines, even Government owned ones, could consequently fail, as was the case with Malev earlier this year.

Alternatives to Cross-Region Mergers

The existence of EU and national ownership requirements throughout the world, as per bilateral air traffic agreements, is likely to be a drag on airline consolidation activity, especially between airlines in different regions. Here we discuss some alternative forms of consolidation in order to get around these ownership restrictions.

Alliance partnerships – only 3 significant European airlines unaligned

The three global alliances are well established and have been in place for over 12 years (Star Alliance founded in 1997, oneworld in 1999 and SkyTeam in 2000). See Figure 9 for a list of current and future member airlines globally.

Within Europe, there are few unaligned airlines left, the largest ones being Aer Lingus, Transaero of Russia and Virgin Atlantic – excluding of course easyJet and Ryanair, who have no desires to join a global alliance.

Aer Lingus used to be a member of oneworld but withdrew in 2007 to focus on its transformation to a no-frills airline on short-haul routes. Under the current management, Aer Lingus is likely to be unwilling to re-join an alliance on the grounds of high initial investment and its preference to be 'open access' – i.e. code-share with multiple airlines, without being constrained to just alliance members.

As we have discussed, Virgin Atlantic is currently considering joining an alliance, of which only SkyTeam and Star Alliance would be eligible, given British Airways' presence in oneworld.

Most future airline recruitment to the global alliances is likely to be in China, India, the Middle East and Russia, where there are currently sizeable airlines that are not aligned. The largest of the non-aligned airlines, Emirates Airline, has made it clear, however, that it does not intend to join a global alliance given the global success of its own route network. Transaero is reportedly examining its alliance options, although realistically its only choices are to remain independent or join the Star Alliance because Aeroflot is a member of SkyTeam and S7 a member of oneworld.

Global alliances have been the main answers to cross-border airline consolidation, given national ownership restrictions throughout the world

Aer Lingus and Virgin Atlantic are the largest non-aligned airlines in Europe

Most future airline recruitment to the global alliances is likely to be in China, India, the Middle East and Russia

Figure 9. Airline Global Alliances – Membership by Region, 2012

Region/Alliance	oneworld	SkyTeam	Star Alliance
Africa/Middle East		Kenya Airways Saudi Arabian Airlines	Egyptair Ethiopian South African Airways
Asia-Pacific	Cathay Pacific Japan Airlines Qantas	China Airlines China Eastern China Southern Korean Air Vietnam Airlines	Air China Air New Zealand ANA Asiana Singapore Airlines Thai Airways
Europe	Air Berlin British Airways Finnair Iberia S7	Aeroflot Air Europa Air France Alitalia Czech Airlines KLM TAROM	Adria Aegean Airlines Austrian Airlines Blue 1 Brussels Airlines Croatia Airlines LOT Polish Airlines Lufthansa SAS Scandinavian Airlines Swiss TAP Air Portugal THY Turkish Airlines
Latin America	LATAM (LAN)	AeroMéxico Aerolineas Argentinas	Avianca-TACA Copa Airlines
North America	American Airlines	Delta	Air Canada United US Airways
Future Members Expected to Join	Kingfisher Airlines (on hold) Malaysia Airlines Sri Lankan Airlines	Aerolineas Argentinas Garuda Indonesia Middle East Airlines Xiamen Airlines	EVA Air Shenzhen Airlines
Passenger Volume	284.6m	487m	648.8m
Number of Destinations	750	926	1,290

Source: oneworld, SkyTeam, Star Alliance

Already established and delivering benefits on North Atlantic routes, we would expect further JVs in other route areas in order to increase global alliance synergies, manage capacity better and help ensure that alliance members remain within their alliances

Joint ventures – North Atlantic lessons to extend to other regions

The main JVs are on North Atlantic routes and predominantly between European and North American airlines in the same global alliance, as shown in Figure 9. Air France-KLM has the deepest joint venture on North Atlantic routes, having initially started in 1993 between KLM and Northwest Airlines, and focused on profit sharing – unlike the oneworld and Star Alliance North Atlantic JV's, which are based on revenue sharing.

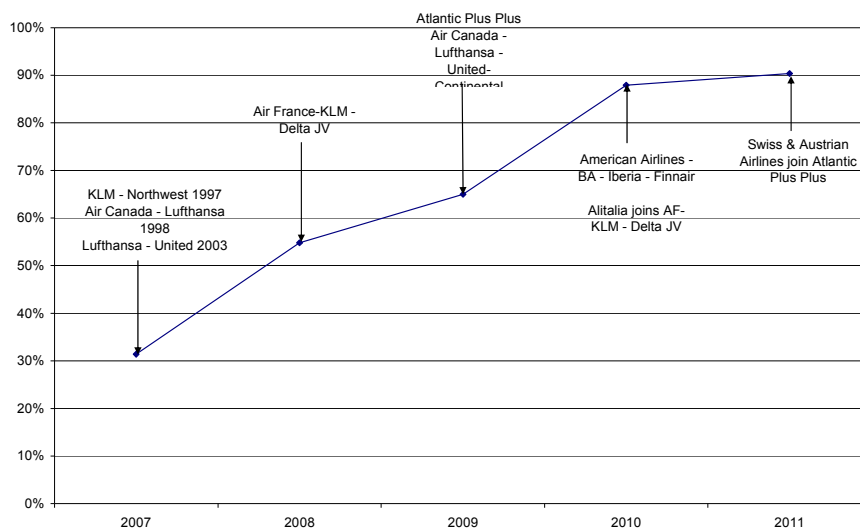
The airlines are generally coy about the benefits they derive from these JV's, probably because they have reluctantly been granted anti-trust immunity by the US and EC authorities, who reserve the right to re-visit this immunity should there be any signs of abuse. However, IAG has targeted annual benefits of €150m by 2015 based on market share gains, especially of premium traffic. As of the first 6 months of its JV, it claimed a 0.9 point increase in trans-Atlantic premium market share to 25.8% and a 0.1 point increase in trans-Atlantic non-premium market share to 19.5%. We estimate that these targeted synergies would equate to c.4% of IAG's North Atlantic revenue by 2015, which is consistent with the 4-5% claimed by other North Atlantic JV's. We believe that these North Atlantic JV's have the added benefit of disciplining capacity.

The next set of joint ventures have started on routes to/from Asia, although at the moment they are country-specific – e.g. the BA/Qantas JV on routes to/from

Australia and New Zealand (which has been in place since 1995) and Europe-Japan JV's concerning BA/JAL to/from Japan being planned. These and other future JV's are unlikely to be nearly as large or as important as the North Atlantic JV's but they are a necessary step to increase global alliance synergies and help ensure that global alliance partners remain within their alliances rather than defect.

Anti-trust immune joint ventures now account for c.90% of North Atlantic passenger traffic, up from 30% in 2007, enabling significant capacity discipline and potential pricing power on what is the most profitable route area for many European airlines

Figure 10. North Atlantic Joint Ventures - % Share of Passenger Traffic, 2007-2011



Source: Company Reports, Association of European Airlines and Citi Research Estimates

Figure 11. Major European Airline Joint Ventures by Region, 2012

Region	oneworld	SkyTeam	Star Alliance
North Atlantic	Joint Business Agreement (2011): - American Airlines - British Airways - Iberia US\$7.9bn revenue	North Atlantic (2009): - Air France - Alitalia - Delta Air Lines - KLM US\$11.5bn revenue	A++ (2010): - Air Canada - Austrian Airlines - Lufthansa - Swiss - United Continental US\$10bn revenue
Asia Pacific	Europe-Australia JSA (1995): - British Airways - Qantas Europe-Japan planned (2012): - British Airways - Japan Airlines (JAL)	Europe-China planned (2012): - Air France - China Eastern - China Southern	Europe-Japan (2012): - ANA - Lufthansa - Austrian (to join) - Swiss (to join)
Latin America	Europe-Latin America (2006): - Iberia - LAN Ecuador - LAN Peru		
Europe			Germany-Scandinavia (1995): - Lufthansa - SAS
Africa		Africa-Europe-US (1997): - Kenya Airways - KLM	

Source: Company Reports

25

Having made a few minority investments in European airlines, we could expect some more, especially with second tier airlines, as Etihad and Qatar Airways strive to establish relationships in Europe and elsewhere in order to boost traffic feed to their global hubs in the Gulf

Inward minority stakes – What are Etihad and Qatar up to?

These refer to the various equity stakes in European airlines taken by non-European airlines. The first was Singapore Airlines' purchase of a 49% stake in Virgin Atlantic in 1999, which we have already discussed and concluded has done nothing for Singapore Airlines, either strategically or financially.

The most recent inward investments have been Qatar Airways' purchase of a 35% stake in cargo airline, Cargolux, and Etihad's purchase of a 29.2% stake in Air Berlin in 2011 and a 2.99% stake in Aer Lingus in 2012. Etihad has also discussed the possibility of buying the Irish Government's 25% stake in Aer Lingus and the media have even linked Etihad with Air France-KLM, although Etihad denied the media reports. Qatar Airways also took a look at investing in Spanair at the end of 2011. Etihad has also recently taken a 40% stake in Air Seychelles and a 10% stake in Virgin Australia.

We are somewhat perplexed by these transactions because they do not allow for majority control. We believe that Etihad is trying to leverage its traffic feed at its Abu Dhabi based from throughout Asia, Australasia, the Indian Ocean and Africa and offering such traffic to second-tier European airlines, who hardly fly to such areas, in order so that they can offer a greater range of destinations and higher frequencies to their customers. We would expect the equity stakes to be used to help cement these relationships on the terms of Etihad and Qatar Airways.

In the case of Air Berlin, Etihad injected much needed €73m of new equity and cash as well as providing US\$255m of 5 year debt funding for Air Berlin's pre-delivery

payments. In return, Etihad gets enhanced access to the German and European markets and Air Berlin switched its Dubai flights to Abu Dhabi and stopped flying to Bangkok, Phuket and the Maldives.

The rationale for the investment in Aer Lingus could be that Irish traffic going to/from Asia and Africa has to transfer via a hub somewhere, as Aer Lingus does not fly to these locations, so a stake could help bias this traffic via Abu Dhabi at the expense of other hubs in Europe and the Middle East.

Given the deep financial resources of Abu Dhabi and Qatar, we would expect further inward investments to help cement airline alliances to develop more traffic to/from their global hubs in the Gulf. We would not expect any investments, however, from Emirates, nor from other non-European airlines.

Taking large minority stakes in other airlines has generally not been successful for European airlines and they have been known to undermine alliance and joint venture partnerships

External minority stakes (outside Europe) – Ultimately no value-added

We are generally not in favour of airlines taking large minority stakes in other airlines. Almost all of the 35 unwound equity purchases in our database involved the disposal of large minority stakes after the relevant airline partnership did not work out and 8 involved loss of equity upon bankruptcy.

Synergies tend to be limited under such arrangements because the relationships tend not to be viewed as permanent by management teams. Also, if they involve non-EU airlines, they tend to take up most of the foreign ownership allocation of an airline. For example, British Airways' 25% stake in Qantas restricted the ability of other foreign institutional investors to buy shares in the airline until BA disposed of its stake in 2004 after 11 years.

Finally, these equity stakes can undermine joint ventures and alliances. For example, the KLM/Northwest North Atlantic JV almost ended because of Boardroom disputes at Northwest in the 1990s. A joint venture often may not feel like a 50:50 partnership to the management team of the airline in which an equity stake is owned by its JV partner. This is because the airline that owns the equity stake is perceived to have a greater than 50% share of the JV, by virtue of it sitting on the Board because of its equity stake, potentially resulting in mistrust. This was evident not only with the KLM/Northwest JV but also the BA/US Air alliance in the 1990s, who terminated their alliance. Both stakes have subsequently been sold. Also, they can become a cash drain, as KLM found out when it had to inject c.€37m in the recent rights issue of Kenya Airways, in which it had a 26% stake since privatisation in 1996.

Other bad experiences of investing in airlines outside of Europe were Iberia's various forays in Latin America in the 1990s, in which lost virtually all of its investment, and also SAir Group, former parent of Swissair, that went bankrupt in 2001 in large part due to the liabilities incurred as a result of its large minority investments in various airlines inside and outside of Europe.

We therefore would not like IAG to invest in its US partner, American Airlines, should it emerge from Chapter 11, or in Japan Airlines (JAL) when it undertakes its IPO later this year. The only meaningful rationale for investing in an alliance partner, in our view, is to help prevent the partner from defecting to another alliance, which does not seem a compelling investment rationale. Japan Airlines, for example, almost defected from the oneworld alliance in late 2009 based on Delta Air Lines offering it much needed cash and an equity injection.

Turkey

We expect the M&A activities in the Turkish airline sector to stay relatively muted, mostly due to regulations limiting foreign ownership and partially due to capacity restraints in Istanbul Ataturk Airport (IAA), the busiest airport in Turkey.

We believe the most likely outcome over the next 3-5 years is a consolidation in the sector among the airlines with relatively smaller market shares. We do not expect Turkish Airlines (THY) to be involved in any domestic M&A activity given its already high market share at 75% in IAA.

Market share data from airport state authority (DHMI) at IAA can be summarized as follows for 2011:

A. Domestic

1. THY with 75%
2. Onur Air with 14%
3. Atlasjet with 8%

B. International

1. THY with 68%
2. Atlasjet with 2%
3. Lufthansa with 2%

In addition to THY, Atlasjet and Onur Air, the other two airlines that round up the list of major airlines in Turkey are Pegasus Airlines and SunExpress.

Pegasus, the low-cost-carrier and second largest private airline in Turkey after THY, carried 11.3mn pax in 2011. The company was founded in 1990 focusing on charter flights. Its first domestic scheduled flight was in 2005. Pegasus has reportedly 23% market share in domestic market and 8% in international as of end of 2011.

In April 2009, Pegasus' owner Esas Holding purchased 16.48% stake of Air Berlin. Pegasus and Air Berlin have started code-shared flights since September 2011. Pegasus has reportedly been in talks with Air France for some type of cooperation over a year ago but nothing concrete has come out of the news yet.

SunExpress was founded in 1989 mostly as a charter flight provider between Germany and Turkey. It was the first private airline in Turkey to offer international scheduled flights in 2001. SunExpress started domestic flights since 2006. It carried 7.7mn pax in 2011, representing an increase of 16% yoy. SunExpress is owned equally by Turkish Airlines and Lufthansa.

We believe all airlines in Turkey could become acquisition targets if the 50% foreign ownership limitation is removed at some stage. However, until that occurs, we believe the most likely scenario over the next few years is a merger among two or more of the smaller players such as Onur Air, Atlasjet and potentially Pegasus Airlines. We believe capacity restraints in IAA is also limiting interest in the sector, particularly in the flag carrier segment that IAA serves. The capacity restraints could be removed if there is a new and larger airport built in Istanbul over the next 5-10 years.

Looking into potential investments by airlines based in Turkey, we believe it will also stay relatively limited due to foreign ownership limitations. THY recently stated that it will not proceed further in the process for potential acquisition of Polish LOT Airlines. THY mentioned the foreign ownership limits for non-EU owners as the main reason for its decision. Furthermore, THY also decided to exit its 49% stake in Air Bosnia sighting lack of control becoming an issue in the turnaround prospects of the airline.

For THY, gaining further scale is probably the main reason for entertaining any opportunity for inorganic growth. We also believe THY uses these opportunities to increase its knowledge about different operating geographies and competition as they get into data-rooms as they carry out the feasibility studies.

Rather than a flat out investment by THY in a foreign airline, it is more likely that THY will form a JV airline potentially with a Russian partner airline over the next few years to serve the strong tourism traffic between Russia and Turkey. This would be similar to the strategy followed back in 1989 when SunExpress was founded to cater to the needs of tourists between Turkey and Germany.

Asia / Pacific

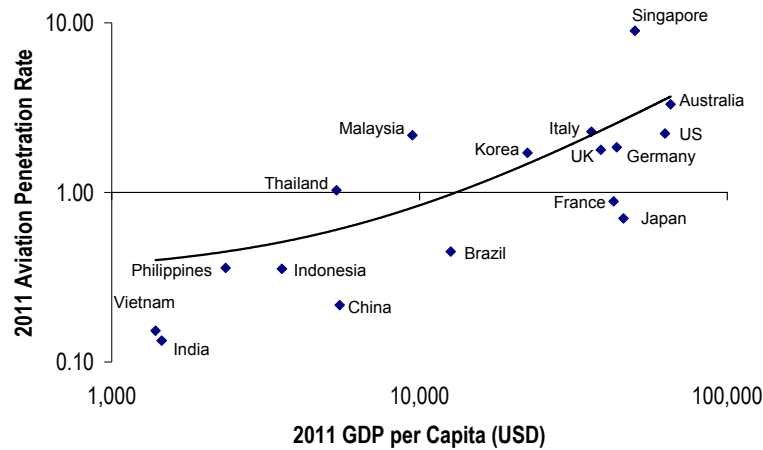
A Shift in Power Dynamics

- **Qantas – from predator to prey:** In late 2011, Qantas was busy exploring options to set up a niche premium regional airline based either in Singapore or Malaysia, to tap into the growing affluence in the region and re-balance its network with a greater tilt towards Asia. Just six months later, in early June 2012, the niche premium regional airline idea still had not taken off, but Qantas had turned to fending for itself in its home Australian turf. Etihad Airways had bought a 5% equity stake in competitor Virgin Australia on 6-Jun, raising the game for the much-coveted Kangaroo route. This announcement was coincidentally at around the same time when Qantas forecast an annual loss (5-Jun) and S&P put Qantas on credit watch (8-Jun). Qantas shares plunged 34% in that one week, to close below A\$1. In just six months, Qantas turned from being a predator (attacking opportunities in Asia) to a prey (defending its core business and fending off possible takeover bids).
- **Asia in a quandary:** These recent developments at Qantas remind us of the dynamic aviation landscape in Asia where corporate actions (which include M&A activities, partnerships, and alliances) may structurally change airlines' fortunes. We think the Asian airline industry is in a quandary – well-positioned to capture the immense growth opportunities in their home and neighboring markets, yet simultaneously having to defend potential market share losses against new entrants, especially when set against an increasingly liberalized aviation regulatory framework. Such an environment often leads to shifts in power dynamics.
- **Analyzing the shift in power dynamics:** In this report, we set out a framework to discuss our views on the changing market structure in the Asian airline industry, including: *i)* the opportunity set available in Asia (low aviation penetration rate, rising purchasing power, improving infrastructure, liberalizing aviation regulations); *ii)* shifts in the aviation landscape (weak yields at premium passenger segment, growth of low-cost carriers and Gulf carriers); *iii)* types of corporate actions in Asian aviation markets and related developments or complexities, *iv)* effect on airline industry structures, and emerging leaders and structural losers.
- **Near- to mid-term trends:** We expect regulatory restrictions on foreign ownership to be slowly relaxed across Asia. In such an environment, we expect: *i)* a proliferation of low-cost airlines in Asia to tap the immense growth opportunities, *ii)* airlines to adopt multiple branding platforms to tap different market segments, *iii)* airlines to pursue partnerships and/or join global alliances under an asset-light expansion strategy; *iv)* airline industry consolidation is largely completed in China, may continue in India, and begin in the Philippines – but success may be mixed; *v)* more cross-border M&A activities within Asia as aviation regulators warm up to foreign carriers taking minority stakes in domestic carriers; *vi)* Gulf carriers to make a stronger presence in Asia and co-exist uncomfortably alongside Asian carriers.
- **Emerging leaders and structural losers:** Within our regional airlines coverage, we like airlines which have large market share in their home country, have little risk of having to deal with destructive competition which may erode their home market share, and have sufficient resources to expand organically in their home country or venture inorganically outside of their home countries. We like the **Chinese airlines** and think **Air China** will win in the longer term given its leadership. **SIA** stands at the intersection of strong headwinds buffeting Asian airlines, yet its strategic response lacks coordination and may be ineffective, in our view. **AirAsia** possesses the *qualities* of a long-term emerging leader, but we remain cautious on the execution of its Pan-Asian footprint. **Cathay Pacific** and **ANA** face an interesting blend of positive and negative market forces.

Asia: The Promise of a Vast Hinterland

Airlines are often attracted to Asia due to the “hinterland promise”, i.e. Asia’s large population, low aviation penetration rate, rising purchasing power and archipelagic geography make it a fertile ground for airlines to invest resources to tap the growing market and establish a local presence. Most governments in Asia also recognize that the macro-economic benefits of higher visitor arrivals and economic linkages outweigh the benefits of protectionist policies towards the aviation sector. As a result, policies have generally also been favorable towards aviation growth, including liberalizing aviation regulatory frameworks and improving infrastructure.

Figure 12. Aviation Penetration Rate vs. GDP Growth per Capita



Aviation penetration rate is the ratio of airport traffic to population size.
Source: Citi Research

Figure 13. Asian Aviation Liberalization Roadmap

	2004	2009	2015 Target
China			
India			
Macau			
Hong Kong			
Korea			
Japan			
Indonesia			
Philippines			
Malaysia			
Cambodia			
Vietnam			
Singapore			
Thailand			
Brunei			
Laos			

Legend:

	Unrestricted access
	Unrestricted access to capital cities and some secondary points
	Limited access to capital cities and some secondary points
	No access

Source: Citi Research

The “New Normal” Leads to a Quandary

Despite the promise in Asia's opportunity set, Asian airlines reported a mixed set of results in the past 12 months partly due to cyclical forces such as high jet fuel costs and weak pricing power, and partly due to recently emerging headwinds such as the decline in premium passenger yields, and the rapid growth of low-cost carriers and Gulf carriers displacing market share from the legacy carriers. These recently emerging headwinds constitute a “new normal” operating environment for Asian carriers, to which they need to respond and adapt. We elaborate further below:

#1: Premium yields are under pressure

The current climate of economic uncertainty has led to downsized corporate travel wallet sizes. Specifically, businesses are shifting some business travel from business class to economy class, becoming more strict on non-client related travel, implementing travel blackouts (e.g. less travel to London during the Olympics when air tickets and lodging are more expensive), and consolidating trip frequencies. As corporate travel budgets tend to be sticky downwards, we think the downward pressure in premium passenger yields is a structural rather than cyclical trend. See the report by our Hong Kong Transportation and Lodging analyst, Michael Beer:

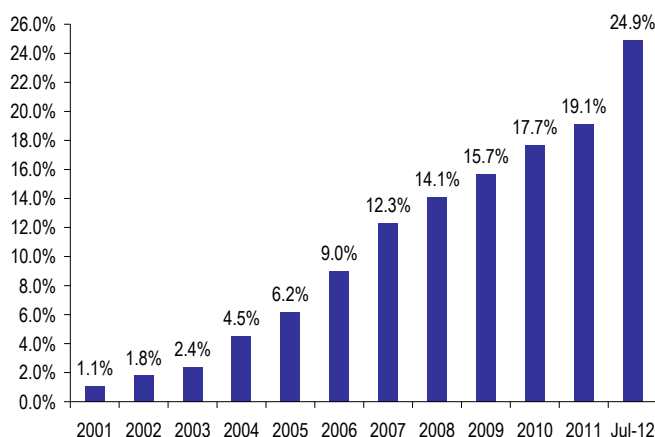
[Corporate Travel Budgets under Pressure across Asia - Conference Call Takeaways](#)

#2: Low cost carriers are growing market share

The potential of the low-cost carrier market in Asia is well-recognized, especially in the context of a price-sensitive travel population. Besides enjoying demand from passengers trading down from full service carriers, LCCs also effectively lower the entry price points for passengers to travel by air, thereby stimulating new demand from price-sensitive passengers, breaking into under-penetrated aviation markets, and gaining market share from less nimble and higher-cost legacy carriers.

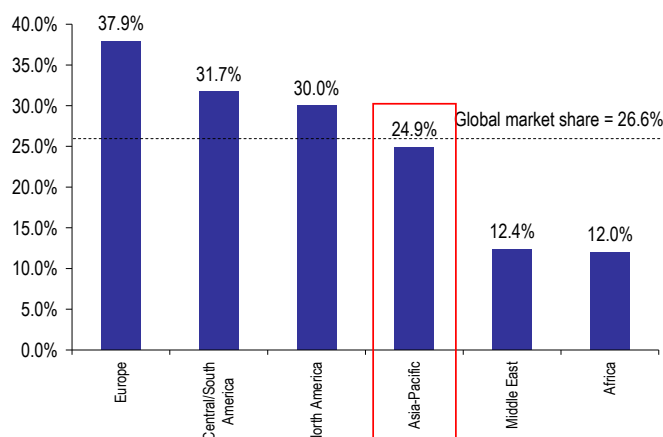
The Asia LCC penetration rate remains slightly lower than Europe and the US, but is rising rapidly and we expect it to exceed Europe and the US by 2015 due to aggressive expansion of existing LCCs and a proliferation of new LCCs in Asia.

Figure 14. Asian LCCs' Capacity Share as a % of Total Seats



Source: Citi Research

Figure 15. Regional Comparison of LCCs' Capacity Share



Source: Citi Research

#3: Gulf Carriers are expanding their presence in Asia

Gulf carriers (especially Emirates, Etihad and Qatar) have been expanding their presence in Asia in an attempt to establish their respective operating bases as aviation hubs. Besides broadening their route networks, adding flight frequencies, and expanding fleet capacities into Asia, Gulf carriers have also been proactive in seeking code-share partnerships and more recently minority equity stakes in Asian carriers. The Gulf carriers' attractive fares, wide network reach globally, and significant presence in Asia have increased yield pressure on Asian legacy carriers.

Our analysis of the Gulf carriers yielded the following conclusions: *i)* Gulf carriers have built a strong presence in Asia Pacific, as it is the region with the most number of non-stop passenger destinations; *ii)* Gulf carriers deploy around 40% of international seat capacity to Asia Pacific and around 20% to Western Europe (Figure 18); the broad catchment from Asia (Figure 17) and relatively large number of seats to Europe (Figure 19) allow the Gulf carriers to capture and dominate traffic between Asia and Europe; *iii)* Gulf carriers have a large aircraft order book; their aggressive capacity expansion into Asia may put further pressure on Asian carriers.

Figure 16. Gulf Carriers – Creation of a Middle East Aviation Hub



Source: Company Reports, Citi Research

Figure 17. Gulf Carriers – Number of Non-Stop Passenger Destinations

Emirates (EK)	No. of Destinations	Etihad (EY)	No. of Destinations	Qatar (QR)	No. of Destinations
Asia Pacific	36	Asia Pacific	32	Asia Pacific	39
Europe	31	Europe	15	Europe	30
Africa	20	Africa	8	Africa	17
Middle East	15	Middle East	14	Middle East	17
North America	7	North America	3	North America	4
Latin America	3	Latin America	0	Latin America	2
Domestic	1	Domestic	1	Domestic	1
Total	113	Total	73	Total	110

Source: Centre for Aviation, Citi Research

Figure 18. International Seat Capacity Split by Geography

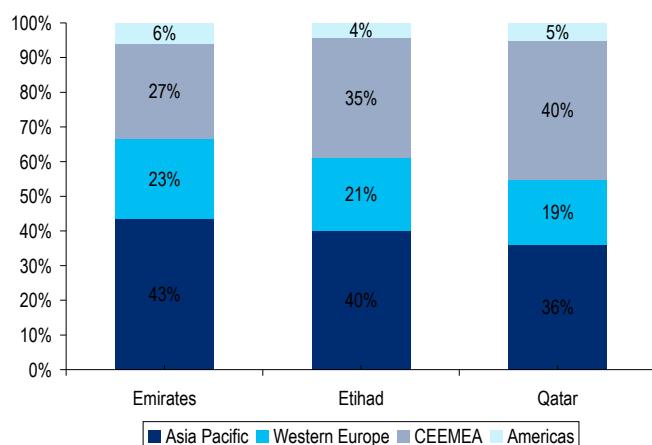


Figure 19. Gulf vs. Asian Carriers – Weekly Seats to Western Europe

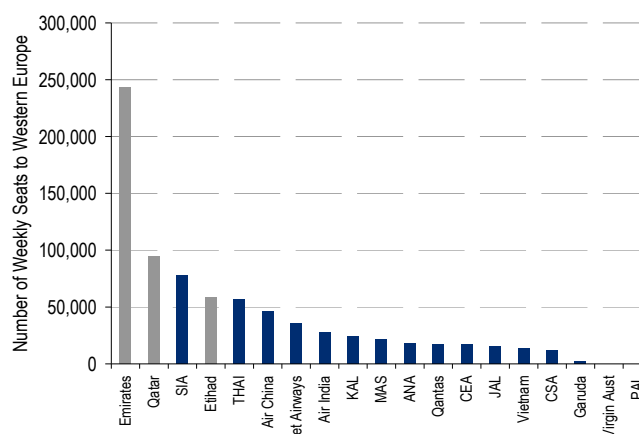


Figure 20. Gulf vs. Asian Carriers – Existing and Future Fleet

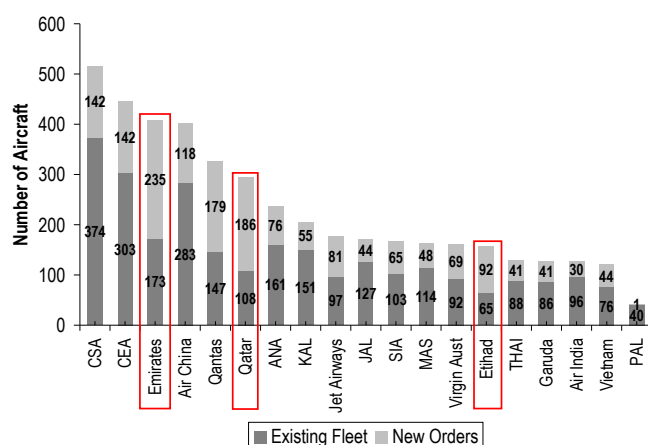


Figure 21. Gulf vs. Asian Carriers – Long-Range Next-Gen Aircraft

Airline	A380 Existing	B787 Existing	A380 Order	B787 Order	Total
Emirates	21	0	69	0	90
ANA	0	10	0	45	55
Etihad	0	0	10	41	51
JAL	0	4	0	41	45
Qatar	0	0	10	30	40
SIA	17	0	2	20	39
Qantas	12	0	8	15	35
Air India	0	0	0	27	27
KAL	5	0	5	10	20
Vietnam	0	0	0	16	16
CSA	3	0	2	10	15
Air China	0	0	0	15	15
THAI	0	0	6	8	14
Jet Airways	0	0	0	10	10
MAS	1	0	5	0	6
CEA	0	0	0	0	0
Virgin Aust	0	0	0	0	0

Source: Centre for Aviation, Citi Research

Source: Centre for Aviation, Citi Research

Complexities Blended into Opportunities

Co-existing in a region rich with opportunities but also facing structural threats (or, equally, opportunities) we think the Asian airline industry is in a quandary. On the one hand, Asian carriers are well-positioned to capture the immense growth opportunities in their home and neighboring markets, yet on the other they may have to defend against potential market share losses to new entrants, especially when set against an increasingly liberalized aviation regulatory framework. Such an environment often leads to shifts in power dynamics.

Add to these the local regulatory restrictions (e.g. foreign ownership restrictions), vested interests, and different industry structures, the process becomes even more complicated. To survive and grow, airlines need to be proactive in defending their market positions while extending their market reach. With airlines having various agendas and interests, finding a meeting of the minds is a complex process.

On Figure 22, we list examples of various corporate strategies which had been or are being deployed in Asia over the last five years, their intentions (as we believe them to be), unique circumstances (including any complexities), and current status.

Figure 22. List of Significant Corporate Strategies from 2006-2012

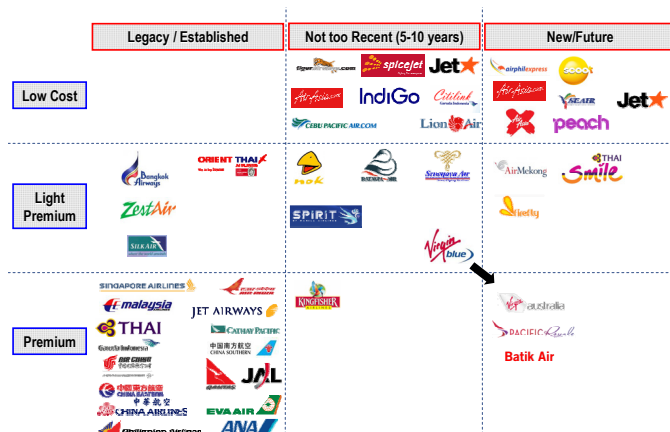
Corporate Strategy	Country	Example	Date	Background	Intentions	Unique Circumstances	Current Status	Citi Comments
M&A	India	Jet Airways and Air Sahara	Apr-2007	Jet acquired Sahara for US\$340mn	Increase market share, reduce competition	First takeover offer (US\$500) in Jan-2006 did not succeed	M&A did not reduce competition; Jet continued to lose market share to new LCC entrants	More details in Figure 31 on Page 39
M&A	India	Kingfisher and Air Deccan	Apr-2008	Air Deccan merged with Kingfisher	Increase market share, reduce competition	Deccan was in heavy losses; Kingfisher used Deccan to expand into International	M&A did not reduce competition; Jet continued to lose market share to new LCC entrants	More details in Figure 31 on Page 39
M&A	Hong Kong	Cathay Pacific and Dragonair	2004-2006	CX and Air China acquired stakes in each other	Forge closer cooperation	Wide differentials in service offerings, global alliance, but committed to cooperate	Many code-share HK-China flights, air cargo JV, ground handling JV	End-game is a merger, but that is still a long way off (see Page 41)
M&A	China	China Eastern and Singapore Airlines	Nov-2007	SIA and Temasek tried to take a 24% stake in CEA	Transfer of expertise, capital injection, network extension	Strong opposition from Air China. Deal was vetoed	Did not succeed; SIA remains interested but has been passive	More details on Page 42
M&A	China	China Eastern and Shanghai Airlines	Jul-2009	CEA acquired Shanghai through a share swap	Reduce unnecessary competition	Industry suffered heavy losses, CEA went into negative equity	Successful merger. Shanghai Airlines left Star Alliance and joined Skyteam	More details in Figure 32 on Page 40
M&A	China	Air China and Shenzhen Airlines	Mar-2010	Air China increased stake in Shenzhen to 51% from 25%	Network extension into South China	Shenzhen Airlines chairman was arrested for corruption; shareholder shake-up	Operates as a separate brand; joining Star Alliance in late 2012	More details in Figure 32 on Page 40
M&A	Philippines	San Miguel and Philippine Airlines	Apr-2012	Bought 49% of PAL for US\$500mn	Financial re-capitalization, turnaround potential	PAL had been losing market share to LCCs, slow to react, faced strong union pressures	Priority to rebrand, re-fleet, instill strong financial discipline, improve union relations	More details on Page 42
M&A	Australia	Virgin Australia and Etihad Airways	Jun-2012	Etihad acquired 5% stake in Virgin Australia	Align interests; progression from operating alliance signed in Aug-2010	Etihad cements relationship through equity stake; Virgin Aust expands asset-light	Etihad wants to raise Virgin Aust stake to 10%; continues to seek new minority stakes in airlines	More details on Page 43 Error! Bookmark not defined.
Operating alliance	Australia	Virgin Australia and SIA	Dec-2011	SIA and Virgin formed an operating alliance	Asset-light network expansion – SIA into domestic Australia, Virgin into long-haul premium	SIA has similar alliance with Virgin Atlantic; Virgin Aus has similar alliance with Etihad	Code-sharing arrangements launched; Virgin rules out joining Star Alliance	
Joint venture	Japan	JAL and American Airlines	Nov-2010	JV on Transpacific routes (awarded anti-trust immunity)	Schedule coordination and joint sales; seamless transfers and better connections	Both airlines are oneworld Alliance members	Successfully implemented	
Joint venture	Japan	JAL and British Airways	May-2012	JV on Japan-Europe routes (awarded anti-trust immunity)	Schedule coordination and joint sales; seamless transfers and better connections	Both airlines are oneworld Alliance members	Successfully implemented	
Joint venture	Japan	JAL and Finnair	Target 2013	May start JV in 2013, currently undecided	Schedule coordination and joint sales; seamless transfers and better connections	Both airlines are oneworld Alliance members	Both airlines currently have a code-sharing agreement; JV subject to anti-trust approvals	
Joint venture	Japan	ANA and United and Continental	Nov-2010	JV on Transpacific routes (awarded anti-trust immunity)	Schedule coordination and joint sales; seamless transfers and better connections	All three airlines are Star Alliance members	Successfully implemented	
Joint venture	Japan	ANA and Lufthansa	Jun-2011	JV on Japan-Europe routes (awarded anti-trust immunity)	Schedule coordination and joint sales; seamless transfers and better connections	Both airlines are Star Alliance members	Successfully implemented; may add Swiss and Austrian Airlines to the JV by Spring 2013	
Common shareholdings	Malaysia	MAS and AirAsia Share Swap	Aug-2011	Share swap b/n major shareholders Tune Air and Khazanah	Reduce unnecessary competition, forge closer collaborations	Significant pushback from MAS employee unions	Did not succeed; unwound in May 2012	Well-intentioned but not well-executed due to union pressure
Cost collaboration	Malaysia	MAS and AirAsia	May-2012	Collaboration to realize savings and boost efficiencies	Collaboration in procurement, MRO, training, technical and operational efficiency	Fall-back agreement following the unwinding of parent share swap signed in Aug-2011	Not much progress so far; collaboration agreement remains difficult to execute	Unlikely to make much progress given union influence on MAS
Cost collaboration	Australia	Jetstar and AirAsia collaboration	Jan-2010	Alliance to reduce costs together	Sharing operational functions, specifying a new type of single aisle aircraft, joint procurement	Alliance was announced near the time of Tiger Airways IPO, details were scarce	Not much progress since the alliance was signed; both airlines compete directly in key markets	AirAsia and Jetstar may remain competitors more than friends

Source: Company Reports, Citi Research

We expect six trends to materialize in the near to mid term:

We expect a proliferation of low-cost carriers in Asia, driven by corporate strategies to capture growth opportunities in the Asian LCC space while having to circumvent foreign ownership restrictions and fragmented aviation jurisdictions in Asia.

Figure 24. New Asian Airlines tend to be in the Low Cost Segment



Source: Citi Research

Interestingly, some of these “new” airlines are actually re-branded versions of smaller airlines that failed to take off in a big way. Regulatory bureaucracy and limited airport slots in some key cities mean a more effective entry strategy into a local market may be through taking an equity stake of a smaller airline that already possesses an Air Operator’s Certificate (AOC) and/or which has favorable grandfathered slots at key airports. Indonesia AirAsia started in this manner (through the acquisition of Awair in December 2004), and Tiger appears to be doing the same by acquiring equity stakes in Mandala (Jan-2012) and SEAir (Jun-2012).

Figure 25. New Asian Airlines and Major Shareholders

Country	New Airline in 2012-2013	Majority Shareholders (Airline Shareholders in blue+italics)	Citi Comments
Japan	AirAsia Japan	<i>ANA (67%), AirAsia (33%) (voting share split; see footnote for details)</i>	Will launch flights on 1-Aug-2012 with 3 x A320
	Peach Aviation	<i>ANA (33.4%), First Eastern Aviation (Hong Kong) (33.3%), Innovation Network Corporation Japan (33.3%)</i>	Launched flights on 1-Mar-2012 with 3 x A320
	Jetstar Japan	<i>JAL (33.3%), Qantas (33.3%), Mitsubishi Corp (16.7%), Century Tokyo Leasing Corporation (16.7%) (voting share split; see footnote for details)</i>	Launched flights on 3-Jul-2012 with 3 x A320
Philippines	AirAsia Philippines	<i>AirAsia (40%), Antonio Cojuangco (20%), Micheal Romero (20%), Marianne Hontiveros (20%)</i>	Launched flights on 28-Mar-2012 with 2 x A320
	SEAir	<i>Tiger Airways (40%), local investors (60%)</i>	Planning to increase fleet to 5 x A320, expand network
Thailand	Thai Smile	<i>Thai Airways (100%)</i>	Launched flights on 7-Jul-2012 with 4 x A320
Indonesia	Mandala Airlines	<i>Tiger Airways (33%), Saratoga Group (51%), others (16%)</i>	Launched flights on 5-Apr-2012 with 2 x A320
	Batik Air	<i>Lion Air (100%)</i>	Scheduled to launch flights in 2013 with 10 x B737-900ER targeting the premium segment
Singapore	Scoot	<i>Singapore Airlines (100%)</i>	Launched flights on 1-Jun-2012 with 4 x B777-200m, targeting long-haul low-cost
Hong Kong	Jetstar Hong Kong	<i>Qantas (50%), China Eastern (50%)</i> For AirAsia Japan, equity (voting + non-voting) split is ANA (51%), AirAsia (49%) For Jetstar Japan, equity (voting + non-voting) split is JAL (41.7%), Jetstar (41.7%), Mitsubishi (8.3%), Century Tokyo (8.3%)	Scheduled to launch flights in 2013 with 3 x A320

Source: Company Reports, Citi Research

Jetstar HK JV brings fresh dimensions to Hong Kong aviation

The low-cost carrier market appears relatively under-penetrated in Hong Kong and China. In China, potential new low-cost entrants face high entry barriers, such as lack of low-cost secondary airports, no free market for pilots which are bonded to airlines for long periods, and difficulty in securing rights to operate on lucrative routes. In Hong Kong, however, the entry of Jetstar Hong Kong and re-branding of Hong Kong Express as an LCC may change the industry landscape.

Low cost carriers are not new to Hong Kong. Hong Kong witnessed the high-profile failure of Oasis HK Airlines, a long-haul low-cost airline which served London Gatwick and Vancouver but ceased operations in early 2008 due to high jet fuel costs and weakening demand. There are no Hong Kong-based LCCs at the moment, but the major low-cost carriers based outside Hong Kong have multiple daily flights into Hong Kong from their home countries in Singapore, Malaysia, Thailand, and the Philippines. Peach Aviation (the low-cost airline based in Osaka that is backed by ANA) launched its first flight to Hong Kong on 1-Jul-2012. Together, these foreign-based LCCs make up only 5.5% market share in Hong Kong – low when compared to the Asia-wide LCC penetration rate of 25%.

The Mar-2012 announcement by China Eastern Airlines and Qantas to launch a new low-cost airline JV based in Hong Kong, to be called Jetstar Hong Kong, brings fresh dimensions to the debate on whether it is feasible to start an LCC based in Hong Kong (where operating costs are high), and whether Jetstar could sustain sufficient edge to compete against strong flag carriers such as Cathay Pacific. **We highlight the following important sector angles regarding Jetstar Hong Kong:**

- **Aggressive scalability:** Jetstar Hong Kong plans to launch in 2013 with three A320 aircraft initially, and scale up to 18 aircraft by 2015. Effectively, it aims to be almost as large as Tiger Airways Singapore, AirAsia Thailand, and AirAsia Indonesia within 2 years of operations, when it took these airlines between 7-8 years to reach similar scale. While the low LCC penetration rate in Hong Kong may justify such an aggressive expansion strategy, Jetstar HK's success (and impact on other airlines) also depends on the extent it can stimulate new demand in HK in addition to attracting "trading down" demand from full service carriers.
- **Mutual benefits:** Jetstar HK will be equally owned by Qantas and CEA. Presumably, we think the "meeting of the minds" occurred when Qantas offered

its expertise in setting up low-cost Jetstar-branded airlines in Pan-Asia in exchange for local knowledge on market access in the Greater China region from CEA. Both CEA and Jetstar have started allocating people to the project and the new entity is already looking at issues such as aircraft allocation, AOC requirements and recruitment. A commercial team is assessing potential routes and *the airline believes it can allocate its Jetstar Japan start-up team to the project in order to aid the process further* – a significant point demonstrating Qantas' unique ability to export the low-cost model across Asia.

- **Cost advantage:** We believe the relatively high cost base and fuel price environment could limit the ability for Jetstar HK to offer lower fare prices over an extended period of time. Therefore it may be difficult for Jetstar HK to under-cut prices offered by foreign LCCs flying into Hong Kong which could take advantage of much lower operating costs in their respective home countries (such as Malaysia, Thailand or the Philippines). However, Jetstar HK may rely on its *cost advantage relative to Cathay Pacific or Dragonair* (through more efficient aircraft turnaround times, higher seat density) to outdo its full-service competitors.
- **Slot advantage:** While Jetstar HK may not enjoy a low-cost structure by virtue of being based in Hong Kong, it may pursue a more aggressive strategy within the Greater China region subject to slots availability. Jetstar HK may be able to tap on CEA's deep knowledge of the region and network of industry contacts. Deeper access and a denser network into Greater China may help to offset Jetstar HK's cost disadvantage relative to regional non-Hong Kong-based LCCs.
- **Incumbent reaction:** Hong Kong's flag carrier, Cathay Pacific, and its wholly owned subsidiary Dragon Air, account for ~45% of the international air passenger traffic in Hong Kong. Cathay Pacific intends to compete aggressively against new entrants such as Jetstar HK and Hong Kong Airlines (which we discuss in our next point). Jetstar HK's relationship with China Eastern could weigh on traffic and yields at Dragon Air for traffic to/from the mainland, but this only accounts for roughly 7% of Cathay Pacific's total RPKs (although provides good feeder traffic for its more profitable long-haul business between HK and US and Europe). It is also worth noting that Cathay Pacific operates within the oneworld alliance alongside Qantas; Qantas is instead cooperating with CEA (which is part of the Skyteam Alliance) in launching Jetstar HK to compete against Cathay Pacific.

Figure 26. HK Airlines Route Network



Source: HK Airlines; Citi Research

- **Competition dynamics:** Cathay Pacific, besides potentially facing increased competition from Jetstar HK, is also facing stiff competition from full service carrier Hong Kong Airlines. Hong Kong Airlines, a subsidiary of Hainan Airlines, entered the market in 2006, providing service across the Asia Pacific region as well as through a new Club Class-only service to/from London's Gatwick Airport. Hong Kong Airlines handled ~10% of total outbound traffic from HK in 2011. An IPO was in the works earlier this year, likely to fund its future expansion plans, but the timing appears to be delayed by recent market conditions. *While new entrants target Cathay Pacific's current client base, the airline continues to expand its presence in the mainland through its Dragonair subsidiary, cross-shareholding with Air China, and a new Air China Cargo JV. We discuss the dynamics of Cathay Pacific and Air China's cross holdings in Point #4.*

#2: Multiple branding platforms for targeted marketing

Airlines may adopt multiple branding platforms in Asia to tap into different market segments, and/or to pursue separate growth agendas in different geographies. Separate marketing strategies may be devised to appeal to different target markets. Last but not least, separate brands are sometimes retained to overcome local

regulatory restrictions (e.g. Jetstar Asia's flights between Singapore and Indonesia are operated under the Valuair brand due to existing protectionist policies limiting addition of low-cost carrier flights between Singapore and Indonesia).

Figure 27. SIA Family of Airlines



Source: Citi Research

The best example of multiple branding platforms is Singapore Airlines. Within the SIA group, the company has separate brands for its premium mainline carrier SIA, its regional short-haul premium carrier SilkAir, its long-haul low-cost carrier Scoot, and its 33%-owned short-haul low-cost carrier Tiger Airways.

In our view, SIA and Temasek are likely to limit their combined stakes in Tiger Airways to less than 50%, in a deliberate strategy to allow Tiger to pursue a Pan-Asian footprint which is uninhibited by the political sensitivities of *appearing to be* state-influenced. Tiger Airways currently has a 100%-owned subsidiary operating in domestic Australia, a 33%-owned associate company Mandala Airlines operating in Indonesia, and a 40%-owned associate company SEAir operating in the Philippines.

Figure 28. Singapore Airlines Group – A Stable of Airlines with Multiple Branding Platforms and Wide Geographical Reach

	Operating Base	% Shareholding	Target Market	Fleet (as at 31-Mar-12)
Singapore Airlines Group	Singapore	56% owned by Temasek Holdings	Parent company	NA
Singapore Airlines	Singapore	100% owned by Singapore Airlines	Premium short-haul and long-haul	100
SilkAir	Singapore	100% owned by Singapore Airlines	Premium short-haul	20
Scoot	Singapore	100% owned by Singapore Airlines	Low-cost long-haul	NA
Tiger Airways Holdings	Singapore	33% owned by Singapore Airlines, 7% owned by Temasek	Parent company	NA
Tiger Airways Singapore	Singapore	100% owned by Tiger Airways Holdings	Low-cost short-haul	20
Tiger Airways Australia	Australia (Melbourne, Sydney)	100% owned by Tiger Airways Holdings	Low-cost domestic short-haul	10
SEAir	Philippines (Manila, Clark)	40% owned by Tiger Airways Holdings (effective stake)	Low-cost short-haul	2
Mandala Airlines	Indonesia (Jakarta)	33% owned by Tiger Airways Holdings (effective stake)	Low-cost short-haul	3

Source: Company Reports, Citi Research

Figure 29. Asian Airlines – Multiple Branding Platforms (% Shareholding in Parenthesis)

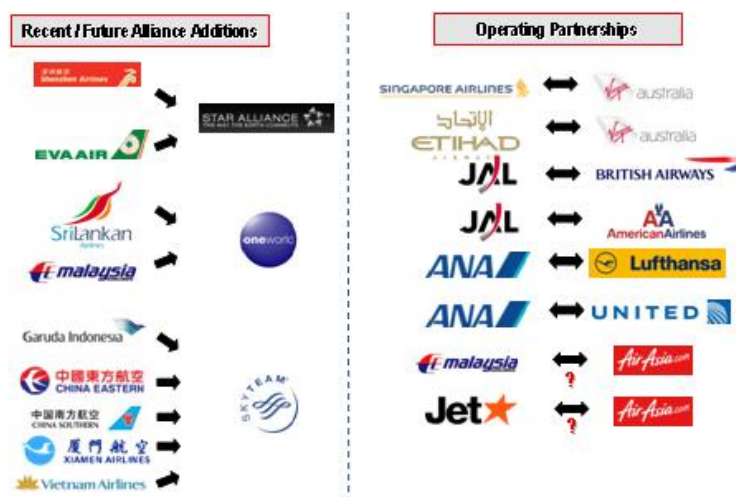
Country	Airline	Long-Haul Premium / Mainline	Short-Haul Premium	Long-Haul Low Cost	Short-Haul Low Cost	Foreign Short-Haul Low Cost (Country)
Singapore	Singapore Airlines	Singapore Airlines	SilkAir (100%)	Scoot (100%)	Tiger Airways (see next row)	Tiger Airways (see next row)
Singapore	Tiger Airways Holdings (33% owned by SIA)	NA	NA	NA	Tiger Airways Singapore (100%)	Tiger Airways Australia (100%) SEAir (40%) (Philippines) Mandala (33%) (Indonesia)
Thailand	Thai Airways International	Thai Airways	Thai Smile (100%)	NA	to be launched in 2013	NA
Indonesia	Garuda Indonesia	Garuda Indonesia	NA	NA	Citilink (100%)	NA
Australia	Qantas	Qantas	Qantas	Jetstar (100%)	Jetstar (100%)	Jetstar Asia (49%) (Singapore) Valuair (49%) (Singapore) Jetstar Pacific (30%) (Vietnam) Jetstar Japan (33%) (Japan)
Malaysia	Malaysia Airlines	Malaysia Airlines	Firefly	NA	NA	NA
Malaysia	AirAsia Berhad	NA	NA	AirAsia X (16%)	AirAsia Malaysia (100%)	Thai AirAsia (45%) Indonesia AirAsia (49%) AirAsia Philippines (40%) AirAsia Japan (33%)
Philippines	Philippine Airlines	Philippine Airlines	NA	NA	Airphil Express (sister company)	NA
Hong Kong	Cathay Pacific	Cathay Pacific	Dragonair	NA	NA	NA
India	Jet Airways	Jet Airways	NA	NA	JetLite (100%)	NA
Korea	Korean Air	Korean Air	NA	NA	Jin Air (100%)	NA
Japan	All Nippon Airways	All Nippon Airways	Air Japan (100%)	NA	AirAsia Japan (67%), Peach Aviation (33%)	NA
Japan	Japan Airlines	Japan Airlines	JAL Express	NA	Jetstar Japan (33%)	NA

Source: Company Reports, Citi Research

#3: Asset-light expansion through alliances/partnerships

The route networks of major airlines in Asia have considerable regional depth but lack global breadth. Airlines have been proactive in code-sharing, joining global alliances or forming meaningful collaborations or operating alliances to strengthen their global route networks and/or to achieve cost synergies (see Figure 22 for past and present examples). We expect the pace of such asset-light expansion plans to accelerate in Asia, especially along the lines of existing global alliances due to existing relationships already in place.

Figure 30. Asian Airlines – Global Alliance Additions and Operating Partnerships



Source: Company Reports, Citi Research

#4: Consolidation in China and India, soon Philippines

China and India – large aviation markets in their own right – appear to be the only markets in Asia where industry consolidation is taking place. In **China**, industry consolidation appears to be state-engineered to a large extent and may have been largely completed. Deregulation of the industry appears unlikely in the near-term. In **India**, an over-liberalized regulatory framework led to a proliferation of airlines which in turn resulted in over-capacity and poor profitability. Rules restricting foreign carriers from owning equity stakes in domestic carriers resulted in consolidation among domestic carriers.

Figure 31. History of Airline Consolidations in India

Year	What Happened?	Rationale
2007	Air Sahara was acquired by Jet Airways Jet Airways made two takeover attempts for Air Sahara. The first was in Jan-2006 when Jet offered US\$500mn in an all-in cash deal for the airline, but this was called off after price disagreements. A second attempt was made in Apr-2007 when Jet offered 1,450 crore rupees (US\$340mn) which was successful.	During the first takeover attempt, Jet had a market share of 37% and Sahara had a market share of 12% - the acquisition would make the combined entity become the biggest airline in India, after Indian Airline at 34% market share. By the second takeover attempt, industry profitability had declined sharply and most airlines are losing money. After acquisition in Apr-2007, Air Sahara was rebranded as JetLite, the low-cost outfit of Jet Airways.
2008	Air Deccan merged with Kingfisher Airlines Air Deccan was one of the airlines which ran into heavy losses in 2007 as a result of lower than expected demand growth, over-capacity, and severe competition between airlines As it was unable to raise fresh capital, it succumbed to consolidation in Dec 2007 Air Deccan finally merged with Kingfisher Airlines in April 2008, with the merged entity adopting the latter's name.	Kingfisher was able to use Air Deccan's longer operating history to venture into International routes. India's regulations stipulate that airlines need to operate in the domestic market for >5 years before they can operate in the international market. At the time of merger, Kingfisher had 3 years of operating history while Air Deccan had 5 years

Source: Company Reports, Citi Research

Figure 32. History of Airline Consolidations in China

Year	What Happened?	Rationale
2002	9 airlines under CAAC consolidated into Big Three in 2002 1) Northern Airlines and Xinjiang Airlines merged into China Southern Airlines 2) Northwest Airlines and Yunnan Airlines merged into China Eastern Airlines 3) Southwestern Airlines and Zhejiang Airlines merged into Air China	To consolidate the industry and to reduce the irrational competition among various airlines. Big Three's market share increased from 57% to 74% after consolidation. The whole process took about 2~2.5 years. As Air China was not listed in 2002~2003, it was the easiest for them. No financial details disclosed. CSA finished by the end of 2004. Listco paid around Rmb2bn for the Northern Airlines & Xinjiang Airlines asset. CEA finished by 30-Jun-2005 and listco paid around Rmb1bn.
2006	Cross shareholding between Cathay Pacific and Air China In October 2004, Cathay Pacific acquired ~10% stake in Air China during the latter's H-share IPO In June 2006, Air China acquired 10% of Cathay Pacific when Cathay Pacific acquired the remaining 82% of Dragonair. In turn, Cathay Pacific acquired an additional 10% in Air China In August 2009, Air China acquired 20% of Cathay Pacific from CITIC Pacific Currently Air China owns around 30% of Cathay Pacific and Cathay Pacific owns around 18% of Air China (after its share was diluted by Air China's share issuances)	To enhance the cooperation between CX and Air China. The series of transactions are quite successful. Currently, Air China and CX jointly operate the HK-China routes. In addition, they have also set up a cargo joint venture to explore the fast growing China cargo market, and recently a ground handling joint venture in Shanghai..
2009	Merger between China Eastern Airlines and Shanghai Airlines The Chinese aviation industry suffered huge losses in 2008 and CEA's equity became negative by end of 2008 With the support of Shanghai local government, in July 2009, CEA announced a plan to take over Shanghai Airlines via a share swap. The swap ratio was 1.3:1 which implied a 25% premium for Shanghai Airlines' share price. The merger finished by the end of 2009	Shanghai was the only hub in China which had two home based airlines before the merger. CEA and Shanghai Airlines used to compete head on head in this market, which resulted lower load factors and yields for routes to and from Shanghai. The merger help to establish a more rational competitive landscape in Shanghai, which once again, showed the Chinese government's support towards the aviation industry.
2010	Air China increased its shareholding in Shenzhen Airlines from 25% to 51% Before 2010, Shenzhen Airlines, an unlisted airline, was owned by Huirun (65%), Air China (25%), and Total Logistics (10%). Shenzhen Airlines' Chairman (the boss of Huirun) was arrested in Dec 2009 due to a series of financial corruptions and it was widely reported that Shenzhen Airlines' financial situation was in trouble. Air China and Total Logistics agreed in March 2010 that they will both increase capital investment in Shenzhen Airlines. Huirun was "forced" out as its liquidator waived the rights on behalf of Huirun. As a result, Air China's share increased to 51% and the 26% additional share only cost Air China Rmb682mn. After the capital increase, the share structure became: Air China: 51%, Total Logistics: 25%, and Huirun 24%.	Air China always wanted to expand into Southern China and the takeover of Shenzhen Airlines effectively helped to fill the gap in its network.

Source: Company Reports, Citi Research

We think the **Philippines** may be the next Asian market where industry consolidation may occur. Similar to India, the Philippine aviation industry has a fairly liberal regulatory framework which has since led to a proliferation of domestic airlines. The aviation industry is adding capacity at a rate above expected demand growth, while infrastructure constraints at the main airport are forcing significant excess capacity to an inconvenient – and unprofitable – secondary airport at Clark. See our recent report, [Cebu Air \(CEB.PS\) - Market Leader with a Clear Strategy](#).

Consolidation examples in Asia have so far seen mixed success. In India, the acquisition of Air Deccan by Kingfisher Airlines and Air Sahara by Jet Airways did not help the respective acquirers' profitability, as new low-cost carrier entrants were established in an over-liberalized industry thereby continuing to erode the full service carriers' market shares. In China, consolidation was largely successful – state-led efforts resulted in less unnecessary competition, better network coordination, and better ability to deal with rapid increase in jet fuel costs in 2011.

In our view, consolidation efforts may not improve industry and airline profitability if other strong headwinds continue to exist to undermine the intentions of consolidation. Consolidation succeeded in improving airline profitability in China but not in India, due to high entry barriers for low-cost carriers in China but not in India. *We may extend this argument to Asia, and conclude that airline consolidation may not be sufficient to fully offset strong headwinds in some markets, such as growth of LCCs and Gulf carriers displacing market share of legacy carriers.*

Cross-shareholding between Cathay Pacific and Air China

Interesting consolidation dynamics are taking place in **Hong Kong** as well, in the form of cross-shareholding between Cathay Pacific and Air China. In October 2004, Cathay Pacific paid around HK\$2.8bn to acquire 9.9% of Air China during the latter's H-share IPO, thereby becoming a strategic investor of Air China.

In June 2006, Cathay Pacific announced the purchase of 82.2% in Dragonair that it did not already own for over HK\$8bn (HK\$10bn on a 100% basis), at 3.2x 2005 book value. As part of the transaction, Air China acquired ~10% of Cathay Pacific, making it the third largest shareholder (after Swire Pacific and CITIC Pacific, although CITIC has since exited its investment). In turn, Cathay Pacific acquired an additional 10% of Air China. After the transaction, Cathay Pacific owned 20% of Air China and Air China owned 10% of Cathay Pacific. The transaction not only gave Cathay Pacific access to routes in China, but cemented its ties with Air China, which then became a substantial shareholder in Cathay Pacific.

In Aug 2006, Air China listed in the A-share market, and Cathay Pacific's shareholding was diluted to 17.3%. In Aug 2009, Air China agreed to purchase 492mn Cathay Pacific shares owned by CITIC Pacific for HK\$6.3bn, raising its stake in Cathay Pacific to 29.99%. In recent years, Cathay Pacific's shareholding in Air China has been diluted to around 18% as Air China issued more new shares. Air China owns ~30% of Cathay (Swire Pacific owns ~45% of CX, leaving the minimum public float in Hong Kong of 25%).

We maintain our thesis that the end-game could be a merger between Air China and Cathay Pacific. However, as the differential between the two airlines' service offerings remains fairly wide, and they belong to different global alliances (Cathay Pacific in oneworld and Air China in Star Alliance) we believe such a merger is still a long way off but there has been a move to increasingly share management and engage in new expansion opportunities together (such as the air cargo joint venture established in 2011 and ground handling joint venture established in 2012).

#5: More cross-border M&A activities within Asia

We observe that almost all cross-border minority equity stakes in Asia Pacific are in the low-cost carrier segment. The need to import LCC expertise provides an opportunity for low-cost airlines to enter foreign jurisdictions. There has been only one significant cross-border minority equity transaction in Asia Pacific involving a full service carrier, i.e. Etihad's 5% equity stake in Virgin Australia acquired in Jun-2012, which appears to be a progression from the operating agreement the two airlines signed in August 2010. Forming operating agreements, code-sharing partnerships, or cost collaboration strategies (point #3 above) may be pre-cursors to cross-border M&A activities once both parties become familiar with each other.

Looking across the aviation landscape, we identify **two potential predators** in the cross-border Asian aviation M&A space:

- **All Nippon Airways:** The company raised ¥175bn (US\$2.2bn) of fresh equity in July 2012, to buy B-787 Dreamliners and other aircraft, to bolster the company's financial base, and to pursue growth outside its home market. According to news report by *Reuters*, ANA wants to take large stakes in its targets that would give it a say in management. Potential deals include becoming a top shareholder in a full-service carrier and the outright purchase of a budget airline. Passive minority stakes are not preferred by ANA. However, given the restriction for foreign investment, as Financial Times reported, ANA would look to start with a minority stake in a carrier but then increase it as markets liberalized. See the report by

Japan Transportation analyst, Akira Funae: [All Nippon Airways \(9202\) - Preparing for next phase with new share issue](#)

- **San Miguel:** After injecting US\$500mn of fresh equity and taking a 49% stake in ailing flag carrier Philippine Airlines (PAL) and its related LCC offshoot Airphil Express, San Miguel (a diversified Filipino conglomerate most famously known for its alcohol products) announced it is evaluating several overseas airline deals which may help PAL circumvent a ban imposed on local carriers' plans to mount additional flights to the US due to a downgrade in the country's safety rating.

While there are generally no regulatory restrictions for foreign carriers to own minority stakes in domestic carriers (except in India), significant vested sovereign interests means it is sometimes difficult for cross-border minority stakes to be successful, especially when it involves a national airline. The most memorable incident was in November 2007, when Singapore Airlines and Temasek Holdings announced plans to take a 24% strategic stake in China Eastern Airlines at HK\$3.80/share. The deal appeared to be a win-win opportunity for both airlines – CEA would gain operational expertise and capital from one of the best managed airlines in the world, SIA. SIA, in turn, may break into the Chinese market and gain valuable slots at Shanghai. The deal received heavy opposition from Air China. In January 2008, Air China counter-offered with a price of HK\$5.00/share, complicating the deal. The SIA-CEA deal was eventually vetoed.

Perhaps a more recent, but less well-known example, was the placement of Garuda Indonesia shares by the domestic IPO underwriters. Delta Air Lines was reported in the press to be interested in the stake (see our report, [Garuda Indonesia \(GIAA.JK\) - Potential Bidder for Domestic IPO Underwriters' Stake](#)), but eventually walked away from the deal when Garuda shares surged after the news was announced. Eventually, the underwriters' 10.9% stake was sold to a subsidiary under domestic conglomerate CT Corp (10.3%) and the open market (0.6%) (see our report, [Garuda Indonesia \(GIAA.JK\) - Overhangs Removed; Focus Returns to Earnings Growth](#)). Throughout the process, the Ministry of State Owned Enterprise (69% shareholder of Garuda) had approached domestic investors to take over the underwriters' stake. Even though there was no regulation prohibiting foreign investors from taking over the stake, we think the Minister preferred a local investor.

At this moment, we do not expect Asian airlines to venture outside the region to do cross-border M&A given the weak opportunities in foreign markets and attractive opportunities closer to home. The experience of Singapore Airlines bears lessons for Asian carriers – its purchase of a 49% stake in Virgin Atlantic in 1999 for £600mn did not translate into any benefits or synergies for SIA. While the original intentions were reasonable (code-share, combine frequent flyer programs, and share airport lounges with Virgin Atlantic) and indeed code-sharing was extensive, the equity stake did not work out well for SIA on commercial terms. Virgin Atlantic's position in the UK did not really take off as Virgin Atlantic continued to face strong competition from British Airways, had limited ability to grow due to slot constraints at Heathrow, no short-haul presence and limited connecting traffic. Since July 2007, SIA has made it clear that the stake is for sale but it has so far attracted little interest.

#6: Gulf carriers become uncomfortable neighbors in Asia

We observe that the Gulf carriers – notably Etihad Airways and Qatar Airways – have been aggressively seeking minority stakes in European carriers so as to secure commercial arrangements to boost global connecting traffic through their hubs in the Gulf. However, Etihad and Qatar have been relatively less active in Asia.

We think this could be due to the need to navigate more complicated regulatory and bureaucratic hurdles to complete a transaction in Asia, especially in Emerging Asia.

Up to now, the Gulf carriers have made only one significant equity transaction in Asia Pacific – Etihad's purchase of a 5% stake in Virgin Australia in Jun-2012 (with an intention to raise the stake to 10% subject to regulatory approval), which appears to be a progression from the operating agreement the two airlines signed in August 2010. *Reuters news* reported in late Jun-2012 that Etihad Airways and Qatar Airways were eyeing a minority stake in a low-cost carrier SpiceJet in India, though such discussions are preliminary and the Indian regulators have yet to lift regulations restricting foreign carriers from taking a minority stake in local carriers.

We expect Etihad and Qatar to become increasingly aggressive in taking minority stakes in Asian airlines when some of the nationalistic opposition towards foreign airline investments in Asian carriers eases. To this extent, it may provide attractive entry points for Gulf carriers to establish a stronger presence in Asia, co-exist as uncomfortable neighbors with Asian carriers in their home turf, and compete more aggressively on long-haul routes especially between Asia and Western Europe.

Emerging leaders and structural losers

Within our regional airlines coverage, we like airlines which have large market share in their home country, have little risk of destructive competition which may erode their dominant market share, and have sufficient resources to expand organically in their home country or venture inorganically outside of their home countries.

We like the **Chinese airlines** and think **Air China** will win in the longer term given its leadership. **SIA** stands at the intersection of strong headwinds buffeting Asian airlines, yet its strategic response lacks coordination and may be ineffective, in our view. **AirAsia** possesses the *qualities* of a long-term emerging leader, but we remain cautious on the execution of its Pan-Asian footprint. **Cathay Pacific** and **ANA** face an interesting blend of positive and negative market forces.

We like the **Chinese airlines** given their strong traffic growth trend. The industry is relatively regulated and there is no sign of further deregulation in the near future, which guarantees a rationally competitive environment for Chinese airlines. Yield trend is expected to improve as Chinese airlines further improve their service level and product offerings, and also the gradual upgrade trend of Chinese business travelers. **Air China** will, in our view, win in the longer term given its leadership, its most balance network, and its better management and execution capability. .

Singapore Airlines stands at the intersection of strong headwinds buffeting Asian airlines, yet we think its strategic response lacks coordination and may be ineffective. SIA faces strong headwinds from the decline in premium passenger yields (especially long-haul), and the rapid growth of low-cost carriers and Gulf carriers displacing market share from short-haul and long-haul premium travel respectively. SIA's responses to these challenges – actively expanding SilkAir's regional presence, launching long-haul low-cost carrier Scoot, developing a Pan-Asian LCC footprint via 33%-owned Tiger Airways, and forging partnerships in the region – appear to be necessarily defensive, but insufficient to tackle the severe headwinds. SIA's group-wide strategy appears to be uncoordinated; we also worry about execution difficulties, especially managing conflicts of interests between the various airlines, and cannibalization of long-haul economy class by Scoot.

We think **AirAsia** possesses the *qualities* of a long-term emerging leader, because of its ability to successfully export its low-cost model beyond its home country Malaysia, into Thailand and Indonesia. Its new ventures in the Philippines and Japan may further cement its Pan-Asia LCC strategy. While we think this regional footprint strategy may yield long-term benefits, we remain cautious in the short-term given execution uncertainties. While Malaysia and Thailand continues to be shining stars in AirAsia Group's portfolio of airlines, Indonesia appears to be underperforming due to a lack of scale. In the Philippines, its late entry into the market and choice of an inconveniently-located operating base may result in significant losses. In Japan, its first-mover advantage to take advantage of the market underpenetration is well-noted, but we caution that AirAsia needs to carefully manage potential conflicts of interest with All Nippon Airways, and navigate the high cost structure in Japan (including limitations on Narita Airport's operating hours).

We think **Cathay Pacific** faces an interesting blend of positive and negative structural forces. While new entrants target Cathay Pacific's current client base, the airline continues to expand its presence in the mainland through its Dragonair subsidiary, cross-shareholding with Air China, and a new Air China Cargo JV. We maintain our thesis both airlines may work closer together with the end-game being a merger between Air China and Cathay Pacific, though this remains a long way off as the differential between the two airlines' service offerings remains fairly wide.

For **All Nippon Airways**, whether structural changes have a positive or negative outcome would be determined by its management skill. Our basic view is that ANA's Haneda-centered stronghold on high-earning routes will not collapse despite market structure changes triggered by the entry of LCCs, and we continue to expect stable earnings. While equilibrium is being maintained, we need to bear in mind that the excessive competition that nobody desires could emerge. Skymark Airlines will introduce larger aircraft from 2014, while ANA and JAL will become financially stronger following a public offering and turnaround. Additionally, we see an unavoidable negative impact if the decline in premium class yields seen globally spreads to international routes of ANA. That said, ANA's joint ventures with United/Continental and Lufthansa/Swiss/Austria may boost its market share and network power. Accordingly, we think it is able to retain its competitiveness in the premium market on routes between Europe/US and Japan/Asia.

The issue for ANA, however, is how to survive competition in the Asian market. We think developed countries' airlines, because they lack the ability to compete on costs, will struggle to survive against competition in the Asian market, even, for example if they use a home-grown LCC. Therefore, we would consider it strategically sensible to tap into growth in Asia. If ANA were to enter the Asian LCC market, we think possible ways could include using Peach strategically like Tiger Airways or forming a new LCC joint venture in Asia using the expertise it has acquired in the Japanese LCC market. ANA could conceivably conduct M&A or take a minority stake in a full-service carrier. However, we think this would not be easy, because, as we have already outlined in this report, we think M&A opportunities will be limited for some time and history shows very few successful examples of foreign airlines taking minority stakes in airlines. Therefore, ANA has to venture overseas carefully and strategically, and focus on execution, in order to be successful. In any case, we think success or failure will be determined by the degree to which it can generate synergies with its existing businesses, needless to say entering the Asian market in a highly competitive form.

The Americas

Overview

We see US Airline consolidation as late-cycle, with (former) regional carriers poised to do more mainline flying.

As we reflect over the past decade, we saw several significant mergers of US airlines. However, **we also see US-market airline mergers as somewhat close to the end of the cycle (but let's see what happens with American Airlines – please also refer to our [Americas-Based Airlines](#) alert, dated 4/22/12)**. Aside from some disbelief (on our part) that antitrust authorities would allow certain (already very large) airlines to merge, we would also highlight the likes of (emerging) carriers such as SkyWest and Republic Airways. Jet order activity (and other signals) from the latter carriers, suggest to us that these airlines are poised to do more of their own at-risk flying (on mainline routes), eventually challenging the majors on the lower end.

In Latin America, the cycle still appears to “have legs,” except for Colombia.

In Latin America, we have observed a combination of M&A and bankruptcy / liquidation as (almost equal) factors in driving the airline consolidation process (Mexico's consolidation has been heavily slanted towards the latter factor, especially following 1H'08's oil spike). Going forward, we see Latin America's consolidation cycle as still running for a few years (even though the number of potential M&A targets has dwindled). We see Colombia as the exception, given that market's somewhat higher propensity for new entrants (Aires, Viva Colombia, etc.).

In contrast to other regions of the world, we also believe that structural issues, including a dearth of airport capacity per capita (especially in Brazil) could still deter new entrants. Therefore, as consolidation comes to a close (over the medium-term) proliferation is unlikely in key Latin American markets (versus our colleagues' expectations for much of Asia).

Latin America's Key Carriers – Then Versus Now

As the quartet of Citi's covered Latin America-based airlines have grown their fleets (between 2006 and 2011). . . .

Figures 20 and 26 of our [Global Aviation](#) report (dated 2/7/12) had highlighted the waxing and waning of Mexican and Brazilian domestic airline market shares, respectively. As the broader Latin America-based airline sector has undergone some periods of expansion (and contraction), we would note that the quartet of CIRA-covered Latin Airlines generally expanded its reach while also having enjoyed varying degrees of exposure to the region's consolidation. For instance, all four airlines increased the number of aircraft in their fleets over the past few years.

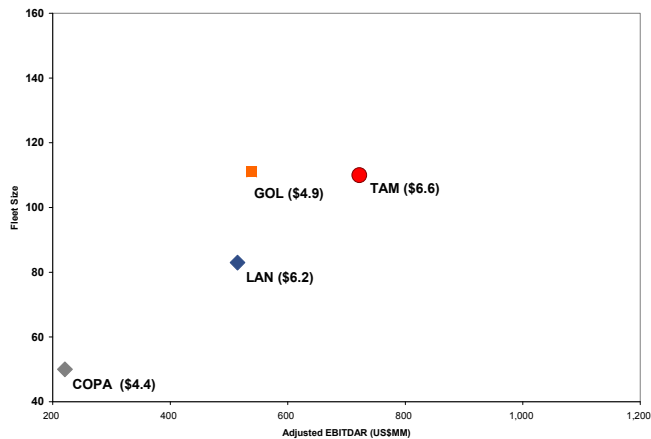
Looking at recent history, and we believe that 2006 and 2011 are good benchmarks, in order to make relatively apples-to-apples comparisons within the group (2007's Brazilian air traffic control crisis, led to a fuel spike – then credit crunch in 2008, followed by a (mostly Mexico) Swine Flu outbreak in 2009 and then Brazil/Colombia fare wars in 2010). **Although all four airlines grew their fleets over the aforementioned period, we would highlight varying degrees of success in which fleet growth has coincided with an improvement in the underlying airline's operating profitability.** Looking at the figures below, and we would highlight the following:

. . .Copa has registered the greatest improvement in operating profitability per aircraft, while GOL's per-aircraft and absolute operating profitability numbers worsened.

1. Copa, LAN and TAM saw stronger operating profitability in 2011 vs. 2006 (as measured by Adjusted EBITDAR minus net interest), while GOL was the lone carrier that had observed a deterioration;
2. Copa saw the biggest improvement in operating profitability per plane (from US\$4.4M to US\$6.6M or ca. +50%), even as the carrier's fleet growth also seems to have been very strong (and Copa's down-gauging/fleet modernization of its domestic Colombia ops probably also helped this metric);

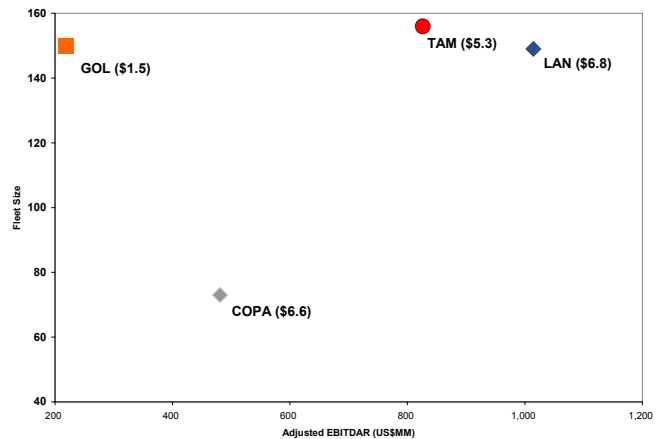
3. LAN Airlines overtook TAM on its operating profitability per aircraft (though our inability to strip out the operating profitability specifically stemming from LAN's dedicated cargo freighters probably somewhat weakens LAN's comparison with the group); and
4. Both TAM and GOL's operating profitability per plane declined.

Figure 33. Fleet Size vs. Adj EBITDAR Minus Net Interest Exp (2006)



Source: Citi Research

Figure 34. Fleet Size vs. Adj EBITDAR Minus Net Interest Exp (2011)



Source: Citi Research

Note: the numbers in parentheses reflected Adjusted EBITDAR minus net interest per plane (in millions). Adjusted EBITDAR excludes non-recurring items.

We recognize the limitations of looking at Adjusted EBITDAR minus net interest expense, as opposed to earnings. However, with respect to our decision to use Adjusted EBITDAR minus net interest expense over net income, we would note the following:

- (A) accounting changes over the above period have created important differences in the disclosure of certain items (that had the ability to significantly impact adjusted net income calculations);
- (B) effective tax rates for the Brazilian carriers are sharply higher than they are for Copa and LAN (we wanted to take a cleaner look at potential operating profitability changes, related to fleet grew, rather than considering arguable Brazilian tax policy disadvantages); and
- (C) we heartily recognize that operating cash flow figures per plane might differ materially from what one might observe looking at operating cash flow on a per-seat basis. Beyond this, we also acknowledge that LAN's figures should (perhaps) be treated a little differently, considering that it's the only member of the group that has dedicated (cargo) freighters. Finally, f/x fluctuations probably also played some role in the above results.

The Future Of Consolidation

A Brief Overview

We believe that consolidation has impacted Americas-based airlines in a positive manner. However, we would note that the pace of consolidation across the Americas-based airline sector has not been uniform, while the nature of such consolidation has also varied.

Figure 35. Americas Airline Industry Key M&A Transactions – Completed Transactions Only (2001-Present)

Date Effective/ Unconditional	Target Company	Country	Target Ultimate Parent	Acquiror	Country	Target Fleet (approximate)
SOUTH AMERICA						
3/1/2002	Aces	Colombia	Aces	Avianca SA	Colombia	21
8/1/2008	Viacao Aerea Rio Grandense SA	Brazil	Viacao Aerea Rio Grandense SA	GOL Transportes Aereos	Brazil	16
2/8/2010	Grupo TACA	El Salvador	Grupo TACA	Avianca SA	Colombia	129
3/1/2010	Aerogal	Ecuador	Aerogal	Avianca SA	Colombia	12
8/19/2010	Pantanal Airlines	Brazil	Pantanal Airlines	TAM Airlines	Brazil	3
11/30/2010	Aires Airlines	Colombia	Aires Airlines	LAN Airlines	Chile	27
11/30/2010	TAM Airlines	Brazil	Grupo TAM	LAN Airlines	Chile	162
UNITED STATES						
4/9/2001	Trans World Airlines Inc	United States	Trans World Airlines Inc	American Airlines Inc	United States	143
9/8/2005	Atlantic Southeast Airlines	United States	Delta Air Lines Inc	SkyWest Inc	United States	156
10/29/2008	Northwest Airlines Corp	United States	Northwest Airlines Corp	Delta Air Lines Inc	United States	303
7/31/2009	Midwest Airlines	United States	Midwest Air Group	Republic Airways Holdings Inc	United States	30
10/1/2009	Frontier Airlines Holdings Inc	United States	Frontier Airlines Holdings Inc	Republic Airways Holdings Inc	United States	62
7/1/2010	Mesaba Airlines	United States	Delta Air Lines Inc	Pinnacle Airlines Corp	United States	92
8/4/2010	ExpressJet	United States	ExpressJet Holdings, Inc.	SkyWest Inc	United States	244
10/1/2010	United Airlines	United States	United Airlines	Continental Airlines	United States	346
5/3/2011	AirTran Airways	United States	AirTran Holdings, Inc.	Southwest Airlines	United States	140

Source: Citi Research

While we see the consolidation cycle as still a few years away from maturing in most of the Americas, it appears to be closer to an end in the USA and Colombia.

In our view, yesterday's US regional airlines could become tomorrow's emerging competitors on some mainline flying.

Overall, we see the following relevant trends within the Americas Airline sector over the next five years:

1. US Airline consolidation coming closer to an end (with some of the "former" regional airlines driving long-term consolidation in the (shrinking) regional airline market – but more possibly crowding into mainline flying).
2. Apparent financial failures seem to have driven most of Mexico's consolidation (and we see (A) the strength of that country's surviving airlines, (B) the latter carriers' fleet plans and (C) "fresh memories" of the demise of many airlines, following 2007's "rush to launch," as factors that could continue discouraging major new entrants over the medium-term).
3. With the possible exception of Colombia, Latin America (ex-Mexico) consolidation seems poised to continue.

We see potentially greater involvement from some (former) regional airlines, as these carriers do more of their own at-risk flying. For instance, in our view, carriers such as Republic and SkyWest that used to be purer regional airlines continue to evolve towards greater direct competition with the US majors. Republic Airways acquired Frontier Airlines, placed a firm order for the (larger variant) CSeries 300

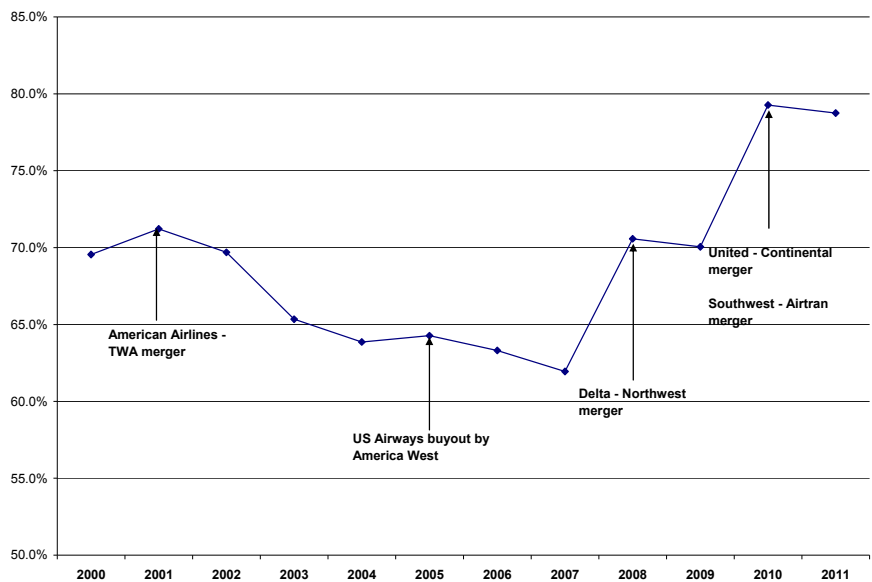
After shedding its minority stake in Brazil's Trip, SkyWest's attention seems to be shifting towards the US mainline market.

In contrast with Europe (see Figure 6 above), the Top 5 US Airlines enjoy a greater market concentration (reinforcing our "late cycle" argument for the group).

and subsequently also inked an LOI for Airbus (we saw that latter as a "hedge" against the risk of protracted CSeries delays).

Similarly, Utah-based SkyWest recently shed its minority stake in Brazil's Trip Airlines (as Azul agreed to purchase this stake as part of the latter's planned acquisition of Trip). SkyWest also announced the acquisition of 100 (ca 90-seat) MRJ regional jets from Mitsubishi Heavy Industries. We also understand that SkyWest is negotiating with Bombardier on an even larger potential order for CSeries aircraft (ca. 110-149 seats) – please also refer to Citi's (post-Farnborough) [The Itinerary: Citi's Global A&D Weekly](#).

Figure 36. Market (RPM) Concentration Among Top 5 US Airline Groups



Source: Company Reports, Association of European Airlines and Citi Research Estimates

We see SkyWest and Republic moves as more evidence that yesterday's regional airlines are creeping towards their own mainline flying. Over the medium-term, these trends imply potentially increased competition for the (surviving) US majors. Conversely, we see carriers such as Spirit Airlines as continuing to be largely unaffected by this trend, in light of that carrier's very different product offering.

Within Latin America, we see the consolidation cycle as less mature (versus the case of the United States). Recent (apparent) financial difficulties with carriers such as Uruguay's Pluna, suggest that surviving airlines could still have some modest opportunities to enjoy higher unit revenue (as the market *prices in* the increased scarcity of available seat miles in the affected regions).

Periodic new entrants into Colombia's domestic market seem to buck the trend, versus our observations of other Latin America aviation markets.

Conversely, we see Colombia's domestic market as the only area in this region that could partially buck the consolidation trend we expect in the rest of Latin America (ex-Mexico). For instance, Aires Airlines expanded for several quarters (until LAN Airlines acquired that carrier). As LAN (LATAM) digests Aires and AerOasis ventures in Colombia, we had noted some time ago LCC Viva Colombia's 2Q12 launch (please also see page 3 of our November 18th [LATIN AVIATOR](#) report).

Nevertheless, in markets such as Colombia (and especially in Brazil), we also see the dearth of airport capacity per capita as a factor that could continue to inhibit new

entrants. Moreover, foreign ownership restrictions of airlines in both Brazil and Mexico (ca. 20% in each case) add yet another entry barrier (though in sharp contrast to Brazil, we see Mexico as having done a very good job in managing airport capacity growth).

LATAM Airlines And Alliance Membership

Our October 5th [LATIN AVIATOR](#) piece had identified LATAM Airlines as one of the region's main consolidators (ex-Mexico) over the coming years. In that report, we had also highlighted our expectations for Copa Airlines' star to rise as a potential medium-term acquisition target.

Although we continue to see the greatest probability of LATAM joining oneworld . .

Although it has been our official view that LATAM Airlines (LAN + TAM) is most likely to stay with the **oneworld** alliance, we would now also entertain the possibility that LATAM might opt out of any alliance membership. We assign a 30% chance that LATAM Airlines opts out of its alliance memberships, a 69% chance that LATAM joins the **oneworld** alliance, a <1% chance they opt for SkyTeam (*very unlikely – in our view, would take spectacular capital contributions from SkyTeam members*), and a 0% chance that LATAM joins Star (difficult to see regulators allowing LATAM to join the same alliance as its main regional competitor).

With respect to our views on the possibility that LATAM Airlines opts out of all alliance memberships, and we would make the following comments:

. . we would also not ignore the possibility that LATAM opts out of all alliances (as we see with some of the Middle Eastern Airlines).

- As LAN is currently a **oneworld** member, while TAM has been a Star Alliance member, choosing one alliance implies some switching costs/transition. TAM uses the *Amadeus Altea* reservation system (which seems to be used by a majority of Star Alliance members), while LAN is implementing the *SabreSonic* system. We would imagine that a switch-over to one of the above global alliances would result in the combined carrier abandoning one of the above systems, at some cost (antitrust decisions prohibit LAN and TAM from continuing to maintain different alliance memberships, two years after their merger closes).
- Leaving each carrier's reservation (and other) systems intact could allow LATAM to more easily continue code shares, interline agreements, etc. across alliance networks (we would note GOL's collaboration with airlines across alliance boundaries, in spite of SkyTeam member Delta's ca. 3% ownership stake in GOL, as well as a seat on GOL's board – please also refer to Figure 1 of our [Brazilian Airlines](#) piece, dated 12/9/11). On a related note, we would highlight TAM's April 16th announcement that it agreed to code-share with the SkyTeam's AeroMéxico on some flights.
- CIRA Europe's Andrew Light also expresses his view (in this report), that several influential carriers, based in the Middle East, are eager to bypass formal alliance memberships, opting to strike bilateral agreements of their own. It could also be the case that LATAM might also choose to pursue this model.

Therefore, as LAN is the carrier that has essentially acquired TAM, we continue to see more likelihood of LATAM joining **oneworld**. Moreover, we would be a little surprised if the **oneworld** alliance simply let LAN/LATAM leave (especially after the difficulties we've seen for the alliance in the Americas, with Mexicana's August 2010 suspension of its operations, followed by American Airlines' Chapter 11 filing roughly 15 months later).

Delta appears to have selectively eyed small minority stakes in foreign carriers, and has also appeared to undertake “special situation”-type investments.

In our view, the ANAC’s very early approval of the LAN-TAM merger was the exception to the rule.

Delta Selectively Eyeing Minority Stakes

Our [Brazilian Airlines](#) dated 12/8/11 had cast a critical eye on Delta’s decision to have obtained a non-voting (ca. 3%) stake in GOL for a huge premium (ca. US\$13.30/ADR, vs. GOL’s current price below US\$5.00/ADR).

Figure 37. Delta Airlines Acquisition Timeline

Nov-09	Aug-11	Aug-11	Dec-11	Jan-12	Apr-12
Delta offers US\$1B financial lifeline to struggling Japan Airlines	Delta and Aerolineas Argentinas agree to start codeshare flights	Delta agrees to purchase a US\$65M stake in AeroMéxico	Delta buys US\$100M stake in GOL	Delta refrains from taking stake in Garuda Indonesia	Delta agrees to purchase a Pennsylvania oil refinery from ConocoPhillips

Source: Reuters, Company website

We had stated in the aforementioned report that Delta Airlines is unlikely to acquire a majority stake in GOL, as (among other factors), it might be hard for them to explain to their shareholders why they intentionally increased the potential cost of such an acquisition by purchasing a very small stake for a huge premium. ***Our caution here appears consistent with CIRA London Andrew Light’s comments, regarding the difficulties of carriers taking large minority stakes, in airlines that operate in geographically distant markets (in which the acquiring airline has almost no footprint) – (please also see the caption External minority stakes (outside Europe) – Ultimately no value-added).***

Looking further at Brazilian aviation’s foreign ownership restrictions, and we see the ANAC’s very early approval of the LAN-TAM as an exception for the following reasons:

- LAN’s merger with TAM was virtually a merger of equals (the fleet size, network breadth, etc. of each carrier were similar). Conversely, we would expect greater scrutiny in the event that a materially larger foreign airline attempts to acquire a smaller (Brazilian) carrier. In the latter event, one might expect conflict arising as the smaller (Brazilian) carrier seeks “equal voice” (thanks to the foreigner’s restriction on voting capital), while the Brazilian airline’s smaller fleet/network/balance sheet, etc. would not justify such equality (***from an operating standpoint – once again, consistent with Andrew Light’s comments***);
- We also understand that TAM’s Amaro family has long-standing professional and personal ties with LAN’s controlling shareholders (including the Cueto family). In our view, such ties/goodwill could provide a strong foundation under which the two controlling groups can work together; and
- Even before LAN and TAM had announced their MOU (on 8/13/10), we would note that the two airlines already had a long track record of collaborating (including code-sharing on regional flights).

Therefore, in addition to a dearth of targets that could be acquired in Brazil (we believe that most of the independent airlines are “too small to matter” – please also see page 3 of our May 29th [Eye In The Sky](#) piece), and we still continue to see Brazil’s foreign ownership restrictions as placing important impediments on the potential for further M&A activity among the airlines. Nevertheless, we would not be surprised to see some ongoing acquisition of smallish carriers in Brazil’s domestic market.

Aside from Copa Airlines (and perhaps Azul), there are not too many large carriers left in Latin America.

Comments on Other Carriers in the Region

As we look across the Latin America aviation sector's mosaic, and we concede that (aside from Copa and perhaps Azul), there does not seem to be much left to buy, as either target airline size, foreign ownership restrictions, infrastructure limitations and/or antitrust considerations could inhibit further, significant merger activity.

We had previously identified Copa Airlines as a potential long-term acquisition target (please also refer to our October 5th [LATIN AVIATOR](#) piece). Separately, we mentioned Azul largely due to its size (but we also concede that Azul appears to be more interested in acting as a consolidator, rather than a target). However, we also identify some airlines (below), which could screen as potentially interesting targets (from strategic and/or financial engineering perspectives, and/or because government owners might be interested in spin-offs). *We are not suggesting that an acquisition of one of the names/brands below is imminent:*

Pluna

We acknowledge the possibility that Pluna might simply liquidate. Separately, Sky Airline and Avianca Brasil both have decent scale (but it's wholly unclear to us whether their controllers have any current interest in selling them).

We would note that this carrier is fairly small (and counted the government of Uruguay as one of its major shareholders). A recent Bloomberg news article stated that this carrier ceased operations in early July, due to apparent financial difficulties.

At this point, it could be the case that the government of Uruguay is not interested in resuscitating this carrier. However, we would not rule out some effort by the Uruguayan government to perhaps auction the carrier's slots, aircraft or other assets (though it is unclear to us to what extent we might also see Uruguayan private investors trying to revive Pluna, as we seem to have observed in the cases of Mexicana and Aviacsa). At the time of publication, what seem to be long-term efforts to revive Mexicana and Aviacsa appear to be unsuccessful thus far.

Sky Airline (Chile)

We would identify Sky Airline as one of the very few South American carriers that is (A) not publicly traded, (B) not government-owned and (C) actually has decent scale (a fleet of 20 planes, Boeing/Airbus narrow-bodies). We do not have any direct evidence that any particular carrier might be in conversations with Sky at the moment. However, we also believe that Sky could potentially be an attractive target, for one of the larger (super-regional) or other airlines, looking to boost its connectivity within the Southern Cone.

Avianca Brasil

In our abovementioned November 18th LATIN Aviator piece, we had flagged Avianca Brasil as the only domestic Brazilian carriers (aside from TAM and GOL) that actually offered regularly-scheduled (Rio-São Paulo) Local Shuttle flights. In that report, we further noted that Avianca Brasil is an independent airline, and is owned directly by German Efromovich's Synergy Group (and not by the Colombian-based airline of the same name).

We reiterate what we had said (several months ago) that ***we see Avianca Brasil as a valuable chess piece (in light of the carrier's possession of Local Shuttle slots)***. We would also note that Avianca Brasil has decent scale (26 Airbus narrow-bodies).

However, we do not sense that Synergy Group is in a rush to sell this carrier. In our view, LATAM Airlines and GOL both have very strong market concentrations (and an

attempted acquisition of Avianca Brasil by either carrier might not pass antitrust muster). While Azul's market concentration is lower (and that carrier could be more interested in Avianca Brasil medium-term), we would note that a potential Azul take-over of Avianca Brasil could also be more complicated, considering each airlines' arguably different product positioning and different fleet compositions.

Therefore, for the above reasons, we see Avianca Brasil as garnering more potential M&A interest in the event that Brazil relaxes the 20% foreign ownership restriction on airline voting capital (not likely to screen as a near-term candidate).

(Fully) Government-Owned Airlines

While we have no hard evidence of government intentions (in these cases), we see *Aerolineas Argentinas*, TAME and Caribbean Airlines as potentially generating interest from other carriers.

We recall the Argentine government's buy-out of (Spain's) Marsans Group's majority stake in *Aerolineas Argentinas* back in 2009. Since this time, *Aerolineas Argentinas* has (somewhat) re-tooled, ordering Embraer planes and announcing that it will join the SkyTeam global alliance. In our view, it is unclear what the Argentine government might decide to do with its ownership stake. However, we would note that *Aerolineas Argentinas* is not small (a fleet of 49 narrow-body and wide-body aircraft), and we believe that the Kirchner administration could have a receptive audience, to the extent that they entertain the idea of selling this stake.

On other fronts, we would note that TAME code shares with Copa Airlines. While it is unclear whether the Ecuadorean military has any interest in selling any of TAME's equity, it would not surprise us to see some airlines express an interest in (at least) taking a minority position in this airline (considering the extent to which the buyer could increase its regional connectivity). Separately, Trinidad & Tobago-based Caribbean Airlines has scale (20+ aircraft), and serves markets with both tourism flow (various destinations in the British West Indies) and business travel (Trinidad itself is a major natural gas producer).

Other (Government-owned) Airlines Unlikely to Be Targets

We do not see Venezuelan, Cuban or Bolivian state-owned airlines as generating interest from other carriers.

Conversely, we see very low probabilities of other government-controlled airlines in the region becoming transaction targets. In the case of Colombia's Satena, we understand that this carrier's service of domestic routes has social implications (Satena serves destinations/routes that other carriers have allegedly avoided, due to poor economics).

Finally, looking at the cases of those airlines controlled by the governments of Venezuela, Bolivia and Cuba (please see the figures below), and we believe that it is extremely unlikely that these countries' flag carriers could end up as acquisition targets. Among other factors, we believe that these governments' alleged antipathy towards free markets makes it highly unlikely that these carriers could attract any industry bidders (aside from other airlines controlled by like-minded governments).

Figure 38. Brazil Airline Industry – Profile Of Key Participants

	ASK Market Share, as of Feb-12	RPK Market Share, as of Feb-12	Fleet size	Fleet Comments	Route Comments	Ownership Data	Alliance Membership
GOL	41.63%	41.01%	123	B737-700 (43), B737-800 (80+108)	49 domestic destinations and 13 international routes to South America and the Caribbean	Constantino family	Various code shares.
TAM	40.63%	39.00%	153	A319-100(30+33), A320-200 (87+39), A321-200(9+21), A330-200(20+3), A350-900(0+27), B767-300ER(3), B777-300ER(4+10)	50 domestic and 12 international routes to Western European, South and North American destinations	Amaro family, LATAM Airlines	Star Alliance
Azul Trip	12.89%	14.27%	105	Azul: 8 ATR 72-200 (8), ATR 72-600 (3+29), ERJ 190(10) ERJ 195 (28+11)	42 routes connecting main cities in Brazil, up from 28 in 2010.	David Neeleman (10% + a control of voting shares) and private investors (57%)	N/A
				Trip: E190 (10+2), E175 (9), ATR 72 (18), ATR 42 (19).	88 routes in low-competition small/medium cities throughout all 5 regions. Latin America's 4th largest carrier in terms of destinations served.	Trip Participacoes Holding (Capriolli Family, 16.5% and Chieppe family, 16.5%)	
Avianca Brasil	4.38%	4.98%	26	A318 (5+10), A319 (3+1), A320 (4+2), Fokker 100 (14)	22 domestic routes, primarily coastal cities.	Synergy Group	N/A
Passaredo	0.61%	0.61%	14	ERJ145 (14)	26 routes in all 5 regions of Brazil with a focus on low competition routes in medium-sized Northern and Midwestern cities	Grupo Passaredo (family-owned bus company)	Codeshare with GOL
Total Linhas	0.06%	0.08%	3	3 ATR-42 500s, 6 B727-200 Full-Cargo	ATR's serving Petrobras and Boeings serving Brazil Postal Service. Route map shows main cities + shuttle between Manaus and Amazon mining destinations	Grupo Empresarial Rota (Private equity firm in construction & engineering)	N/A
Sete	0.04%	0.03%	7	2 EMB-120 + 5 Cessna Grand Caravan	Centro-Oeste and Norte regions, low-competition routes.	Grupo Sete (Eriston Araujo and Luiz Vilella, TAM's Rolim's former business partner)	N/A
NHT	0.03%	0.02%	6	6 LET 410 UVP E-20	Southern Brazil (Parana, Santa Catarina and Rio Grande do Sul). One CGH-Curitiba route. Gave back 10 CGH slots	JMT Holding (Teixeira Family)	N/A

Source: Company websites, Company reports, FlightStats, Airliners.net, ANAC

Figure 39. Mexico Airline Industry – Profile Of Key Participants

	RPK Market Share, as of Apr. 12	Fleet size	Fleet Comments	Route Comments	Ownership Data	Alliance Membership
Grupo Aeromexico	39.9%	111	Aeromexico: B737-700(30+8), B737-800(15+20), B767-200ER (6), B767-300ER (2), B777-200ER(4+1), B787-800(0+7) Aeromexico Connect: E145 (38), E190 (16+5)	destinations in the Americas, Europe and Asia	Banamex, private investors and Delta Airlines (4.2%)	Skyteam and codeshares with carriers such as LATAM, AviancaTaca and Copa
Interjet	25.1%	33	A320 (33+8), SSJ-100 (0+15)	25 domestic destinations and 5 routes to the US, Costa Rica, Cuba and Guatemala from its hubs in Toluca and Mexico City	Aleman Group (100%)	None
Volaris	19.5%	35	A319 (24+11), A320 (11+14), A320neo (0+30)	32 domestic destinations and 7 ethnic markets in the US from its hubs in Tijuana and Guadalajara	TACA (50%), Discovery Americas (25%) and Indigo Partners (25%)	Codeshare with Southwest Airlines
VivAerobus	10.8%	20	B737-300 (17+3)	21 domestic and 5 US destinations from its Monterrey hub	Ryan family (founders of Ryanair, 49%) and IAMSA (largest local bus company, 51%)	None
Aeromar	2.0%	16	ATR 42-320 (4), ATR 42-500 (10), CRJ-200 (2+2)	21 domestic (mostly coastal) destinations and one international flight to San Antonio, Texas from its hub in Mexico City	N/A	Partnership with United Continental
Magnicharters	2.8%	9	B737-200 (2), B737-300 (7)	7 domestic (mostly coastal) destinations and one flight to Las Vegas. Hubs in Monterrey and Mexico City.	Bojorquez Family (100%)	None

Source: Company websites, Company reports, FlightStats, Airliners.net, DGAC

Figure 40. Southern Cone Airline Industry – Profile Of Key Participants

	Fleet Size	Fleet Comments	Route Comments	Ownership Data	Alliance Membership
ARGENTINA					
Lan Argentina	18	A320 (14), B767-300 (4)	12 destinations throughout Argentina with a Buenos Aires hub. International flights to Miami, Lima, Santiago, Punta Cana and Sao Paulo.	49% LAN, 51% Argentine investors	oneworld
Aerolineas Argentinas	49	Aerolineas: B737-700(16+6), B737-800 (2+5), A340-200 (4), A340-300 (7)	Local Argentina destinations plus 17 international routes to South American neighbors as well as New Zealand, Australia, Mexico, USA, Spain and Italy.	99.4% Argentine Government, 0.6% company employees	Joining SkyTeam in 2H12
		Austral: ERJ190 (20)			
CHILE					
Lan	164	Q400 (14), B737-700(6), A321/A320/A319/A318 (83), B767-300(50), B787(2)A340-300(5), B777-200F(4)	Owens Lan Colombia, Lan Peru, Lan Ecuador, Lan Argentina, Lan Cargo and Lan Express. Serves xx destinations worldwide.	LATAM Airlines Group	oneworld
Sky Airline	20	A320-200(5), B737-200(14), A319(1)	Local Chilean destinations plus international routes to Buenos Aires, Florianopolis, La Paz, Arequipa + Chile.	Majority owned by Mr. Jurgen Paulmann.	Codeshare with 11 global airlines, including AviancaTaca
URUGUAY					
Pluna	13	Full CRJ900 fleet	16 destinations. Longest route to Brasilia. Serving Paraguay, Argentina, Chile and Brazil	75% Latin American Regional Aviation Holding Corp (33.3% owned by Canadian Jazzair), Government of Uruguay (25%)	Codeshares with Iberia and American

Source: Company websites, Company reports, FlightStats, Airliners.net

Note: At the time of publication, Pluna appears to have suspended its operations (and the above ownership information reflects what had been the case prior to that carrier's apparent suspension).

Figure 41. Andean & Caribbean Airline Industry – Profile Of Key Participants

	Fleet Size	Fleet Comments	Route Comments	Ownership Data	Alliance Membership
BOLIVIA					
Aerosur	11	B727(1), B737 (7), B767 (2), B747 (1)	Local Bolivian routes plus flights to Miami, Madrid, Washington and Sao Paulo	On the brink of bankruptcy. Aerosur temporarily ceased operations in May 2012 because of unpaid taxes and inability to pay for jet fuel and to service its outstanding debt	N/A
VENEZUELA					
Conviasa	20	A340-200(1), A340-500(+4), Cessna208(+4), B737-200(6), B737-300(3+1), CRJ700ER(4), E190(+20), ATR42-400(2), ATR72-200(3), DHC7-100(1)	Destinations in Caribbean, Syria, Argentina.	Wholly owned by the Ministry of Aquatic and Transport of Venezuela	Codeshare with Aeroflot, Cubana, IranAir, Satena and Aerolineas Argentinas.
COLOMBIA					
AviancaTaca	63	Avianca: A330(8), A320 (25), A319(11), A318(10), Fokker50(9)	Owns Avianca (Colombia), Tampa Cargo, VIP (Ecuador), Avianca Brazil, Helicol (helicopter service) and Aerogal (Galapagos)	Synergy Group and National Federation of Coffee Growers of Colombia	Star Alliance
	46	Taca: A321 (5), A320(18), A319(11), E190 (12)			
Satena	15	ATR42/72 (5), Dornier328 (6), E145(3), E170 (1)	Serves 38 domestic destinations from its hub in Bogota.	Wholly owned by the Colombian Air Force	Codeshare with AviancaTaca
EQUADOR					
TAME	11	ATR42-500 (3), A319 (1+2), A320 (3), E170 (2), E190(2)	13 local destinations plus international routes to Colombia, Cuba, DR, Panama, Mexico and Jamaica	Owned by the Ecuatorian Air Force but operating autonomously in both administrative and financial fields.	Codeshare with Copa
TRINIDAD & TOBAGO					
Caribbean Airlines	25	ATR72-600(2+7), B737-800(16), B767-200ER(1+2), B767-200F(1), BBD Q300(5)	16 global destinations (Flying to US, Canada, South America as well as the UK)	Acquired Air Jamaica in May 2011. Government of Jamaica (16%), Government of Trinidad (84%)	N/A
ANTIGUA					
LIAT	18	Dash8-100 (3), Dash8-300(10), Q300(5).	22 Caribbean destinations	Owned by 7 Caribbean governments (73.4%), private investors (10%), employees (5.3%)	Partnership with Virgin Atlantic
CUBA					
Cubana	14	An-24RV(2), A320(3), B737-400(1), B767-300ER(1), Ilyushin Il-96(3), Tupolev Tu-204(4)	Flying domestically, regionally and to destinations such as France, Spain, UK, Argentina, Mexico and Canada.	Wholly owned by the Cuban Government	Codeshares with Air Europa, Aeroflot, TACA, Copa among others
AeroCaribbean	18	ATR42-300 (3), ATR 72-212(4), B737-200(1), EMB-110(4), Yakovlev-40(6) An-26 (1)	Domestic flights, regional charter to the islands as well as Guatemala City	Wholly owned by the Cuban government	Codeshare with Cubana

Source: Company websites, Company reports, FlightStats, Airlines.net

Figure 42. Selected Global Airline Comps (Intra-Day Prices As Of 7/23/12)

Company	Country	Ticker	Rating	07/23/12	Price	'12E	'13E	'12E	'13E
Low-Cost									
RyanAir	Ireland	RYA.I	1	\$4.77	\$5.35	11.3x	11.6x	9.1x	6.7x
West Jet	Canada	WJA.TO	NR	\$15.90	NR	14.4x	11.7x	NA	NA
AirAsia Bhd	Malaysia	AIRA.KL	3	\$1.18	\$0.90	11.7x	9.5x	NA	NA
Tiger Airways	Singapore	TAHL.SI	3H	\$0.55	\$0.37	NM	NM	15.4x	30.1x
Cebu Air	Philippines	CEB.PS	1	\$1.61	\$1.91	9.9x	10.1x	10.8x	7.5x
Air Arabia	United Arab Emirates	AIRA.DU	1	\$0.17	\$0.22	8.5x	7.7x	1.7x	3.9x
easyJet	United Kingdom	EZJ.L	1	\$8.44	\$9.69	9.1x	8.4x	11.0x	5.2x
Spirit	United States	SAVE.O	1	\$20.02	\$27.00	10.8x	8.5x	10.8x	5.4x
GOL	Brazil	GOL.N	2H	\$4.17	\$6.00	NM	NM	5.1x	4.0x
Median						10.6x	9.8x	10.8x	5.4x
Low-Cost Hybrids									
Jet Airways	India	JET.BO	3H	\$6.45	\$3.11	NM	NM	21.2x	25.4x
Copa Airlines	Panama	CPA.N	1	\$74.79	\$104.00	9.0x	7.5x	13.2x	6.8x
TAM	Brazil	TAM.N	1	\$25.98	\$30.00	17.2x	13.3x	7.9x	7.8x
Median						13.1x	10.4x	13.2x	7.8x
Premium Passenger/Cargo									
LAN Airlines	Chile	LFL.N	1	\$24.45	\$33.00	15.3x	15.0x	19.0x	12.8x
Cathay Pacific	Hong Kong	0293.HK	1	\$1.66	\$1.93	28.7x	13.6x	6.0x	6.4x
Korean Air	South Korea	003490.KS	NR	\$43.36	NR	6.3x	5.9x	NA	NA
Singapore Airlines	Singapore	SIAL.SI	3	\$8.60	\$8.28	13.7x	9.7x	6.1x	3.7x
China Airlines	Taiwan	2610.TW	3	\$0.41	\$0.41	21.3x	9.2x	16.4x	9.3x
EVA Airways	Taiwan	2618.TW	3	\$0.56	\$0.56	20.1x	8.4x	13.8x	7.3x
Median						17.7x	9.5x	13.8x	7.3x
Legacy									
Intern. Consolid. Airlines	United Kingdom	ICAG.MC	1	\$2.31	\$3.16	NM	16.4x	13.2x	6.1x
Lufthansa	Germany	LHAG.DE	1	\$11.72	\$18.24	34.3x	10.7x	5.9x	4.7x
Scandinavian Air	Sweden	SAS.ST	1H	\$0.81	\$1.15	NM	4.4x	15.4x	1.7x
Air France	France	AIRF.PA	2H	\$4.46	\$4.86	NM	NM	8.5x	6.0x
Garuda Indonesia	Indonesia	GIAA.JK	1H	\$0.08	\$0.08	11.7x	8.8x	8.0x	6.8x
Turkish Airlines	Turkey	THYAO.IS	1	\$1.75	\$2.21	13.5x	8.5x	4.7x	7.2x
Air China	China	0753.HK	1H	\$0.67	\$0.88	7.8x	7.1x	8.1x	6.3x
China Eastern	China	0670.HK	2H	\$0.33	\$0.35	10.6x	7.6x	10.7x	7.7x
Aegean Airlines	Greece	AGNr.AT	2	\$1.52	-	NM	NM	3.8x	11.3x
China Southern	China	1055.HK	3H	\$0.49	\$0.52	13.3x	12.1x	11.8x	7.9x
Median						12.5x	8.5x	8.1x	6.8x

Notes: (1) EPS Estimates for "NR" companies are taken from I/B/E/S or Bloomberg Consensus Estimates. All estimates and values are calendarized and are in US\$.
NR = Not Rated by Citi Investment Research. NM = Not Material. NA = Not Available. RyanAir, Jet Airways, Frontier and Singapore Airlines have a fiscal year ended March 31; AirAsia FY is ended June 30; easyJet FY is ended Sept. 30.
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Source: Citi Research

Appendix A-1

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