We are now in the third element of the first phase of the downswing of the aviation cycle which started just over twelve months ago and which for most airlines is characterised by downward pressure on revenues and upward pressure on costs – mainly but not only fuel. Even the most cursory look at airline earnings releases or statements for regional associations will confirm this; most recently the ATA reported that in October passenger numbers for its members fell by some 3% and revenue per RPM was down by 13.5%. Whilst this may be less worse than for most months this year, it is certainly does not represent an improvement in the financial performance or position. One almost universal factor across the US industry has been the cash raising exercises whether from pre-selling frequent flyer miles or from issuing high coupon debt instruments. We (CTAIRA) have no difference from the view of the ATA when they state “the pressure to generate revenue will remain intense for the foreseeable future”.

Cost pressures

Despite the announcement by many airlines of cost reduction programmes, fuel is the major swing factor on the cost side of the equation and at the time of writing the price was back to levels last seen a year ago but this time it is on the way up and twelve months ago the trend was down. For most airlines their ability to reduce unit costs is a function of growth which enables costs to be “grown down” as fixed costs are spread over more ASKs and ATKs. Indeed we have already had warnings from airlines that in the absence of growth we should not expect non-fuel unit costs to fall This inevitably focuses even more attention on the outlook for revenue which IATA’s forecasts expect to fall by some $80bn or 15% in 2009 compared with 2008 and for 2010 the forecast for industry revenue is still some $60bn lower than in 2008 (a fall of 11%). This in turn should focus attention on the necessary shape and size of the industry where there appears to have been, albeit from cyclical origins, a structural reduction in the revenue and almost by definition there is a need to reduce the productive capacity of the industry. For the majority of airlines improvement will not inevitably follow a period of what may be characterised of “hanging on for a bumpy ride”. A recovering economic cycle on its own will not be enough to improve performance sufficiently quickly. What we appear to be witnessing is a fundamental change in the economics of the industry with a consequent need for a meaningful adjustment on the supply side.

Supply adjustment

Contrary to what at times appears a widely held belief, the rules of economics do in fact apply to the aviation industry as they do to all other industries. The balance between supply and demand and the impact on achieving the necessary prices and revenues to cover costs and make a return really does matter. However the actions and reactions in a competitive market may result in behaviour which appears...
irrational against the prevailing circumstances and which is more related to protecting volumes and market share with a hope, although not always an expectation, that either competitors will exit the market and their revenues will, as a result, increase. New aircraft may well be received by airlines that can grow structurally but as the result of taking traffic from competitors. The near and medium term effect will be less revenue to share around and this will persist until there is at least a partial withdrawal, and even then the capacity is likely to remain somewhere in the system. Notwithstanding this, the longer the downturn persists the more likely earlier decisions made in respect of future capacity are to be re-visited. However adjustment in either direction is neither instant nor costless and in respect of real capacity adjustments the process can be long and painful. Although we have seen in the US in particular fleets being reduced and can track the aircraft to the breakers’ yards, in most cases taking aircraft out of service does not take capacity out of the system although it may transfer the risk.

The process of adjustment is particularly interesting in the so called “low cost” segment of the market given their near universal operating and financing model. Whilst there is a tendency to talk in terms of replacement demand and growth demand there is another dimension that is of interest and importance. Replacement demand does not only arise when aircraft are broken up; indeed most if not all so called low cost airlines have models that are based on turning over their aircraft after 7-9 years which amongst other things removes the need for an expensive D check but also enables them to continue to benefit from low cost capacity – assuming the manufacturers are willing to engage at the necessary prices (which may not be the case – at the moment – in the current discussions that Ryanair management is having for aircraft required for delivery from 2013). Given the timing of the acceleration of these airlines from 2002/03, out of the last downturn, there will be an increasing source of capacity from “nearly new” aircraft which will inevitably have an impact on the level of demand for and prices of new aircraft – after all the manufacturers do not appear to have influence or control over the second hand market and by definition there will be a lagged effect from deliveries made in the recent past (7-10 years) on the actual demand for new aircraft and achievable prices. Indeed over the upswing of the next cycle “nearly new” aircraft would appear to have the potential to provide a significant source of attractively placed supply.

Fleet storage and utilisation

When we talk about the airline industry what we are in referring to is a series of inter-related markets which differ widely in the speed at which they can adjust to a new operating environment. It is also worthwhile looking behind the headlines to understand the actual nature of the adjustments that have been made. Most recently there has been a focus on the fact that load factors are back to “pre-recession” levels. The latest traffic data from IATA shows that passenger load factors are back to the levels of two years ago with the figure for September 2009 of 77.1% being not significantly different from the 77.4% reported in September 2007. However more than one set of figures is required for a trend and for the year to date the cumulative load factor for 2009 of 75% is some 2.3% points below that of the corresponding period in 2007. It is important to recall that the load factor is just a ratio showing how much of the capacity offered to the market is filled; it is only one measure of capacity utilisation and it tells nothing of the prices or costs associated with reaching a particular figure.

An inevitable part of the adjustment to a downturn is an increase in the number of parked aircraft and unsurprisingly, compared with our reference point of September 2007, the number of aircraft defined by Ascend as parked has risen by some 750 aircraft to just over 2600 in September 2009. This increase is entirely predictable and at equivalent to 11.5% of the total jet fleet represents a similar percentage of the fleet that was parked in the initial phase of the last downturn (11.2% at the end of 2001). The increase from September 2007 represents some 3.5% of the current fleet (in airline fleets or parked) measured in terms of aircraft but slightly less in terms of capacity. It should not come as a surprise that the majority of the increase has resulted from older aircraft being put into storage. Our analysis of the Ascend data also suggests that during the last twelve months just over 350 MD80s, DC9s, JT8D powered Boeing 737s and
Boeing 727s have been scrapped, more than twice the number for the whole of 2008. As a consequence of this the number of DC9s, JT8D powered Boeing 737s and Boeing 727s has declined within the total for parked aircraft. The increase in the number of parked aircraft in the 150 seat segment that are still in production has increased by less than 60 aircraft over the two years to September 2009 or less than 1% of the current fleet.

Less visible to the outside observer has been the change in daily utilisation. In the latest analysis of the market IATA reflects on the fact that “average daily hours flown are down for some aircraft” and that there will be an impact on unit costs. Taking this data which measures change in hours used per day for aircraft in airline service it appears that there has been a fall of some 4.5% for short haul aircraft and some 5.5% for long haul. Even at a reasonably high level this suggests that the headline load factor is overstating what has occurred. Whilst the load factor measures the use of capacity offered to the market it does not reflect the utilisation of the “installed capacity” or productive potential of the industry measured by the number of aircraft in airline fleets. On an adjusted basis it suggests that on a similar basis to September 2007 capacity utilisation in September was closer to 73%. More simply it seems that the headline figures are overstating the current position. In effect capacity is being hoarded – a position that is not good in terms of efficiency or cost of operations but perhaps also reflects on one hand the difficulty and expenditure associated with a permanent adjustment whilst on the other perhaps the hope that the current “bumpy ride” won’t last too much longer – not a view we share given the outlook for industry revenue into 2010 and indeed beyond. Reintroducing too much too soon will have an inevitable further negative impact on yields and financial performance against the background of a still weak “fundamental” i.e. GDP driven recovery in traffic.

**Production levels**

The re-entry of too much capacity too soon is only one area of concern on the capacity side of the equation. Whilst the problems associated with the production of new long haul aircraft are well documented; in terms of numbers of aircraft delivered the “swing category” is the 150 seat segment represented by the A320 and Boeing 737 families. Whilst our analysis shows a step up in the number of older aircraft in the 150 seat segment being scrapped, the full year figure is expected to be equivalent to less than half of the number of aircraft in this category that will be delivered during 2009. Taking into account substitution effects higher up the chain this means that the “growth component” of the deliveries in 2009 will represent a near 4% increase in capacity in the single aisle/short haul segment of the market; all this can inevitably do is to add to excess capacity and add further downward pressure on fares given that the market is shrinking this year. For those few airlines that have structural growth then this is not a problem but even those which will benefit from substitution effects the overall impact on industry revenue will be negative.

The most recent statements from the manufacturers suggest that for the time being at least they intend to maintain production rates in the single aisle segment at or close to current rates. Although there has been a recent statement from one of the manufacturers that airlines have stopped deferring deliveries, this is of course only one element of the adjustment phase. The other two elements are cancellations and then a near hiatus in ordering. Although in the last downturn a new source of orders emerged from the low frill/low fare segment as they accelerated their growth plans and placed orders for near term delivery, deliveries of aircraft in the 150 seat segment still fell by a third between 2001 and 2003 (from 650 to 432). This time around given the likely absence of a new structural source of orders the downturn appears to have more of the characteristics of that of the early 1990s. Then the peak year for deliveries in the 150 seat segment was 1991 (553 aircraft), which coincided with the start of the downturn, and although deliveries held up relatively well in 1992 (513) the trough was reached in 1995/96 (220 and 226 deliveries respectively) or a decline of almost 60% from peak to trough.

IATA Economics: [www.iata.org/economics](http://www.iata.org/economics)
Without an adjustment on the supply side through a significant step up in the rate of retirement, even allowing for the demand for aircraft for growth from a number of Asian markets, unchanged delivery rates for aircraft in the 150 seat segment will result in a structural increase in capacity, further widening the gap between that at which the industry can generate the fare levels it needs. However if history is indeed some sort of guide to the future then it is reasonable to expect that production rates will be cut notwithstanding the current line taken by both manufacturers. The conversion of orders into deliveries is going to be even more dependent on external financing and here the costs of this finance, if available has risen sharply over the last twelve months by some 500 to 600 b.p.

Overall however the risk remains that the adjustment in the productive capacity of the industry that would appear to be necessary will be largely absent due to the supply of new aircraft into the system. This suggests that even fewer airlines will be able to achieve investable returns in the next upswing and this is not a particularly attractive prospect. However for those with cash or access to finance, even in the phase before the production rates are reduced, there will be some attractively priced aircraft available and in this respect some things never change.

*The views expressed in this article are the author's and not necessarily those of IATA.*