

The “Rules of Economics” apply to aviation just as to any other industry

An address to the Aviation Club of the United Kingdom

Chris Tarry

11th February 2009

When I was asked if I could give today’s address and share my views on what I saw as the current and likely future developments for the industry, I thought that it wouldn’t be too onerous a task: after all it was just a question of reflecting on the previous three downturns that I have encountered as a professional follower of the aviation industry – telling a few anecdotes and taking, or perhaps dodging, some questions. However when I got the rules of engagement which stated that I should speak for 15-20 minutes and provide a transcript of my speech I realised that I would have to be structured and focused in terms of my remarks to you.

For the next 14-19 minutes I will present my perspectives from what I consider to be a basis of evidence. From these I set out how I see the likely process of adjustment and the possible consequences that will result. For the record, I have been described as “balanced and objective” in an analyst rating survey but conversely “alarmist and extremist” by railway operators when I suggested that the recovery from the Hatfield disaster would take a number of years (which it did). By the end of this session you will form your own view into which category I fall and hopefully it will be the former.

As I proceed I will touch on:

- The economic outlook
- Airline profitability and the consequences of the lack of it, including issues of survival.
- The consequences for future rates of aircraft production
- Perspectives on likely winners and losers

Generalisations are inevitably dangerous and although we might talk about the performance of an industry, what we are really interested in is the performance of the group of individual companies that are of interest to us. Almost 25 years ago as a new, rather than young, analyst a colleague and I visited a well known aerospace manufacturing company which at the time had its offices at 100 Pall Mall – this was before moves to the Strand, Farnborough and Carlton Gardens. It was also before the days of large scale investor presentations and “so called” company guidance. When we asked the Finance Director on his views for the outcome of that year - his response was that “it depends” and indeed it does.

I was not a believer that in 2006 or thereabouts the industry entered the upswing phase of some long wave cycle - referred to as a “super-cycle”; in any event this would in due course have had a corresponding equal and opposite downward phase. Unfortunately some of the aspects of what we see now are depressingly familiar – not least the over-ordering of aircraft in the period when the airline industry begins to make some money. What is also depressing this time around is that the peak operating margin in 2007 was just 3% - about half of what it was in the last upswing and the one before that too.

The rules of economics apply to this industry just as any other – for example the rates for container shipping reflect the relationship between the build rate and the scrap rate - relatively unsophisticated but true. In this respect my starting point is that overall the airline industry, even in better times, probably has some 20% too much capacity to enable it to produce an “adequate return”. In any industry, excess supply is damaging and in a downturn it gets even worse; in this respect attention should be focused on how much capacity needs to be removed, not only in terms of aircraft already in the system as well as what needs to happen to future delivery rates. Whilst this may be a real challenge for some it will clearly be an opportunity for others - but which of these it is depends on who and where you are.

All of us have a view on how bad it might get, how long it will take to reach the bottom, and then, when the economic picture will improve. Generalisations are dangerous – but it is clear that the world’s economies have not decoupled - again I was not a buyer of this idea - a quick look at the recent air cargo figures show this to be the case just as well as anything else. This also means that the rates of economic growth, or perhaps more accurately decline, will differ between countries and regions - there will also be differences in the timing of these changes – there will be leaders and laggards. However before we reach the turning point we first have to reach the bottom and that I fear is sometime away.

For what it’s worth, it’s probably safe to say that the downturn will be U shaped - the risk is that in some countries the U might look like an L if there is no sign of a near term upturn. Some of the recent headlines relating to the UK indeed suggest

that we face the worst recession for a 100 years; the problem is if this is an expectation of what might lie ahead. Other headlines in the UK over the last few days have announced that: "Unemployment was to reach a 12 year high" and that "companies fear that the worst is yet to come" - but we probably knew that.

Against the current background, where making even short term forecasts is more fraught with difficulty than usual, and where such views are only likely to be right in terms of direction, it is perhaps not worth devoting too much time on how bad it is likely to get in terms of the likely percentage falls in GDP. However it is worthwhile spending a minute or so on examining what might be meant by the term recession in various parts of the world - again it appears to depend on where you are.

For the US, the UK, much of Europe and Japan there is little doubt that these countries are now in a technical recession having had at least two quarters of economic contraction (I hate the term negative growth).

In Asia ex Japan - described in yesterday's Financial Times as having "an economic heart attack" growth is now forecast to be well below the 6% necessary to absorb the workforce migrating from rural areas. In terms of aviation we have seen the Chinese government not only discourage aircraft deliveries in 2009 but also provide funding for a number of its airlines – elsewhere in Asia we have seen dramatic action from management at Cathay and Singapore and most recently a capital raising exercise has been announced by Qantas management.

In the Gulf, where growth is predicated on oil in excess of \$40 a barrel (Brent currently at \$46 and West Texas Intermediate at \$40), not only are prices now

close to what might be seen as the danger zone in terms of the oil price necessary to act as the catalyst for growth, but the IMF has just cut the GDP forecast for the UAE for the current year from 6.6% to 3.5%. This compares with an expected outcome for 2008 of 6.8%. This inevitably must raise questions over the reality of all of the aircraft on order in the wider region being delivered.

Of course, expectations of the future have a direct bearing on our current behaviour. In this respect if you believe that things are broadly “all right” you will act as if they are and collectively it will reinforce the outcome - hence (at least until recently) the view expressed by government that the UK economy would be OK was hoped to condition consumer behaviour. However now with comments and statements about recession and depression, consumers, if they didn't already, will begin to fear the worst and their behaviour is most likely to reinforce the downturn. Similarly the public statements by aircraft salesmen along the lines of “crisis what crisis”, then followed by a question of how many aircraft they could put you down for appears to reflect misplaced optimism. We, probably like many of you, are aware of new 150 seat aircraft being offered for sale at \$25m – which in the likely future environment would appear to be a little pricey at the present time.

So what then of the outlook and the consequences? The key to almost everything in the aviation sector is the performance of the airline industry, and in the current environment finance, or perhaps more accurately the lack of finance, is clearly important too. Indeed it is of course possible to define a successful airline as one that has access to affordable finance; there are a few that are in this category at the present time and those who are, are well placed to be winners as cash in particular remains king.

The airline industry, which has a voracious appetite for cash, has most of its costs externally determined and is extremely sensitive to outside events. Any decline in revenue has an immediate effect on cash and the ability of airlines to rapidly and significantly reduce costs is close to zero. Indeed the most significant structural reduction in costs over the last decade has arisen through the reduction/eradication of commissions, the move to internet booking and from the introduction of the e-ticket.

Over the last few years the economics of the industry have also changed and one outcome has been that airlines are now more vulnerable to small reductions in volumes than they were. Over the last 30 years or so the seat load factor of passenger airlines has increased from close to 65% to some 76% in 2007. Over the same period, the associated breakeven load factor has increased from being in the order of 60% to between 73% and 74%. Whilst the higher seat factors reflect better utilisation, the rise in the breakeven seat factor over the same period has increased the vulnerability of the industry. Some of the low cost airlines have been able to open up the gap between achieved and breakeven load factors with ancillary revenues. In its last full financial year on fare revenues alone Ryanair had a gap of 3% between the sold and breakeven seat factors in 2008. However, including ancillary revenues this gap has been widened to 15% points. Not all airlines, low cost or otherwise, have such an opportunity. This has increasingly become a business at the margin – getting your prices wrong by £2 a ticket with 40 million passengers a year can be very damaging. Indeed just because you like to be referred to as a low cost airline doesn't mean that you will survive; at the end of the day "low cost" is in effect a state of "economic being". Furthermore if you

have the lowest costs that you think are possible there is, almost by definition, little to do on this front to reduce costs and the dependence on revenue is increased.

Again whilst generalisations are dangerous, most airlines are facing falling passenger numbers and lower fares. There is also a near continuous stream of fare sales advertised at the moment – and these always appear to be extended due to strong demand – but this seems to hide a type of reverse economics - there is no surprise that if you cut prices demand will rise but if, as is usually claimed, demand is strong, the normal response should be to put up the prices. However, fare sales are an inevitable consequence of falling traffic and a need to draw cash into the business – presuming the credit card companies don't hold it back. However, in a declining market, cutting fares will only tend to redistribute what traffic there is rather than growing the market - at times it appears to be a bit like a race to the bottom – indeed there are plenty of offers where you just pay the taxes and other charges rather than providing fare revenue to the airline; this is clearly good news for travel buyers but a bad deal for the airlines particularly if there is little or no spend on “ancillaries”. However some of these are now unavoidable - the charge for paying with a card for example, not least as there appears to be no way to pay with cash – although it could be argued this is a pass through.

However, reductions in unit revenues through lower fares, absent a reduction in unit costs, push the breakeven load factor up – but in the current circumstances, near term cash is probably more important than considerations about profitability. Longer term, the fare reductions that have their origins as a cyclical response could well result in a downward movement in the price structure – this means that the shape of the recovery in terms of mix and revenue, when it comes, will be

different than in the past; the internet has resulted in travel buyers having near perfect information on fares and they now have a clear view of what they are prepared to pay to travel and it always appears to be the airlines that blink first.

IATA's current forecast for the industry suggests that revenues will fall in 2009 by some \$35 billion based on a 3% reduction in passenger numbers – just yesterday ACI announced that they expect global passenger numbers to fall by some 4% this year – only time will tell who is closer to the actual outcome. Whilst the outlook for fuel is more encouraging than a year ago, and in its forecasts IATA expects the industry's fuel bill to be \$38 billion lower - I do fear that the risk to profit forecasts at a company and industry level remains on the downside.

In the past, downturns in the airline industry have tended to last three years – but given the current and likely future circumstances will history be likely to provide an accurate guide to the future? Again it depends and although I did suggest that I would adopt an evidence based approach I believe it is also necessary for some judgemental analysis here. In this respect the downturn appears to have all of the makings of lasting longer than three years.

Turning now to issues of capacity and particularly those relating to the 150 seat segment; it is important to consider those aircraft that are already in circulation within the system as a source of supply. Here the near term focus should be on those aircraft that come off lease, albeit as planned, but without a follow on lessee and also those aircraft that are returned or repossessed, whether in the light of concerns over an airline, or where an airline has failed. This is clearly going to be an increasing issue and for the recipients of the returned aircraft, and the concern

at the forefront of the mind is inevitably the impact of this potential source of excess supply on lease rates and values. The move from a relatively orderly market to a distressed one can be reasonably rapid. For some however this represents an opportunity. In the last downturn some 12% of the narrow bodied remained parked for almost 5 years. This raises a number of issues; one of which relates to the older but still newer generation aircraft; for example what if 16 -18 year old aircraft are parted out as the sum of parts is worth more than the whole; just consider what this might do to depreciation charges and lease rates if the economic life of such aircraft are re-assessed to be 16 -18 years rather than “the usual” 25 years.

What then of planned deliveries: whilst not all of the aircraft in the backlog are in the production schedule the real issue is whether a sufficient number of those identified “at risk” have been excluded from the production plans. Our analysis of the current backlogs suggests that there are some 1600-1800 aircraft in the 150 seat segment backlogs, more or less equally spread between the manufacturers that are at risk from evaporating customer need. There is then the issue of the inability to finance deliveries where customers still have a need (as well as a want) - increasing this number – and there is little or no finance available for aircraft at the moment in most of the (non-French) banking sector.

This suggests to us that a significant adjustment in future production rates is inevitable. In the last downswing, the order cycle in 2002-2004 was padded by an acceleration in orders from LCCs with “sufficient” aircraft for relatively early delivery. Whilst deliveries in the 150 seat segment fell from 660 in 1999 to 432 in 2003, the percentage reduction of 35% was relatively modest compared with the

60% reduction in deliveries of aircraft in this segment in the previous downturn in the early 1990s.

Again from the basis of judgemental analysis, the nature of the downturn, the volume of aircraft in circulation and the likely absence of “order padding” similar to that seen in 2002-2004, suggests that the nature of the adjustment to deliveries this time around is most likely to be closer to that seen in the downturn of the 1990s. In other words there is a reasonable basis for expecting that by 2011/12, deliveries of aircraft in the 150 seat segment could be some 60% lower than the peak delivery rate of 697 in 2007 – suggesting that deliveries of 150 seat aircraft are close to 280 aircraft by this time.

In the near term this will clearly give rise to some opportunities as adjustment is not instant, and before the deliveries come back into balance with real requirements, there will a number of aircraft that need buyers. In the language of economics, a situation of excess supply will exist which will reduce prices until buyers are found, the so-called “market clearing price”, and for somebody this is going to be a real opportunity.

There are many other issues that have come to the fore but time does not allow for their consideration here although perhaps I can leave them as thoughts for you to ponder.

Firstly there are the consequences for airports in general, and regional airports in particular, of a reduction in traffic particularly given the increased dependence on

footfall and related passenger spend. It is even more an issue if you became the owner of a regional airport towards the top of the valuation cycle.

Secondly whether mergers and acquisitions are in fact the solution to the problems of the airline industry which we would identify as; too much capacity, too much cost and in most cases not enough profit. Unless there is substantial post acquisition activity in terms of restructuring the combined business, the answer is inevitably that consolidation alone will not solve the problems – consolidation can of course also occur within an industry by exit. Even at the best of times, the measurement of the supposed synergy benefits is impossible from the outside. In an environment where a more rigorous emperor's new clothes test is a necessity in all situations - less should be taken on trust alone and promises for the delivery of benefit over a number of years into the future should be heavily discounted. However, the rapid structural cost reduction, including the eradication of duplicated activities, which would be necessary to produce real, tangible and meaningful shareholder value in a sufficiently short period of time, is very difficult and usually impossible – often because of a number of “quid pro quos” let alone explicit agreements. Again I'll leave this one with you to ponder. But remember there is always the M&A approach that might be described as the “two drunks” strategy where two not very well placed businesses are combined - it might appear that they support each other for a while but then they collapse in a not very pretty heap.

In conclusion, the aviation industry, even in the best of times, is generally in a state of what is best described as knife edge instability – and the problem is when, for whatever reason, it falls off the knife edge as the nature of the adjustment process to the rapid change in the operating environment is neither instant nor

costless. For many in the industry these are clearly already difficult times and the fear is that it is going to get perhaps considerably tougher before it gets easier. The demand for air travel remains, albeit in the near and medium term, at a lower and less rewarding level than before; it is also reasonable to conclude that the industry is likely to emerge into the upturn in a different size and shape.

At the risk of invoking the view that the best type of economist is one who has their hand tied behind their back, I would suggest that whilst on the one hand there are significant challenges ahead, the nature of the rapidly changing environment that we are now in provides significant opportunities on the other. Which these are, and what they are, depends on who and where you are, and your own view of the future, and at the end of the day only you know the answer to that.