WHO WILL HAVE TO "PAY THE PRICE"?

CHRIS TARRY\(^1\), CTaira

One of the fundamental rules of economics is that too much supply relative to the demand at any expected, or indeed required, price level will result in falling prices. Of course lower prices may well result in the expansion of the market but this is only successful if total revenues still exceed total costs over the longer run. The fact that this is, and will, not necessarily be the case in a significant number of important markets has a number of implications and one where the "end game" may well be profitless growth.

Although the consequences of the relationship between supply and demand are the same as any other industry, it is the time lags that are associated with the adjustment from one position to another that may be longer across the aviation industry than many other industries. Indeed given the long life nature of an aircraft as an asset it is necessary to look at:

- The behaviour in both the new and second hand markets which comprise the supply side
- How the market correction and absorption mechanisms work now and how they might work in the future and with
- The consequences for adjustment and value given the changes in the quantum of new aircraft entering the market.

In the past start-up airlines would have begun operations using second hand aircraft; however the tendency now is for these airlines, aided by the manufacturers and lessors, to use new aircraft which closes out one source of second hand demand. Furthermore a number of countries (some of which in the past were key markets for second hand aircraft) have a ban on taking older aircraft and in some cases the threshold is as low as ten years and is also a position which results from the provision of ECA support. This results in a range of effects that impact on: the ability to fund second hand aircraft; assessments of the realistic financing lives (if not operational) and inevitably on future values. At the end of the day an aircraft is only worth what somebody thinks it is worth and has the funds to pay for it. At the present time there are increasing signs in a number of areas where a state of what is best described as disequilibrium already exists, whilst in others it is emerging. The key question is what will bring balance back; how and at what cost to whom.

Indeed what we are seeing in some areas has much more of a structural element to it rather than the consequences if what is now, at least in some areas of the world, a broken economic cycle. It seems that what we now have is a set of imbalances which appear to be more structural than cyclical. From the perspective of an economist the issue is whether what we are and will be seeing is a movement along a particular supply or demand curve or a shift in the curves suggesting a structural change

It is not only the direct impacts of the imbalances in and on particular parts of the system that are of interest and importance but also the "knock on" effects elsewhere. Whilst the impact of too much capacity

\(^1\) Corresponding author: christarry@ctaira.com
on a route or in a market or region may result in a damaging downward movement in fares, where there is a net negative outcome, the consequences of too much capacity on amongst other things, residual values and investment returns will take longer to show through and indeed will have a number of other effects.

Our focus for now is on these key areas:

1) Current and likely future production rates of narrow body aircraft, which are forecast to increase further combined with new technical developments and:-
   a. The consequences for profitable deployment by airlines
   b. The consequences on the second hand market as a competing source of supply

2) The implications for financing and re-financing aircraft:
   a. Against a background where we are now seeing the realisable values for some narrow body aircraft falling sharply and diverging from forecast values. In particular the question is whether this is a reflection of a move along a valuation curve or a shift in the curve.
   b. As a result the changes in the secondary market for aircraft where there is increasing potential supply but reducing demand
   c. The reduced supply of aircraft finance from banks and increasing demand
   d. Higher costs associated with ECA financing

In the short haul market in particular it appears that supply side, rather than demand side, economics are increasingly the underlying determinant of market behaviour. There is a need to be clear about causality and the limits to the extent that supply led demand is able to generate the necessary revenue to ensure competitive prosperity. Volume of course is a necessary element of success but so is traffic value and as a result the revenue generated from it. It is clear from the behaviour amongst so-called LCCs in Europe that the “race to the bottom” on fares may be ending and we are also seeing the consequences of maturing markets converging which mean that substitution effects will be a greater source of traffic gain or loss for individual airlines. What we are now seeing is significant change in the dynamics where the currently high and indeed possibly higher production rates of narrow body aircraft will have a wide ranging set of impacts across the whole system.

Of late there have been several announcements where it appears that there is the need for “my order is bigger than your order” and whilst the news certainly attracts some attention there is increasingly a need to employ the “Emperor’s new clothes test” – even in those parts of the world where substantial growth opportunities exist. There is quite a difference between placing an order for a new aircraft, which is generally the easy bit, affordably financing its delivery and placing it in profitable service is likely to be even more of a challenge. Even in the developing regions of the world there is a need to ensure that the achievable fares are high enough to ensure profitable performance rather than just volume growth. There are an increasing number of examples where growth is becoming less profitable if not profitless.

Whilst there is a marked difference between the narrow body or volume end of the market and what is going on in the wide body end the latter segment is not immune. We believe that it is even more important to consider airlines as two businesses; a transportation business and an asset management business.

Put simply, success in the asset management business is in effect determined by acquiring an aircraft as

---

2 The announcement by Cyprus Airways that it had sold two 2002 vintage A319s for just over $15m each for parting out when the estimated values of each aircraft were some $1-2m higher has unsurprisingly stimulated a debate over the validity of valuations for aircraft of all vintages.

3 Supply will always tend to lead demand but here the issue is the extent to which it is likely to in the future and the nature of the source of supply.
cheaply as possible; and then arranging affordable finance and disposing of the aircraft for more than was estimated or required in the financing calculations that were made at the time of acquisition.

For many airlines the medium term at the moment is probably best described as little longer than 6-12 months. Against this background a key question ought to concern the confidence that there is over the values of narrow body aircraft upwards of 10 years into the future when there has been what appears to be a structural change in the relationships between supply and demand.

Airbus with the A320 family and Boeing with the B737 should now be producing at the lowest point of their cost curves with the result that the programmes are both substantially profitable and significantly cash generative. Over the next 12-18 months both manufacturers will also be increasing the rates of their respective programmes. However both will also be delivering new generation versions of their respective aircraft from 2016 in the case of Airbus and 2017 in the case of Boeing. Inevitably there has been a debate about what will happen to the prices (and future values) of the latter and indeed the last aircraft coming off the production lines. However the issues that are emerging are more fundamental and deep seated and relate across a far wider number of aircraft than just the last few off the line.

The increasing volume of the suggestions that all will be “ok” in terms of; financing and residual values should set off some warning signals - almost in the same way when it is said that somebody might protest too much and the reverse is in fact true. It is certainly worthwhile giving some more consideration to the possible consequences and outcomes.

In particular it is important to consider the time lags in the system and the nature of the adjustment process. In all cases those financing the aircraft will take a view on its residual or realisable value at future date and this will have amongst other things a marked impact on the expected returns. However if the realisable value is below the forecast residual value not only will the impact on the aircraft in question but it will, or should, cause all other values to be reviewed. Indeed it is likely that the greatest impacts will be evident on the future values of newer aircraft as these will be relatively lower at any given age than for older aircraft. All of which adds weight to the view of a structural shift in valuation curves rather than just movements along existing curves with a hope for recovery in values.

Questions also immediately arise over what are the key determinants of the residual value:

1) The relationship between the supply and demand of the aircraft type and here “niche aircraft” will have reduced attractiveness

2) The availability of financing; clearly a large supply of cheap financing increases affordability, but then the aircraft acquired still have to be profitably deployed by an airline. Indeed we have seen with Ryanair and easyJet in particular where they were able to benefit from a particular set of market circumstances in 2001/02 and acquire significant numbers of aircraft at very attractive prices. However these circumstances are unlikely to repeat even for those placing similarly sized orders. Even then, the Ryanair asset management model which is based on selling aircraft on after 7-9 years, before incurring the costs of the first heavy maintenance check, appears to have stalled, a position perhaps exacerbated by the fact that Ryanair’s Boeing 737-800s are considered to be “minimum spec” aircraft in a number of respects

There is often a lot of debate over the share of the manufacturers’ order books that is for growth and that which is for replacement. Whilst some observers suggest the larger the share is for replacement the better, this is not necessarily the case (from at least a financing or asset management perspective) as in order to create space for the newly produced aircraft the old aircraft have to go somewhere and whether and where they go will depend to a large part on the financial and financing economics. Indeed it is now very rarely the case that a new aircraft is replacing one at the end of its economic life – although the US market does provide considerable evidence to counter this view. The second hand market for aircraft has
been a emerging problem over for some time now. It is also a problem for the manufacturers and indeed those providing finance as they have no real or meaningful control over it. As a result there is in an increasing imbalance between physical supply and demand at “current prices” and either the available supply has to be cut or the “price” has to fall to ensure that the supply is absorbed both of which have potentially significant implications. At the present time we are seeing falling prices and values and believe that both will weaken further.

Whilst there are a range of possible outcomes the three main ones are where:

1) There is a willing buyer at the required price to make the financing economics of the current owner work

2) The acquirer has access to affordable finance

3) The current owner is not able to sell and has to retain the aircraft resulting in a number of knock on effects and consequences – which is the increasingly likely outcome.

Whilst “parting out” may in some cases ensure a higher value is obtained for an older but still modern aircraft than as a result of selling or leasing it out; there is an element of first mover advantage here as the value of the parts, and the attractiveness of this as a route to realising value will decline as volumes increase.

Obtaining affordable finance is becoming a more challenging issue not just as the result of a number of traditional providers exiting the market reducing the pool by some $5bn. There is also the issue, for example, in the case of at least some of the European banks a need to refinance their existing portfolios so they are also competing for a reduced volume of funds. Furthermore there is also some evidence of banks in a number of countries (including China) increasing their domestic focus. All of which, in addition to the changes in forecast values, suggests that on a risk adjusted basis that the cost of funds in any event will rise. There is also the issue that ECA finance will from 2013 become more expensive which will have an immediate and direct impact on “affordable” financing.

There are indeed new sources of aircraft finance available as pension funds and insurance companies seek out long life assets with reasonable and transparent structures and returns; however given the prospect of what increasingly appears to be an oversupply of single aisle aircraft it is reasonable to conclude that these new entrants might focus on financing wide body aircraft with good airline credits.

What then of the outlook and likely process of adjustment from the current position of increasing over supply in the narrow body market? It is undoubtedly the case that a reduction in the availability of finance for aircraft combined with a shortening of the estimates of the economic lives of aircraft will push up the cost of ownership. Perhaps the more important questions are who will take the financial hits (as they are inescapable) and what impact the higher cost of aircraft ownership will have on the economics of the business and how this might feed through to actual demand rather than announced orders and over what period. In this respect perhaps the only conclusions are that the necessary adjustment is neither instant nor costless and the impact depends on whether you are in a position to see it as an opportunity or just another challenge.

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

---

4 Of course the underlying prices for aircraft could be reduced