



# COMMERCIAL AVIATION MARKET OUTLOOK

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# Happy New Year ... but what's in store for the Commercial Aviation Market in 2015 and beyond?

Written by Bert van Leeuwen, Head of DVB's Aviation Research department

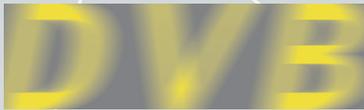
## Still a Cyclical Business

As 2014 fades away into the mist of history, everybody in the aviation finance community is focused on what the New Year 2015 will bring. But, as any economist will tell you, forecasting is difficult especially if it is about the future, so let's start with a short review of what happened in 2014. DVB generally looks at three different "macro" level cycles plus a "micro" cycle to analyze transactions, as well as the state of the air-finance market. The first macro cycle we look at is the state of the air transport market. Generally the data to look for are the well known monthly IATA traffic reports, macro-economic indicators as well as relevant cost-indicators, such as the price of jet-fuel. The second macro cycle is what we call the technology cycle. For how long will the aircraft to be financed or invested in meet the highest operational standards, such as fuel efficiency, environmental impact or a payload-range performance that is in line with today's airline requirements? The third macro cycle that is often overlooked is the financial cycle. What is the cost of capital, interest rates and how balanced are demand and supply of different sources of liquidity. The fourth cycle, the "micro"-level aircraft maintenance cycle, is extremely relevant for individual deals, especially involving mid-life aircraft or part-out projects, but will be ignored for the purpose of this article.

## Looking Back

Overall 2014 was a positive year for the commercial airline business. Despite economic uncertainties, political unrest and unfortunately some tragic incidents, the industry enjoyed relatively strong traffic growth. While the final figures for the year are not yet in, preliminary data for the first 11 months indicate an increase in passenger kilometres of about 5.8% on a year-over-year basis. This compares favourably to IATA's 4.1% average annual growth in demand for air connectivity during the coming 20 years. Even air cargo made a come-back during 2014 with a growth in revenue passenger kilometres of 4.4%, three times as high as the 1.4% achieved during 2013. In terms of financial results, IATA adjusted its projections upwards from US\$ 18 billion in its June report to US\$ 19.9 billion net profit in the adjusted December outlook. Clearly the main driver for this improvement was the fairly spectacular drop in the price of crude oil, halving from over US\$ 107/bbl (WTI) in June to under US\$ 54 at the end of the year. Whether the drop in oil prices was caused by the Saudi's trying to kill shale oil and other alternative energy sources or by a concerted effort to sabotage the Russian economy is unclear. In any case, except for





Avitas' Adam Pilarski, very few economists had foreseen a drop of this magnitude. It should be noted that the fuel-cost reduction will not fully reach the bottom line of the airlines due to fuel hedges and mark-to-market balance sheet adjustments of these instruments. However, with limited fare reductions so-far, the positive impact on profitability should still be considerable. While traffic growth figures and the aggregated financial results look strong, this does not imply that all is rosy. Traditional European "flag carriers" continued to feel the pressure of strong Middle East competitors as well as from the local Low Cost Carriers. Cost reduction programs proved difficult to implement as a result of strong opposition from the unions. In Asia, expanding Low Cost Carriers for the first time experienced the limits to their ambitious expansion plans. Towards the end of the year, Russian carriers entered the danger zone as a result of the economic and political pressure on their country. In several cases, local governments had to come to the rescue, Malaysia's MAS being the most obvious example of this.

The commercial jet market had another banner year in 2014. While the record ca. 3,650 new commercial jet orders (incl. type swaps) booked in 2013 could not be matched, the ca. 3,300 orders reported in 2014 put this year comfortably in second position. With a total of 1,481, the record was broken in terms of deliveries. The used equipment market prospered during 2014, as an increasing amount of equity was available for investment in commercial

jets. With a backlog of over eight years for new commercial jets, assuming current production volume and no cancellations, less patient investors focused on sale/lease-back transactions, trading of mid-life aircraft and even part-out projects.

With both the air traffic cycle and the financial cycle experiencing a very strong "high", where is the technology cycle and how could this cycle influence the other two? While the bullish mood in the market leaves little room for any doomsday prophecies, the imminent generation-change virtually across the entire spectrum of commercial jets could be a potential risk factor for many investors and/or financiers. In the regional jet market, the CRJ's, ERJ's and E-Jets will be replaced by a new generation of MRJ's, E2's and CSeries aircraft in the next couple of years. In the mainstream single aisle segment, the current A320 and 737 will be replaced by their more efficient successors, the NEO and MAX. In the twin aisle segment, both the 787 and A350-900 are now in service as alternatives to the 767, A330 and 777-200, with the A330NEO not too far behind. Although still a few years away, the A350-1000 and 777X for the majority of operators seem excellent alternatives for the 777-300ER and even for the big twin-aisle "quads", such as the 747 and A380.

### What to Expect in 2015

Now, looking back is easy, but how will the three cycles develop in 2015 and the rest of the decade, and – maybe as important – how will the three macro-cycles interact with



each other? The interaction of the three cycles we believe is very relevant. As an example, the increased residual value risks resulting from the technology cycle could be compensated by the overheating finance cycle. As long as there is a lease attached, many investors – or financiers – are happy to accept even “last-of-the-line” jets, the set of aircraft potentially most severely impacted by a technology shift.

So, do we see “doom-and-gloom” for 2015? Well, realistically, without any major external shock, 2015 should be another good year for our industry. The outlook for the global economy is that of an uneven recovery, with the IMF expecting a modest 3.8% growth for the world economy. Risks include geopolitical tensions, stagnation of growth in advanced economies and a decline in growth of emerging markets. The IMF expresses concerns that markets are under-pricing risks, taking into account the uncertainties of the macro-economic. The outlook for the US economy remains positive, while for the Euro-zone question marks remain, including that of a Grexit. China will continue to grow, albeit at the slightly lower pace of around 7.2%. While this figure looks impressive, by the own admission of the Chinese authorities, it will not be enough to offer qualified jobs to a growing number of graduates arriving in the market every year, a reason for concern. In Russia, geopolitical actions as well as lower oil prices have resulted in severe weakness and increased economical and political risks. The destabilized oil price remains another

concern. According to the EIA – crude (WTI) should only modestly increase to on average US\$ 63/bbl with the 95% confidence interval between US\$ 51/bbl and US\$89/bbl (end Q1, 2015). Short term impact of low oil prices on the airlines’ bottom line should remain positive but history has shown airlines have difficulty coping with high volatility. Despite this, European flag carriers will need to continue updating their business models. No major defaults are expected here (yet) but Russian carriers may only be able to survive with significant government support. Asian LCC’s will probably struggle to meet their growth targets. Some will suffer financial pain, but nothing lethal. For long-haul, low-cost initiatives, 2015 could be an interesting year. Will there finally be a breakthrough for this business model or will the new initiatives in this market segment follow the likes of Laker, People Express and Oasis to the graveyard of failed airlines? Let’s not forget the air cargo market. While modest growth has returned, it seems the “good old days” for wide-body main-deck freighters are over after the fundamental shift to belly cargo.

Maybe more relevant for aircraft investors and financiers, what will be the impact on the equipment market? For the time being, it looks like this very low oil price may be a temporary anomaly without consequences for the viability of the new generation of fuel efficient jetliners. We believe the capital cost of the new generation aircraft, such as the A320NEO, 737MAX and E-Jets E2 should not be much different compared to “old”



generation planes. When the A320NEO was launched in 2010, Airbus linked its price premium to the fuel burn advantage the plane offered, a number that should (but in real life probably will not...) be much lower compared to the moment the plane was launched. In the twin-aisle segment the launch of the A330NEO has created an interesting situation. Prior to the launch of this “other” NEO, Airbus and Boeing both focused their marketing efforts on the high tech A350XWB and 787. These are very fuel efficient but – compared to their predecessors the A330“CEO” and 767 – relatively high capital cost aircraft. Leaving aside the range difference, the A330NEO offers a combination of relatively low capital cost and significantly improved fuel efficiency. In a low fuel-price environment, this should be an attractive proposition, but how long will it take for fuel prices to return to their old levels? If and when they do, will the A330NEO just be an “interim aircraft” because eventually Airbus would be able to design an optimized medium haul A350XWB version – a bit like the 787-10 – that will be accepted by the airlines, or is the A330NEO so good it can actually cannibalize the short-to-medium range segment of the A350 market?

In the limited market niche for ultra large aircraft, the A380 and 747-8 – even under the ultra-favourable market circumstances of 2014 – did not trigger any substantial order-volume and the future viability of this class of aircraft can be questioned. Effectively this would be the continuation of the decade

old trend of “twins” replacing “tri-jets” (727, L1011, DC-10, MD11) and “quads” (707, DC-8, A340). As an aside, should production of the 747-8 eventually cease, this would leave the Western world without production of “nose loading” freighters for oversized cargo. Can we expect any developments in the “jumbo” segment this year? It seems that Boeing is already well covered with the 777-9X, effectively the largest “twin”. But can Airbus maintain the -1000XWB as their largest two-engined aircraft or will they need something like an A350-1100XWB? The alternative could be an A380NEO, but that decision will probably be made in Dubai rather than Toulouse.

### **What can Possibly go Wrong?**

After the record years 2013 and 2014, with no major new product announcements expected and with a production backlog of seven to eight year at current production rates, we do not expect 2015 will bring in nearly as many orders as the two preceding years. For some of the in production models, such as the E-Jets, A330-200/-300 and 777-300ER, the manufacturers may stimulate some ordering by offering attractive price concessions, but will this be enough to overcome residual value concerns?

How about the used equipment market? Low fuel cost should actually stimulate the continued use of older aircraft. Will this be the case? With long lead times for new jets, top-tier airlines like BA, Southwest, Delta and smaller – but very smart – Allegiant, have not shied away from adding used equipment to



their fleets. Will their example be followed? The abundant availability of liquidity for aircraft investments seems another factor that will support used equipment values during 2015. For “mainstream” 737NG’s and A320/321’s we expect the strong market to continue in 2015. Even “undervalued” aircraft like the A319 or 737-700 may find some opportunistic operators. We believe there is less optimism for most used wide-bodies, such as the A330-200, 777-200ER and obviously the “quads”. Overall 2015 and maybe 2016 should bring prosperity to aircraft lessors and investors. Our “doom & gloom” projections remain in place for the years after 2016. If the generation-change and a reduction in liquidity are to be combined with a cyclical downturn in the market and a rebound of fuel cost, the result may not be “pretty”. However, there is still time for the remaining “smart money” to exit their investments in the interim period.

In conclusion; without any unexpected external shocks, 2015 should be another good year for our business. Ticking time-bombs include several geopolitical conflicts, terrorism (let’s not forget “Charlie”), Ebola as well as the stability of the euro-zone. Airlines may enjoy a “bonus” if oil prices stay low but that bonus may have to be shared with staff and even the travelling public. The joy of low oil could even “backfire” if it inspires the global airlines to a more relaxed capacity discipline and less focus on yield. Intake of new jet orders is likely to go down in 2015 and “quads” move firmly towards the list of extinct species. Can Airbus keep

the -1000XWB as its largest twin or will they need a stretch to fill the gap with the A380? “Last of the line” single aisles will remain popular but E-Jets, A330’s and 777’s may need some sales stimuli. In the used equipment market, mainstream 737NG’s and A320/321 will be easy to move and some opportunistic interest in the A319 and 737-700 may develop further. “Naked” used A330-200’s and 777’s will be very challenging.

While 2015 and 2016 should be OK, the impact of the generation change may start to hit during the second half of the decade in what we fear, will be more than the usual cyclical downturn.