

Jetliners: Bright spot in the world economy



IN THE GREAT 2009 RECESSION, EXACTLY one major segment of the commercial economy held up with no pain: Large jetliner output increased, despite the worst economy the world had seen since WW II. This is not because jetliner production is a lagging economic indicator; deliveries will stay at a high level this year, and Airbus and Boeing are largely concerned about logistical challenges to any future production rate increases.

This somewhat unexpected market performance was certainly welcome in an industry more accustomed to painful cyclical downturns. It also raises questions about the scope of further growth and any risks that lie ahead.

Mystery achievement demystified

The year 2009 was the first since WW II to see a global economic contraction. In all, worldwide economic activity dropped by about 1%. Not surprisingly, this resulted in the worst year in jet aviation history. According to the International Air Transport Association, RPKs (revenue passenger kilometers) dropped by 3.5% in 2009. Cargo (freight ton kilometers) fell by an unheard of 10.1%.

Economic and air travel contractions like these have historically produced unpleasant jetliner market busts. The economic indicators clearly pointed to a jetliner production drop of more than 30%, which historically is typical for a bust cycle. Most other industries felt se-

vere pain. Indeed, the World Bank's unit value of manufactured exports fell at a rate of 4.9%.

Yet the large jetliner industry's behavior was anomalous relative to both its history and the global economy. Regional jet deliveries fell by 5.7%. Business jets fell by 24.3%. Civil helicopters fell by 12.5%. Yet the large jetliner market grew by 10.1%. Much of that was Boeing output recovering from the 2008 machinists' strike, but some of this growth was organic. Airbus output grew by about 2% as well.

Several factors differentiate this downturn from previous ones. The first major difference that helped to keep jetliner output high involves fuel prices. Normally, a recession of this magnitude translates into slack oil demand, which means lower prices. Yet while the price of oil came down from its July 2008 record high of \$147/barrel, by historical standards it has stayed stubbornly high.

While high fuel prices made new jets considerably more appealing than older types, past demand downturns usually have resulted in serious financial problems at the airlines. The credit crunch of 2008-2009 also had the potential to keep carriers from obtaining financing for the planes they wanted. This brings up the second major difference with this cycle: An increasingly high level of government financial support.

The most direct government help came in the form of ECA (Export Credit Agency) financing, which reached all-time record levels. ECAs such as the U.S. Export-Import Bank increased their presence in the market, helping with about 35% of

transactions. In addition to ECAs, government-owned banks such as Bank of China and sovereign wealth funds have confidently gotten into jetliner funding. The percentage of deliveries going to airlines with government financial backing also increased. Chinese and Mideastern carriers, typically owned by governments, both took delivery of a record number of jets, as a percentage of the total world market.

Government support for the jetliner business also took indirect forms. Government actions taken to stabilize major financial institutions such as AIG, the Royal Bank of Scotland (RBS), CIT, and



others forestalled massive fire sales of the aircraft. Imagine if AIG had had to force its ILFC unit into dumping its portfolio on the market to generate cash. Repeat that with a few other lessors and you would have seen a particularly severe jet glut, creating low prices for used jets that would have made many of them more competitive against new jets.

Government policy has also helped create the third factor that is different with this downturn. Thanks to low interest rates set by central banks that are eager to stimulate the economy, the world is now awash in cash that has nowhere else to go. With few investment opportunities in housing or new technology—or much of anything else—investing in jets seems smart, or at least harmless. Thus, orders at the July Farnborough Air Show

were largely from lessors. Almost all of these were for the Airbus A320 and the Boeing 737, the two jet families with the best asset value track records and the broadest end-user market.

Meanwhile, air transport demand has come back strongly. RPKs indicated a 7.9% increase in the first half of this year relative to the first half of 2009. Cargo shipments have risen at a faster pace, corresponding with a remarkable comeback in world trade. Not surprisingly, both Airbus and Boeing have announced production rate increases. If these industry health indicators are sustainable, then all the actions taken to sustain jetliner production in 2009 and 2010 were worth it, from the standpoint of keeping output steady and avoiding unpleasant layoffs and revenue drops.

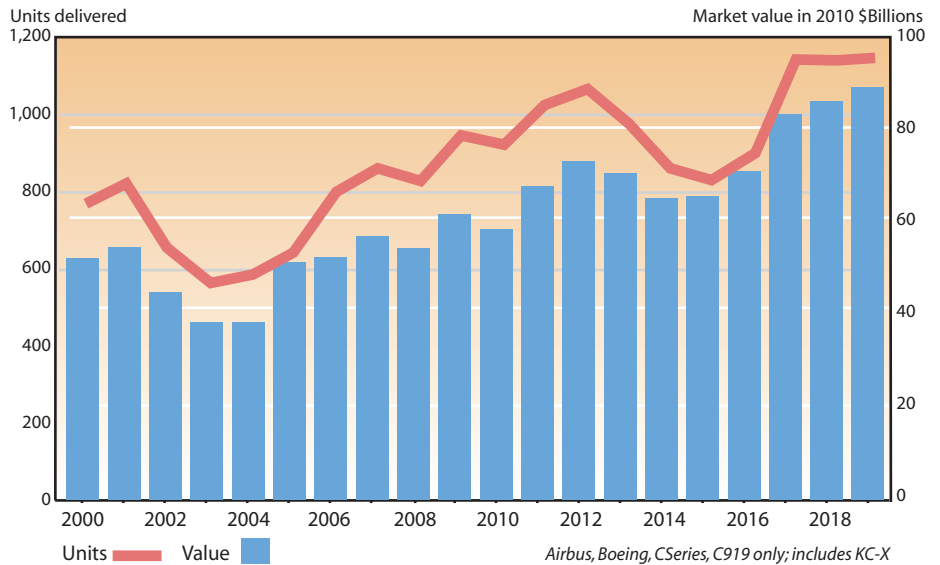
Risks ahead

Yet there are big risks with this optimistic prognosis. While the air travel industry is doing very well, the economic recovery that should be its primary driver has been relatively muted, with the developed world experiencing fairly anemic growth. U.S. second-quarter 2010 GDP growth, for example, was just 2.4%. The International Monetary Fund is forecasting euro-zone growth of just 1% for this year. Japan saw only 0.4% growth in the second quarter. Even China is starting to slow, although its numbers are still enviable. The Chinese government now expects that the second quarter's 10.3% rate will fall to 8-8.5% by the fourth quarter.

Clearly, there is a degree of separation between today's air traffic numbers and the broader economy. Travel demand is currently disconnected from, and much better than, the economic indicators that typically drive them. Stock prices, GDP growth, inflation (or even deflation), bond rates, retail sales, housing inventories, employment, and consumer confidence numbers in the U.S. and Europe all show continuing uncertainty. We have seen this disconnect before. In 2008-2009, plummeting air traffic numbers were much worse than the prevailing economic indicators.

The jetliner primes would maintain

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that we should ignore U.S. and European numbers and focus instead on the strong economies of China and the Middle East. But the recent orders have all been for lessors, and those Chinese and Middle East airlines already have large order positions of their own. So do the established low-cost carriers. The lessors are not looking at China and the Middle East as their core markets. They are betting that the rest of the world economy will keep coming back despite economic uncertainties. Yet if there is a double-dip recession, traffic will drop again. That recession is unlikely, but any kind of serious slowing of economic growth represents the greatest risk to this market.

The second risk is basically political risk. This arises when politicians control a much broader swath of the economy. Most of the 2009 deliveries financed by private banks and lessors were arranged before the credit crunch. Although this crunch is easing, many key jetliner financiers remain under

heavy pressure, particularly AIG's ILFC unit, CIT, and RBS. Any government decision to scale back ECA finance, or to cut government support for government-backed lessors or airlines, could hurt jetliner demand.

The third biggest risk is irrational exuberance at the airline level. Airlines have returned to profitability largely because they held the line on capacity growth. That 3.5% RPK demand drop in 2009 was accompanied by a 3% ASK (available seat kilometer) capacity cut, which allowed airlines to avoid ruinous losses. Halfway through this year, capacity was up just 2%, meaning the 7.9% RPK increase has translated into superb



profits. With multiple airlines now adding capacity, there is a danger that any kind of market slowdown could result in too many seats chasing too few passengers.

On a related note, the fourth risk concerns irrational exuberance at the manufacturer level. Both jet primes have announced plans for modest, incremental increases. But if they get too aggressive, any market slowdown would have an unpleasant impact, particularly on the supply chain that would need to add capacity to serve the jet primes.

There are also valid reasons to question the strength of some of the backlog. For example, at Farnborough, Airbus announced a large A320 order from Air



Lease, with deliveries beginning in six months. The availability of these production slots is cause for concern.

The fifth risk concerns damage to existing jet portfolios. While demand and financing for newer jets have been strong, older jets have not recovered their pre-downturn values and lease rates. It is also relatively difficult to find financing for these older jets. Recent financial troubles at several midsized and small airlines, particularly Mexicana and Italy's Wind Jet, also indicate the dependence of older jets on less healthy and somewhat marginal players in the aviation business. All of this, of course, means financial pain for lessors and other finance providers who had planned on these assets better holding their values. Also, if the wide spread between new and old jet values and lease rates gets even wider, those old jets will get irresistibly cheap, undermining new jet values and demand.

Finally, there is significant risk to after-market business models. With a very high level of new jet production relative to capacity growth, the world's jet fleet is getting younger; thus older, more maintenance-intensive aircraft will be retired faster or consigned to marginal markets with lower utilization. Seventy 737 classics were parked in early 2005. That number is up to 260 today, and retirements of this type are ramping up. Many companies in the supply chain sold their original equipment at a discount in anticipation of strong revenue as aircraft got older. These manufacturers are likely to face lower aggregate margins, and will find that they need to adjust their pricing strategies.

Powered by technology

One unusual aspect of this market is that the "modern" planes now in high demand are not particularly modern. This is not a typical case of new technology

serving as a market stimulant; rather, the market is simply buying newer copies of jet families that have been in production for 10-20 years, particularly Boeing's 737NG and Airbus' A320.

This raises an intriguing question: If all-new technology with even lower fuel and maintenance costs were available, would the market be propelled to even greater heights? Assuming the answer is yes, the market can look forward to a strong, technology-induced growth wave starting in the middle of the decade.

Boeing's 787 will be the first to arrive. While it will enter service late this year or in the first half of 2011, deliveries will likely ramp up gradually, eventually reaching 10 per month by around 2014. Around the same time, Airbus' A350XWB will arrive. These two long-range midmarket twinjets offer significant cost savings over their predecessors, the 767, A330, and 777-200ER.

Just after these new twin-aisle jetliners arrive, we will likely see a new version of the A320 series, using Pratt & Whitney's Geared TurboFan (GTF), and perhaps General Electric/Safran's Leap-X engine. There is a good chance that Boeing will be forced to follow Airbus with a product reengining. Bombardier's GTF-powered C Series will also arrive in this period. Our forecast assumes that Airbus will introduce its new product in the second half of 2015, with Boeing following one year later.

In all, our forecast calls for the current plateau to be sustainable, with a few small production increases. Our 2010 jetliner forecast calls for a 4% decline by value from 2009, but this is due solely to a temporary dip in 777 numbers and the transition between the 747-400 and -800. While we do call for a narrowbody market dip immediately before the new reengined versions arrive, Teal Group also forecasts a technology-driven upturn, starting around 2016.

All of this, of course, assumes that the world economy will cooperate. The current macroeconomic environment, which combines a respectable level of growth with relatively high oil prices and government-assisted liquidity, might not continue indefinitely.

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