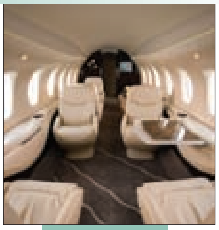


Business aircraft market falls hard

As the world economy struggles to recover from the massive financial shock of late 2008 and early 2009, the business aircraft market has lately found itself in free-fall. After growing at a record 17.1% compound growth rate between 2003 and 2008, business jet deliveries look set to fall even faster.

There are few hopes of a recovery any time soon, and signs point to a three-year downturn. The only consolation is that the fundamental drivers behind this market's transformation—it has almost quintupled in size since 1995—remain intact.

Citigroup was pressured to cancel its order for a Dassault Falcon 7X.

Some awful numbers

By any measure, the leading indicators of business jet demand are in terrible shape. Many world economies are shrinking, with the U.S. suffering a 6.1% drop in the first quarter of this year, following a 6.3% drop in the last quarter of 2008. There are fewer high-net-worth individuals—for example, two-thirds of Russia's billionaires in 2008 are no longer billionaires.

Worst of all, corporate profits, the indicator with the closest correlation to business jet demand, are slumping. From an annualized peak of $1.7 trillion in the third quarter of 2007, U.S. corporate profits fell to $1.3 trillion in the fourth quarter of 2008. Most forecasts call for a more serious drop this year. Typically, deliveries of new jets begin to fall about 12-24 months after profits fall. This market cycle looks set to fit the pattern.

The indicators of market health are in terrible shape too. Business jet utilization in the U.S., as measured by cycles (takeoffs and landings), has been falling by double-digit rates for eight consecutive months. March cycles are down by a disastrous 30% relative to a year ago. Used aircraft pricing is down across the board. Availability has reached record levels, with 16.2% of the fleet (well over 2,000 jets) up for sale as of April.

Typically, when 13% of the fleet is on the market, it has been a clear sign of a serious market downturn. The current level is unprecedented and indicates a severe oversupply problem. However, one possible explanation of this high number is that companies and individuals are putting their aircraft up for sale as a demonstration of frugality, either to politicians or to stockholders, but with no actual intent to sell the plane. That is the only possible silver lining in a dark cloud of numbers.

Meanwhile, backlogs, long vaunted as a large cushion for the manufacturers against any serious downturn, have been proven to be completely meaningless. All manufacturers had been reporting backlogs sufficient for several years of full production, yet they all have announced production cuts for this year or next. Clearly, backlogs offer no guarantee that a broad section of customers will not defer.

Cessna provides the best illustration of backlog weakness. Up until the fourth quarter of last year the company had planned to build 525 Citations this year, up from 467 in 2008. In November, it cut the number slightly, to 495. In late January, it cut anticipated 2009 production to 375. In April, this number was reduced to 290-300.

Notably, Cessna's backlog did not change much with these announcements. In late 2008 the company said it had a $14.5-billion backlog. When the first quarter of this year ended, the company announced a $13-billion backlog. Orders had slowed to a trickle, so the only changes were due to deliveries of existing orders and a relatively light number of cancellations (92 net in the quarter). This means these massive production rate plan reductions have been almost purely due to deferrals, against which backlog announcements are meaningless.

Has anything really changed?

These market health indicators and delivery outlook numbers are truly dire. But only two possible events threaten the future of the business aircraft market: an end to world economic growth, or an end to the link between that growth and

Public and political pressure drove GM to cancel its Gulfstream leases.

business jet utilization. The first is a very remote risk. The second risk is easily overstated.

First, there is no disguising the magnitude of the world economic downturn. Until April, the International Monetary Fund had tentatively forecast that the world economy would grow at a 0.5% pace this year. But that has since been revised, with expectations of a 1.3% shrinkage. This means that 2009 will be the first year without world economic growth since WW II. It is quite possible that the world faces a prolonged period of structural readjustment, or that it is reaching the limits of growth. Several prominent economists and commentators have stated the risk of this development at about 20%. But nobody believes that a depression of this magnitude is a baseline scenario.

Second, it is clear that the business jet industry is facing cultural headwinds. Key politicians in both U.S. political parties have criticized business jet users, and there have been some high-profile events that have cast a pall over business jet ownership. The CEOs of Chrysler, Ford, and General Motors came under heavy criticism for taking private planes to Washington to plead for aid money. GM promptly terminated leases on seven Gulfstream jets.

Similarly, Citigroup, the recipient of billions in U.S. government funding during the financial crisis, was pressured to cancel its order for a Dassault Falcon 7X. "The notion of Citigroup spending $50 million on a new corporate jet, even as it is depending on billions of taxpayer dollars to survive, does not fly," Sen. Carl Levin (D-Mich.) said on his Web site. Citigroup also put two older Falcon 2000EXs up for sale, although this might be an example of jets put on the market with no actual intent to sell.

Not long after, both Cessna and Hawker Beechcraft began advertising campaigns designed to defend the image of corporate aviation. Cessna President Jack Pelton pointed to the pressure on executives to avoid private aviation, saying, "That stigma is a factor we've never experienced in the past."

Yet it is not really clear that this cultural antipathy is entirely new to the market. History is replete with anti-business-jet pronouncements during recessionary times. In 1987, the movie *Wall Street* was widely viewed as putting bankers and their private jets to shame.

In the last downturn, one *USA Today* article commented that "sales of business jets, once the ultimate status symbols, have cooled with the U.S. economy…. The sleek stratospheric board rooms have come to represent corporate greed for some, and for others are simply no longer affordable."

That was in February 2003, a few months before the greatest growth spurt in business jet market history.

Moving forward

Nobody can say where the world is headed in terms of economic recovery, but one thing is becoming clear: The cause of this downturn—a devastating near-collapse of credit markets and financial liquidity—was a discrete event. There might be additional similar shocks ahead, but the crisis that led the world's economy to its current condition ended sometime in the first quarter of this year. That means the world will gradually resume growth sometime in 2010.

One alternative scenario posits that a sharp economic drop will be followed by an equally fast recovery. Possibly, this will involve inflation, which could hit the economy as a vast amount of government spending combines with an extremely loose fiscal policy. This would cause a rapid recovery in business aircraft market conditions, but it would likely produce anemic growth rates after that initial recovery.

A third alternative would be a

Last year, Cessna planned to build 525 Citations this year. By April, this number was reduced to 290-300.

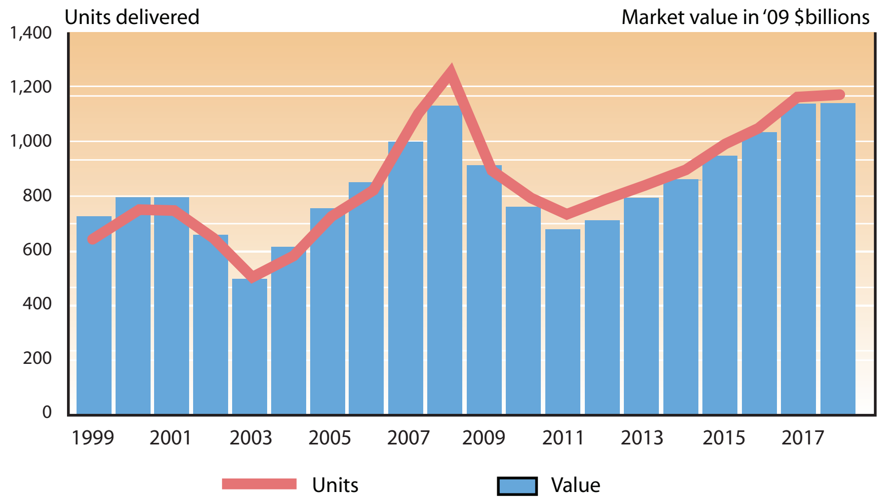
decade-long depression. This would produce a "swimming pool" market trend, with a market drop followed by a long flat bottom. But as noted above, nobody regards this as a baseline scenario.

Assuming that our baseline scenario is the correct one, we can expect the economy to remain in recession through 2009 and 2010. This means business jet market conditions will stay poor through 2010, or early 2011, with no recovery in deliveries until 2012. If the number of available jets keeps rising beyond the present 16.2% of fleet, and if those jets are actually on the market, it might take an additional six months for new deliveries to recover as the market absorbs all of the used planes.

But making the assumption that the credit shock has produced a downturn that is relatively "front-loaded" (that is, with the sharpest market drop felt initially), a forecast of a 40% peak-to-trough ratio seems appropriate. This market drop is in line with past downturns, only longer.

BUSINESS JET FORECAST: A SUDDEN DROP

Excludes jetliners, RJ, and turboprops



Why the future still looks bright

Although business jet ownership and use have been equated by many with excess and abuse, the extraordinary transformation of the business aircraft market over the past 14 years has been closely linked with corporate profits. And the composition of these profits indicates encouraging trends too.

It is impossible to state empirically that one type of profit is more conducive to business jet demand than any other. But it is notable that manufacturing profits have made the strongest leap of all the business sectors. According to the U.S. Bureau of Economic Analysis, U.S. manufacturing profits leaped from $53 billion in 2001 and $48 billion in 2002 to $317 billion in 2007 and $240 billion in 2008. The strength of the U.S. economy in 2003-2008 had almost as much to do with manufacturing as it did with financial services. Profits in the financial services segment were stronger but flatter, going from $228 billion in 2001 and $276 billion in 2002 to $450 billion in 2007 and $309 billion in 2008.

There is a very strong likelihood that U.S. and other developed-country manufacturers are prospering because they are transforming themselves into product integrators. That means they are farming out labor-intensive production to work in developing countries, keeping higher value integration, development, and marketing for themselves. The establishment of new facilities in less developed areas increases the attraction of private aviation. And of course the profits that result from a successful new manufacturing strategy are also good for business jet demand.

This hypothesis is boosted by business jet demand in Europe. Just as U.S. companies are likely to transplant production to Latin America, European manufacturers are looking to new European Union entrants in Eastern Europe, as well as Turkey, for lower cost manufacturing. These Eastern European countries lack the excellent public infrastructure—airlines and trains—that have traditionally hobbled business aircraft demand in Western Europe. Companies setting up shop in Eastern Europe are looking increasingly toward private aviation. In 2001, only 10.7% of the global business jet population was domiciled in Europe. In 2008, Europe's share of the fleet was nearing 15%.

Meanwhile, economic development in emerging markets is gradually boosting business jet demand from customers in many of those countries, too. Relatively high commodity prices are further increasing demand, particularly in Latin America and the Middle East. Markets outside the U.S. accounted for 23.5% of the fleet in 2001, rising to 30% in 2008. Most business jet manufacturers in 2008 reported a majority of sales from outside the U.S.

Asia remains largely quiet as a source of demand, for reasons of geography, politics, and excellent airline service, but there are signs that this could change. Because of its economic growth, poor infrastructure, and great geography, China could emerge as a huge market as its airspace rules are liberalized. But as of 2008, the country had only about 20 business jets in civilian use.

If demand in China grows, the rest of Asia could easily follow. This is particularly true since many Asian manufacturers in higher cost economies such as Singapore, Japan, and Taiwan look to China as a source of lower cost manufacturing sites. Basically, Asian businesses located in high-cost manufacturing countries could emulate their U.S. and European equivalents, looking to private aviation as they follow an integrator model of manufacturing.

In short, despite the current grim market conditions and negative short-term outlook, there are solid reasons to assume that this market will recover and resume its growth in the future.

Richard Aboulafia
raboulafia@tealgroup.com