Despite the recent traffic slump, macro trends predict that narrowbody deliveries will reach a low in 2004 and peak again in 2008. About 1,200 new orders are required to fulfil this predicted delivery profile. Examination of low-cost airline development and fleet plans, plus other markets, reveals the manufacturers' requirements could be exceeded.

Will low-cost airlines deliver Airbus & Boeing a narrowbody order bonanza?

The aircraft order cycle was already heading towards a downturn before the terrorist attacks in the US on September 11th, 2001. With the shock of a slump in traffic, aircraft orders for 2002 and 2003 have been revised downwards. Coupled with this is the fact that most major US and European carriers have placed narrowbody orders to replace older equipment. So where does this leave the market for the 717/737/757 and A320 family in the next 5-10 years?

Order cycle

Aircraft orders satisfy airlines' needs for replacement and capacity for growth. Recent traffic reductions have been dealt with by reduced capacity and cancellation or deferment of aircraft orders.

Prior to the recent traffic slump, the narrowbody market had been buoyed in recent years by the comparative low financing cost of new jets. Monthly lease rates of new types like the 737-700 had fallen by more than $100,000 per month, which catalysed demand for new narrowbodies, as did the increased global fleet.

A decade ago the airline fleet was 9,500-10,500 units. Annual new aircraft deliveries of all types in the early 1990s were 700-800, which fell to less than 500 in 1995 and 1996 after the recession. Numbers rose to about 700 in 1997 and up to a peak of about 1,100 units in 1999 and 2000.

Of these deliveries, 40-55% per year were accounted for by Airbus and Boeing narrowbodies. Deliveries of 717/737/757s and A320 family types peaked in 1992 with a total of 428 units, reduced to about 190 aircraft in 1995 and 1996 and climbed to an annual peak of about 600 aircraft in 1999-2001. Scheduled deliveries for these types show this level will be maintained in 2002 and will fall to about 580 in 2003. Scheduled deliveries of Airbus and Boeing for 2004 stand at 425 and reduce to 12 for 2010.

The *Airline Monitor* predicts that total deliveries will reduce to 1,025 units in 2002 and fall to less than 900 between 2003 and 2004. They will begin to rise in 2006 to 950 units and further to about 1,200 units two years later and peak near this level.

The *Airline Monitor* also predicts that 717/737/757 and A320 family deliveries will reach a low of about 350 in 2004 and climb to about 430 in 2006 and about 600 units in the 2009-2010. Narrowbody deliveries will therefore continue to account for 40-45% of all jet deliveries.

While most predicted narrowbody delivery positions for the 2002-2005 period are fulfiled with existing orders, the predicted delivery schedules from 2006 require further orders. There is a shortfall of about 55 orders to meet predicted narrowbody deliveries for 2005, rising to a shortfall of about 540 orders for predicted 2008 deliveries. The implications of this are that about 1,200 narrowbody orders will have to be placed by 2006 or 2007 to fill these predicted delivery slots.

The short-term delivery profiles have been skewed by the fall-out caused by the terrorist attacks in September 2001. Order and delivery cycles are never in-phase, and orders during these years would be lower than deliveries.

Many airlines have had excess capacity since the terrorist attacks, but traffic has climbed back steadily. By January 2002 some airlines had completely recovered to the traffic levels they had a year before, while others were still down 10-20%. Traffic may recover to pre-terrorist attack levels by mid-2002, and increase thereafter as recession recedes in the US. Capacity will then have to return to pre-terrorism levels. Traffic growth may return to most US and European carriers in late 2002 or 2003. This will see an increase in airline load factors and profits.

When this stage is reached the order trough should be passed and begin to rise again in 2003 or 2004.

"The order and delivery cycles should cross over again in 2004 or 2005," predicts Dick Forsberg, head of strategy at Lombard Aviation Capital. "That is, orders will exceed deliveries from this point. The pressure of high load factors on airlines will occur by 2007, or before, and stimulate the demand for new aircraft. In the interim, no-frills and low-cost airlines will provide some short-term comfort to the manufacturers."

Competitive financing

Besides the general characteristics of recession and over-capacity, there are several fundamental differences in the air

Ryanair has continuously shown annual growth rates of 25%. If this is maintained it will have to increase its fleet from 44 to about 170 aircraft by 2008. This would require the conversion of options over the outstanding firm orders it has for more 100 737-800s.

transport sector that will influence and stimulate demand for new aircraft, which were absent in previous recessions. These will compensate for some of the reduced or even total lack of demand from markets that were traditionally the largest for new narrowbody orders.

The first of these is low lease rates and generous financing terms for new aircraft. Prior to the dramatic cutbacks and mass parking of aircraft, lease rates for new aircraft were lower than they had been for equivalent sized aircraft 5-10 years before.

Lower interest rates have reduced operating lease rates of new medium-sized narrowbodies by $100,000 per month. That is, a 737-700 in 2000 or 2001 could be leased from a mega lessor at about $270,000 compared to a lease rate of $360,000 for a 737-300 in the early 1990s. Lessors are now also willing to lease aircraft to a wider range of credit risks, which has contributed to the increase in demand for new aircraft in the past five years.

Monthly lease rate factors of new aircraft have fallen from 1.0-1.2% per month for the highest credit quality airlines to 0.7-1.0% for most airlines. This is combined with the effect of substantial price discounts secured by the mega lessors. Consequently lease rates of new 737-700s have fallen from $400,000 to about $270,000 per month. While this has put downward pressure on lease rates and values of older equipment, it has made aircraft more affordable. Low credit quality airlines, which have traditionally only been able to acquire used aircraft, have been able to lease new equipment from lessors, at rates not to dissimilar to those paid by national airlines and high credit quality carriers. Lessors now account for more than 20% of the world's orders. This figure is set to rise.

Low financing charges of new equipment are also being used to persuade airlines to take aircraft during the traffic slump. Even undercapitalised airlines are reportedly being offered aircraft such as A319s and 737-700s for less than $200,000 per month. These lease rates will be stepped up to coincide with a predicted recovery.

While demand for aircraft may still be generally weak, irrespective of low lease rates, the rates being offered are encouraging new airlines to enter the market. "This is further pushing down values and lease rates of MD-80s and 737-300s," says Forsberg. "These aircraft can now be acquired for as low as $80,000 per month. This even makes it uneconomic to convert aircraft, since lease rates of $140,000 or so for 737 freighters will not be high enough to cover the cost of conversion. The overall effect, however, is for the 737-300s and MD-80s to get sidelined. Once the order cycle picks up again in about 2004, airlines will be seeking new aircraft. This will add stimulus to the market."

Low-cost airlines

A second factor to compensate for weak demand for new aircraft is the explosion in the no-frills or low-cost airline market; especially in Europe and Canada. The trend is more mature in the US, but low-cost airlines are also growing at rates that outpace traditional airlines.

Large orders for narrowbodies have been placed in recent years by carriers such as Frontier, JetBlue, WestJet, easyJet and Ryanair. More large orders are expected from UK carriers easyJet and Go before the end of 2002.

The low-cost airlines have been a success for the past four or five years, and they look set to become even more successful. The most mature, Southwest, maintains an annual growth rate of 10-12%, while the younger carriers, such as WestJet, are growing at rates in the region of 40-50%. Some of these airlines are able to offer unit seat-mile costs 35-40% lower than their traditional short-haul counterparts, as a result of which major and incumbent airlines have been forced to reduce fares to maintain traffic levels, and have consequently incurred losses.

Low-cost airlines are still able to offer lower fares than the traditional carriers. This has allowed the new airlines to take traffic from the major carriers, as well as stimulate a new level of demand.

Some low-cost airlines have gained a majority market share from major airlines. In the most extreme cases the traditional airlines have been forced out of the market altogether. "We are now the biggest UK carrier from the UK to any destination where we compete with British Airways. For example, we carry the most traffic between London and Sweden; exceeding both BA and SAS," says Michael Cauley, commercial director at Ryanair. "SAS and BA have already pulled out of some markets we entered and we have beaten them. We will now attempt to repeat the same process in every major possible market from the UK and in Europe." This is backed up by BA's recent announcement of 5,800 job cuts and the decision to pull out of some European routes because of low-cost airlines. "We have recently started routes from Germany, and are already beating Lufthansa from secondary airports serving Frankfurt and Hamburg," adds Cauley.

Ryanair placed an order for 100 737-800s in January 2002 to keep up with its annual growth rate of 25%. It currently operates 44 aircraft, and will be at least

UK carrier easyJet expects to maintain annual growth rates of 25% and treble its fleet to about 88 aircraft by 2008. With the retirement of its 737-300s, easyJet will have to place its planned order for 75 new aircraft plus orders for an additional 20.

three times larger by 2010 if this growth rate is maintained. An annual growth rate of 25% will only be sustained at the expense of major airlines.

WestJet of Canada is recording a similar success. The airline operates a fleet of 28 737s, and has firm orders in place that would allow a fleet of 36 aircraft. "The delivery of these orders starts to reduce by 2004. We have put a flexible fleet plan in place whereby we have purchase rights for a further 56 aircraft, similar to options, which we can exercise if required," explains Tim Morgan, senior vice president of operations at WestJet. "If we exercise these options our fleet will have 93 aircraft by the end of 2008. The first of these can be delivered in 2004 and the last by the end of 2008. Even this plan is based on the assumption that Air Canada's short-haul operation will be the same as it is now. We are achieving the same against Air Canada that Ryanair is against BA and other major European airlines. We have not lost money in any financial quarter since we started, our traffic had recovered to original forecast levels by the end of November 2001, and are beating Air Canada in every market where we compete against them. Our unit seat-mile cost is 35-40% below theirs, while they have to compete with our fares. I cannot see them being able to operate short-haul routes profitably. Our growth is fuelled by two factors: one of taking market share from Air Canada and other traditional airlines; and the other by stimulating a new level of demand with low fares."

Although WestJet has predicted its annual growth rate will fall from the current level of about 45% per year to about 15-20% by 2008, it still may have to bring its purchase rights on 737-700s forward and have the first deliveries in 2003. With the predicted growth rates WestJet would have to place more orders over the current orders and purchase rights, and its fleet would easily have grown to more than 150 aircraft by 2009. Moreover, Air Canada may have a reduced operation by 2009 as a result of competition from WestJet. In this case WestJet will have to place further orders.

If Ryanair's and Westjet's success continues, and the same achievements are made by Frontier, AirTran, JetBlue, easyJet and Go, is there a real possibility that these airlines will force the incumbent carriers out of the major markets in North America and Europe, making the low-cost airlines the main providers of short-haul services? The indications from Ryanair point to this being a very real scenario. "We have already started to expand outside the UK, and now have routes from Brussels, Charleroi and Frankfurt, Hahn. We are already beating Lufthansa at Frankfurt. We plan to open a new base on the European continent every year. We expect to double the number of routes we operate from London. For example, we currently have none to Spain. The number of destinations served from London is 42, but this could exceed 80," says Cauley.

The UK's other major low-cost airline easyJet has also expanded rapidly at the expense of major airlines, especially BA. "We have pinpointed our expected market share by 2007/08," says Toby Nichol, head of corporate affairs at easyJet. "By this time we and Ryanair will have large operations from the UK, and we will probably expand into other European cities, where there are plenty of opportunities to compete with other major European airlines. One example is Paris. We have already started operations from Paris, with services to Switzerland."

Creeping expansion into other competitors' territory is not just happening in the UK. Morgan predicts that WestJet will start trans-border operations to the US in the next few years. "We cannot operate domestic flights within the US, because of cabotage issues. However, we could start flying the west coast markets into California and Nevada alongside Air Canada."

If this process is repeated by other low-cost airlines, incumbent carriers will be forced reduce their fleets over the next 5-10 years, putting large volumes of aircraft on the market. Many of these could be used by the low-cost carriers, despite their current appetite for new equipment. Low-cost airlines are not, however, currently replacing incumbent carriers on a one-for-one basis. As Morgan has already explained, low-cost airlines also stimulate passenger demand with low fares, and so will grow total demand, and thus increase the overall

New US airline JetBlue had placed firm orders and lease contracts for 39 A320s by only three months after it had started operations in February 2000. It has since added a further 40 firm orders. Its fleet plan to 2005 equals an annual compound growth rate of 35%, and if maintained the fleet will grow to 132 by 2008, requiring more than another 50 firm orders.

requirement for capacity and aircraft.

The size of the incumbent carriers' short-haul operations in the future will depend on the effect of low-cost airlines. If the effect of low-cost carriers is mild, major airlines will experience lower growth rates than they have been used to. If the effects are stronger they will have to maintain or even reduce the size of their current operations.

One possible scenario is for major airlines to to fight back against the new entrants by changing their corporate strategy and form low-cost short-haul operations to operate alongside their medium- and long-haul operations. Morgan does not believe this is possible. "We do not have a 35-40% lower unit seat-mile cost than Air Canada for nothing. Major airlines have high overheads and the problems of unions. By comparison we formed the company with new contracts. Our pilots, for example, are on generous incentive schemes."

No-frills fleet plans

All major low-cost airlines have made aircraft orders, or will place orders, that will see their fleets grow substantially over the next five to nine years. Southwest, a mature carrier, placed a firm order for 94 737-700s in June 2000. This is in addition to a large order for 59 737-700s it placed in 1998, the majority of which have been delivered. Southwest has 119 orders outstanding, and a further 87 options it can exercise. If the airline maintains 12% annual growth until 2008 it will need to double its current fleet to about 700 aircraft. Without any retirements it will have to add another 230 firm orders in addition to the 120 it has in place to meet its requirements.

AirTran is a relatively small carrier, with 62 aircraft in operation, 23 firm orders for 717s outstanding and options for a further 47 in place.

Frontier started with a fleet of used 737-200s, later adding 737-300s, and placed an order for A319s in 2000. It has a fleet of 29 aircraft, including five A319s. It has another 18 A319s and six A318s on order, as well as options on 15 more A320 family aircraft. It also has orders in place for operating leases.

Frontier plans to operate an almost all-Airbus fleet by 2005, with most 737s phased-out. It will have about 30 aircraft by the end of 2002, and increase this to 39 by end of 2003. This represents an annual increase in capacity of 15%, which is low compared to many other low-cost airlines. Continued growth at this rate will mean the airline will need about 70 aircraft of the same gauge by 2008. Current orders only number 24, and so an additional 38 will have to be placed if the same growth rate is to be maintained.

JetBlue has enjoyed rapid success. The airline was financed by Weston Presidio Capital, George Soros and Chase Capital, and started with funding of $130 million. President David Neeleman started Morris Air to Southwest, helped launch WestJet and helped develop the e-ticketing system for Morris Air. This system was sold to Hewlett Packard, and is also used by easyJet, Ryanair and Virgin Express.

JetBlue started with an initial order in July 1999 for 25 A320s, as well as signing a lease for a further seven aircraft. Operations started in February 2000, and it placed further firm orders for another seven aircraft in May 2000, another 30 in June 2001 and 10 more in January 2002. JetBlue currently operates 22 aircraft, with 62 firm orders outstanding. Options were also placed with these orders.

The current fleet plan is for it to number 35 aircraft by the end of 2002, taking delivery of 13 in 2002. This will climb to 49 by the end of 2003, 62 by the end of 2004, and 74 by the end of 2005. This alone represents an annual compound growth rate of 35%. If maintained the fleet would need to grow to about 132 aircraft by 2008. With additional commitments for eight aircraft from lessors, and all options in place, the fleet could match this capacity requirement. The fleet could thus grow by 110 aircraft over six years.

UK carrier easyJet has grown from two aircraft in late 1995 to a fleet of 30 737-300/-700s. EasyJet placed its first large order for new aircraft in 1997, and by May 2004 will have 48 aircraft in operation, including 32 -700s. "We also hold options for a further 30 737s, but I doubt we will take these aircraft," says Nichols. "We are instead in the process of negotiating a new order with Boeing and Airbus for 75 aircraft. These will be for deliveries between 2004 and 2008. Some of these will replace the -300s over time, since we only keep aircraft for about seven years before returning them to lessors. This means we will have a net increase in the fleet of 58 aircraft to 86 by 2008. These orders will be placed for us to maintain our current annual growth rate of 25%." If these orders are fulfiled, easyJet's capacity will have almost trebled in six years. A constant annual growth rate of 25% will mean that additional orders for about another 20 would have to be placed.

Nichols says the new order could be for A319s. "We believe the economies of scale for a single type are reached by the time the fleet reaches about 50 aircraft. It may therefore be beneficial to order A319s to maintain competition between the manufacturers."

Go is a smaller UK low-cost carrier, with just 19 aircraft in operation, which has experienced higher growth rates since being sold by BA. It is planning to open

OLDER NARROWBODY FLEETS, FIRM ORDERS AND OPTIONS HELD BY MAJOR US AND EUROPEAN CARRIERS

Airline	Old narrowbody fleet	Outstanding firm orders	Options held
Alaska	30 X MD-80	8 X 737-700/-900	10 X 737-900
American	39 X 737-200/727-200	41 X 737-800	382 X 737-800
	362 X MD-80	5 X 757	18 X 757
	60 X F.100		
Continental	36 X MD-80	12 X 737-800/-900	
		12 X 757	
Delta	39 X 727-200	63 X 737-800	277 X 737-700/-800
	55 X 737-200/-300		89 X 757
Northwest	22 X 727-200	47 X A319/20	76 X A319
United		60 X A319/20	
US Airways	166 737-300/-400/ MD-80/F.100	42 X A319/20/21	
Total	**1,088**	**282**	**842**
Air France	36 X 737-300/-500	31 X A319/20/21	36 X A319/20/21
Alitalia	89 X MD-80	12 A319	
British Airways	53 X 737-300/-400	38 X A319/20	70 X A319/20
Finnair	26 DC-9/MD-80	16 A319/20/21	5 X A320
Iberia	37 X MD-80	36 X A319/20	24 A319/20
KLM	15 X 737-300		
SAS	72 X MD-80	9 X A321	10 A321
		5 X 737-800	37 737NG
Total	**390**	**147**	**222**

two new hubs in the UK, and is aiming to maintain an annual compound growth rate of 30%. If this is maintained its fleet will need to reach 80 aircraft by 2006. The airline may order up to 80 aircraft. Both the A320 family and 737 are being considered.

Ryanair's expansion plans are among the most aggressive currently pursued by low-cost airlines. The current fleet of 44 could grow to 120-130 with the delivery of all firm orders in place by 2010. While the airline has more than 100 737-800s on order, it will phase out all its -200s. This will increase the current operation by a factor of three by 2010. If the current growth rate of 25% per year is maintained over eight years, Ryanair will not only have to fulfil the 50 options it holds but also place additional orders to take the fleet to about 240 units. This would therefore require the airline to place another 120 orders in addition to the ones it has it place.

As Morgan has explained, WestJet's fleet could have grown to more than 150 aircraft by 2008/09 if its predicted growth rates, reducing to about 15-20% per year by 2008, are reached. The airline would have to convert purchase rights on 56 737-700s, and also add a further 58 firm orders. This is on the assumption that Air Canada's current short-haul operation and fleet maintains its size over this period. If Air Canada pulls out of some markets WestJet may have to place even more orders.

The combined orders that Southwest, Frontier, JetBlue, easyJet, Go, Ryanair and WestJet would have to place, in addition to the outstanding orders these airlines already have, total more than 600 units. This is based on the assumption they maintain their expected growth rates. These orders would provide the deliveries they require to provide the capacity they need by the end of 2008, meaning the orders would have to be completed over the next four years. This compares to an expected annual order volume of 480-600 narrowbodies per year over this period. Low-cost airlines could thus account for about 25% of narrowbody orders over the next four or five years.

While other airlines may order low volumes in the next few years due to over-capacity and low profitability, the low-cost airlines are likely to order aircraft at consistent rates.

US & European majors

Besides low-cost carriers, there are several other markets that could provide orders for narrowbodies.

Although many major airlines in the US and Europe have placed narrowbody orders during the 1990s, a proportion of these have been delivered. The same airlines hold options that could be converted to replace older aircraft and satisfy growth requirements.

American now has 77 -800s in operation, with another 41 on order, plus orders for five 757s. It has 39 737-200/727-200s, 362 MD-80s and 60 Fokker 100s in operation *(see table, this page)*. These will be replaced over a long-term period, but orders will have to be placed in the next five years to replace at least some of these. It currently holds options on 382 737-800s and 18 757s; almost the number required to replace the older types on a one-for-one basis.

Delta has 69 737-800s in service, with orders for a further 63. It holds options on 277 737-800s and 89 757s. By comparison it has 71 737-200/727-200s and 133 MD-80/-90s in operation.

Continental operates 122 737NGs, with another 12 to be delivered. It holds no options for any narrowbodies, but has 36 MD-80s in service.

A summary of the number of older narrowbody types in operation, that may be replaced, and outstanding firm orders and options held by major US carriers is shown *(see table, this page)*. This gives some indication of where large numbers of narrowbody firm orders could come from in the next five to 10 years.

The major airlines listed have a combined total of nearly 1,100 older aircraft in operation, 282 outstanding firm orders for 717/737/757 and A320 family aircraft and options on a further 842 aircraft. The number of firm orders and options are almost equal to the number of older aircraft still in operation *(see table, this page)*.

Some airlines do not hold any options. US Airways, for example, placed an order for up to 400 A320s. Not all were accounted for by firm orders and options, and the airline had purchase rights on the majority of aircraft in the order. Its combined operational fleet and undelivered aircraft total 136. It also has 166 older mixed types, which it intends to ultimately replace.

The older aircraft operated by the US majors includes 169 DC-9s operated by Northwest. The airline has stated on several occasions that it intends to keep them operational. One recent statement was that this would be for as long as 15 years. This implies the A319 options Northwest holds will not be used for DC-9 replacement, but rather used for growth requirements.

Potential orders from low-cost airlines and the conversion of options from major US and European airlines alone could total 1,700 aircraft. Once other markets are considered, the potential orders up to 2008 could exceed order and delivery predictions.

Similar to US majors, major European airlines have large numbers of older narrowbodies to be replaced, outstanding orders and options. In total, the airlines listed have 390 older narrowbodies still in service, 147 orders outstanding and a further 222 options *(see table, this page)*.

The US and European majors combined have options for almost 1,100 narrowbodies. Simple replacement of older aircraft in operation will require these, before any additional capacity is required for growth. A large percentage of narrowbody orders could come from these airlines in the next five to 10 years.

It is hard to gauge the capacity required by these airlines for growth until 2010. It is now less certain that these airlines will enjoy the same 4-6% annual growth they did in the past, since many low-cost airlines are experiencing annual growth rates of 25-40%. Few of their orders are to replace older aircraft. Their fast growth partially comes from taking market share from the major carriers. The major airlines may therefore see smaller growth rates, or even zero growth. Although this issue can make fleet planning difficult, manufacturers have cut the lead time from order placement to delivery to as short as eight months.

In addition to this, manufacturers now have agreements with US carriers to have purchase rights. This gives the airlines more flexibility and they can order aircraft in small blocks nearer the time they know they will require them.

Other markets

Other major narrowbody markets are China and Australia. China buys only new aircraft and the industry enjoys 6-8% annual growth. The total Chinese fleet is about 600 units. With this growth rate continuing, China will need a net increase in its fleet of about 500 units by 2010. China is expected to be the world's second largest air transport market after the US.

Australia is also providing some scope for narrowbody orders. Qantas ordered 15 737-800s in October 2001 after the collapse of Ansett. Ansett, however, is planning to come back into operation, and may order 30 A320s.

Changing strategy

Although the narrowbody market may appear to have a healthy future from the issue of orders placed by low-cost airlines to keep pace with traffic growth and the conversion of options to replace older aircraft, changing airline strategies may counter this. Pressure on yields, particularly from low-cost airlines, may not only force majors to maintain their capacity, but they may even reduce it. This will be done either by pulling out of routes altogether, or by reducing aircraft size. Some US majors, Continental and Delta for example, are passing weaker routes to their regional subsidiaries which use regional jets to provide capacity.

In addition to the possibility of this continuing, major carriers may themselves operate the new generation 70-seat and larger aircraft from Bombardier, Embraer and Fairchild. "It may only be a question of how long it takes for airlines to realise that they can swap A318s, A319s, 717s and 737-600s for the larger regional jets and operate more efficiently," says Forsberg. The smallest jets from Airbus and Boeing are only about 10 seats smaller than types like the ERJ-190-100/-200 and 928Jet, which are lighter. Major airlines are losing low-yield passengers to low-cost airlines, and so may not require capacity of A318/19s or 737-600s for much longer. This will particularly be in the case of routes with a low proportion of leisure traffic. One example is London Heathrow-Hanover. With the leisure traffic on this sort of route taken away by no-frills carriers, airlines will find it more economic to introduce large regional jets. In this case order prospects for Airbus and Boeing narrowbodies will be eroded. One particular case is Northwest, which may split an eventual order for DC-9 replacements between conventional jets and large regional aircraft.

Summary

A combination of continued growth by low-cost carriers and the conversion of all options by the US and European majors to replace older aircraft could see up to 1,700 narrowbodies being ordered in the next four or five years to 2007/08. This exceeds the 1,200 required to fill the predicted delivery slots up to 2008, and ignores additional orders that could be placed by other airlines and lessors.

Although it is unlikely that the both low-cost airlines will order 600 new aircraft and that US/European major airlines will convert all 1,100 outstanding options, the majority of these 1,700 orders are likely to be placed.

The main issue is what impact the low-cost airlines have on incumbent major carriers. Low-cost airlines are stimulating the market with low fares, which partially accounts for their rapid growth.

The existence of other major narrowbody markets indicates implies that the predicted Airbus and Boeing narrowbody deliveries of between 350 and 600 each year between 2004 and 2009 could be exceeded by a large volume. Airbus and Boeing may therefore have their orderbooks swelled by the success of new low-cost airlines.