

# Boeing Co. (BA)

## Takeaways from Seattle Visit

- **What's New** – We met with Boeing Capital and the management of the 737 program in Seattle late last week. Takeaways from the meetings & a walk of the 737, 747, 777, 787 production lines support our constructive stance on BA shares.
- **Boeing Capital Takeaways** – The commercial aircraft finance market appears healthy as Boeing, typically viewed as a lender of last resort for airline customers, has financed the delivery on only one new aircraft over the past 18 months. And while some European banks appear to be decreasing their exposure to the market, banks in other regions of the world appear to be stepping in.
- **737 Takeaways** – In Boeing's view, demand continues to outstrip supply – in part driven by the company's efforts to reduce the cyclical nature of production. As such, management appears to be much more focused on executing the ramp to 42 planes a month than on the pacing of new orders. In our opinion, this should be viewed as a positive by investors given the fact that the 737 program represents roughly a quarter of the company's profits.
- **737MAX Takeaways** – The MAX is on schedule for final design next year, first flight in 2016, and EIS in 2017. The next milestone is "load testing", which will inform engineers of the exact changes needed on the airframe to support the new engines. At this point, the company plans to first produce the MAX on its own production line and then later feather it into the established production lines – thus hopefully avoiding the 1998 line break the company experienced during the NG transition.
- **Aircraft Useful Life Under Pressure** – Both Boeing Capital and management of the 737 program suggested that the average useful life of an aircraft has declined by a year given technological advances and high fuel prices. In our view, this trend could have positive implications for OEMs and negative implications for aftermarket suppliers who rely on parts sales into ageing aircraft.
- **Cash Deployment on Hold Until Engineering Deal is Reached** – We walked away from meetings under the impression that a deal with the union likely needs to happen before a cash deployment announcement is made.

EPS	Q1	Q2	Q3	Q4	FY	FC Cons
2011A	0.78A	1.25A	1.45A	1.83A	5.33A	5.33A
2012E	1.22A	1.27A	1.35A	1.19E	5.03E	5.00E
Previous	1.22A	1.27A	1.35A	1.19E	5.03E	na
2013E	1.23E	1.31E	1.37E	1.41E	5.32E	5.07E
Previous	1.23E	1.31E	1.37E	1.41E	5.32E	na
2014E	1.43E	1.56E	1.58E	1.62E	6.19E	6.21E
Previous	1.43E	1.56E	1.58E	1.62E	6.19E	na

Source: Company Reports and dataCentral, Citi Research. FC Cons: First Call Consensus.

### Company Update

<b>Buy</b>	<b>1</b>
Price (09 Nov 12)	US\$73.25
Target price	US\$84.00
Expected share price return	14.7%
Expected dividend yield	2.8%
<b>Expected total return</b>	<b>17.4%</b>
Market Cap	US\$55,236M

### Price Performance (RIC: BA.N, BB: BA US)



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### See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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BA.N: Fiscal year end 31-Dec						Price: US\$73.25; TP: US\$84.00; Market Cap: US\$55,236m; Recomm: Buy					
Profit & Loss (US\$m)	2010	2011	2012E	2013E	2014E	Valuation ratios	2010	2011	2012E	2013E	2014E
Sales revenue	64,306	68,735	81,670	89,823	96,884	PE (x)	16.5	13.8	14.6	13.8	11.8
Cost of sales	-51,999	-55,539	-68,087	-75,344	-81,274	PB (x)	18.3	14.5	6.3	6.1	5.6
Gross profit	12,307	13,196	13,583	14,479	15,610	EV/EBITDA (x)	9.4	7.8	7.5	7.0	6.2
Gross Margin (%)	19.1	19.2	16.6	16.1	16.1	FCF yield (%)	3.5	4.3	7.3	10.3	11.7
EBITDA (Adj)	6,698	7,520	7,857	8,088	8,866	Dividend yield (%)	2.3	2.3	2.4	2.9	3.5
EBITDA Margin (Adj) (%)	10.4	10.9	9.6	9.0	9.2	Payout ratio (%)	38	31	35	40	41
Depreciation	-1,727	-1,675	-1,713	-1,600	-1,600	ROE (%)	130.2	124.0	64.6	47.1	50.0
Amortisation	0	0	0	0	0	Cashflow (US\$m)					
EBIT (Adj)	4,971	5,845	6,144	6,488	7,266	EBITDA	6,698	7,520	7,857	8,088	8,866
EBIT Margin (Adj) (%)	7.7	8.5	7.5	7.2	7.5	Working capital	-5,010	-4,261	-1,634	670	1,345
Net interest	-516	-498	-458	-437	-427	Other	1,268	757	-357	-1,508	-2,374
Associates	0	0	0	0	0	Operating cashflow					
Non-op/Except	52	47	57	72	72	Capex	-1,062	-1,619	-1,779	-1,600	-1,600
Pre-tax profit	4,507	5,394	5,742	6,123	6,911	Net acq/disposals	-932	-42	-18	0	0
Tax	-1,196	-1,383	-1,908	-2,143	-2,419	Other	-2,837	4,030	-3,396	0	0
Extraord./Min.Int./Pref.div.	0	0	0	0	0	Investing cashflow					
Reported net profit	3,311	4,011	3,834	3,980	4,492	Dividends paid	-1,253	-1,244	-1,326	-1,580	-1,840
Net Margin (%)	5.1	5.8	4.7	4.4	4.6	Financing cashflow					
Core NPAT	3,311	4,011	3,834	3,980	4,492	Net change in cash	-3,852	4,683	-1,879	2,069	2,398
Per share data						Free cashflow to s/holders					
Reported EPS (\$)	4.45	5.33	5.03	5.32	6.19		1,894	2,397	4,086	5,650	6,238
Core EPS (\$)	4.45	5.33	5.03	5.32	6.19						
DPS (\$)	1.68	1.65	1.74	2.11	2.53						
CFPS (\$)	3.97	5.33	7.69	9.69	10.80						
FCFPS (\$)	2.54	3.18	5.36	7.55	8.59						
BVPS (\$)	4.00	5.05	11.55	12.10	13.02						
Wtd avg ord shares (m)	715	715	715	715	715						
Wtd avg diluted shares (m)	744	753	763	748	726						
Growth rates											
Sales revenue (%)	-5.8	6.9	18.8	10.0	7.9						
EBIT (Adj) (%)	137.2	17.6	5.1	5.6	12.0						
Core NPAT (%)	148.0	21.1	-4.4	3.8	12.9						
Core EPS (%)	137.7	19.7	-5.6	5.8	16.4						
Balance Sheet (US\$m)											
Cash & cash equiv.	5,359	10,049	8,167	10,236	12,634						
Accounts receivables	5,422	5,793	7,323	7,654	7,879						
Inventory	24,317	32,240	36,852	39,362	40,564						
Net fixed & other tangibles	14,571	16,848	16,982	16,990	17,001						
Goodwill & intangibles	7,916	7,989	7,891	7,891	7,891						
Financial & other assets	10,980	7,067	10,165	10,165	10,165						
<b>Total assets</b>	<b>68,565</b>	<b>79,986</b>	<b>87,379</b>	<b>92,297</b>	<b>96,133</b>						
Accounts payable	21,517	20,645	22,846	25,867	27,545						
Short-term debt	948	2,353	2,172	2,172	2,172						
Long-term debt	11,473	10,018	9,014	9,014	9,014						
Provisions & other liab	31,765	43,362	45,093	46,590	48,096						
<b>Total liabilities</b>	<b>65,703</b>	<b>76,378</b>	<b>79,124</b>	<b>83,643</b>	<b>86,827</b>						
Shareholders' equity	2,862	3,608	8,255	8,654	9,307						
Minority interests	0	0	0	0	0						
<b>Total equity</b>	<b>2,862</b>	<b>3,608</b>	<b>8,255</b>	<b>8,654</b>	<b>9,307</b>						
<b>Net debt</b>	<b>7,062</b>	<b>2,322</b>	<b>3,019</b>	<b>950</b>	<b>-1,448</b>						
Net debt to equity (%)	246.8	64.4	36.6	11.0	-15.6						

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For definitions of the items in this table, please click [here](#).

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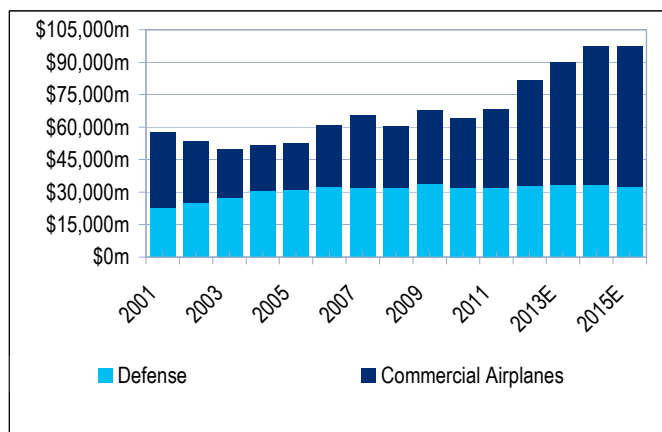
# Boeing Commercial Airplanes

We met with the GM of the 737 program and also saw most of Boeing's production lines. We came away with a renewed appreciation for the longevity and profitability of the 737 as well as the size/scope of the Everett facility aka the largest building in the world by volume.

## BCA Snapshot

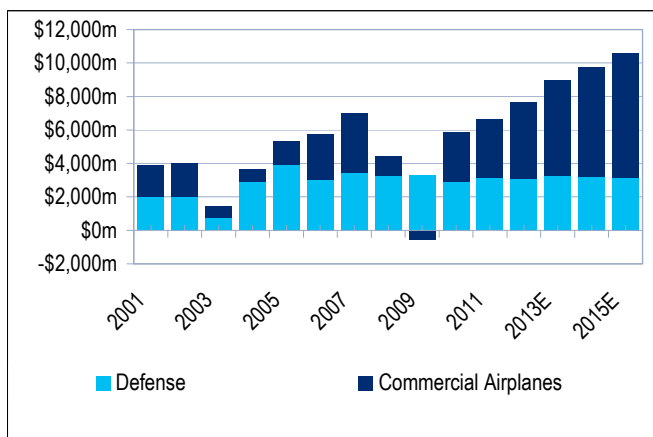
BCA represents ~60% of Boeing sales and segment EBIT in 2012E, growing to 67% and 70%, respectively, in 2015E driven by production rate increases and margin improvement (especially on the 787).

Figure 1. Boeing Sales 2001-2015E



Source: Citi Research

Figure 2. Boeing Segment EBIT



Source: Citi Research

We expect BCA sales to grow an average of 10% through 2012E-2015E driven by higher deliveries (737, 777, and 787 deliveries) as well as by a services business (CAS) that continues to take market share. We expect BCA margins to expand 210 bps over the same period driven by 787 and accretive services sales.

## Backlog

Backlog's running at a record high ~7 years, in our view implying that current order flows do not matter as much since there is so much visibility. Back when Boeing ran ~2.5 year backlogs, orders mattered a lot more because they would drive earnings in a relatively short time period. At this point, we see Boeing as a cash deployment and execution story.

## Supply Chain

Boeing is working more closely than ever with its suppliers to ensure their strength and ability to keep up, as well as to protect IP. In fact, Boeing has a real-time monitoring center with live feeds to several suppliers. In Boeing's eyes, the key is working with suppliers ... not just making demands of them. We heard a similar refrain during our meetings with PCP, that Boeing is very involved in the supply chain (weekly meetings) and that both sides see the ability to make more money based on leaned processes. One of the strategies Boeing points out that helps everyone save money is Boeing buying common items in bulk (such as metal or fasteners) and then distributing to the suppliers.

## CAS Update

Commercial Aviation Services (CAS) run by Lou Mancini continues to generate ~15% of BCA sales and is looking for opportunities to grow inside and outside of aero.

Within aero, there continue to be opportunities in training, electronic flight bags, and long-term service agreements, like GoldCare. Boeing admits that GoldCare hasn't picked up as quickly as initially thought, but it's not a bad thing since there are some risks associated with the new program and BA is learning that it should offer the program in multiple flavors to suit multiple customers.

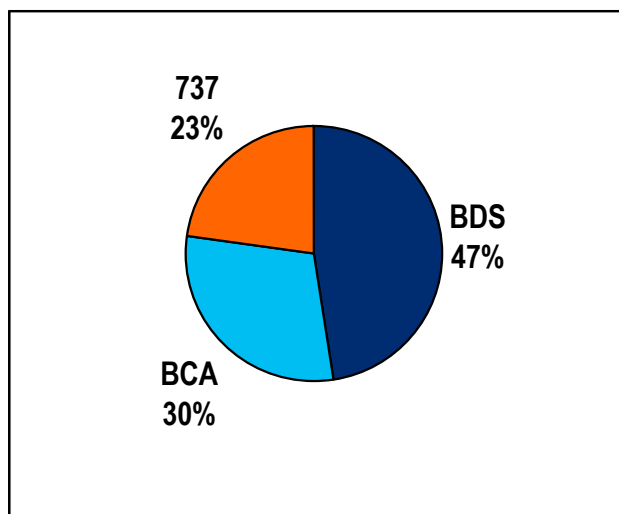
Beyond aero, CAS's Jeppesen business is pursuing the maritime market, looking to make electronic maritime maps, which were only recently okayed for displacing paper maps on the bridge.

## 737

We met with Beverly Wyse, General Manager of the 737 program. Wyse is a 27-year Boeing veteran and has worked on all major programs except 787. To her, it's a very exciting time for the very mature 737 program which recently received its 10,000<sup>th</sup> order while also ramping to record production rates and developing a new variant (MAX). There are just over 3k jets in backlog with over 990 orders to-date. Wyse expects to exceed 1,000 by year-end with the program being busy processing MAX orders flipping into commitments as quickly as possible. Meanwhile, the company continues to invest in NG, which will deliver almost 2,000 more units before the MAX even enters service in 2017.

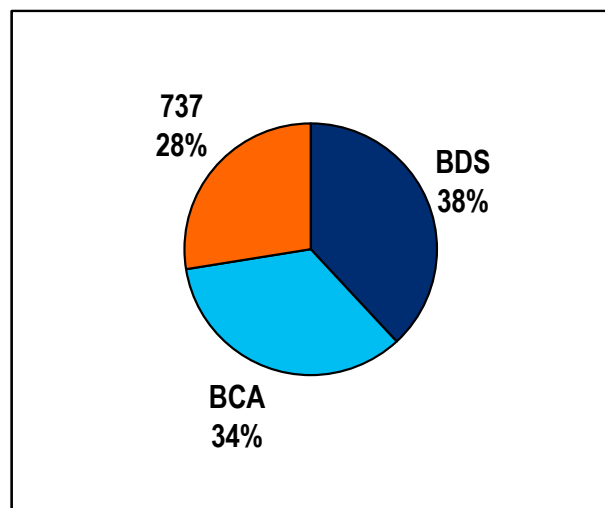
The 737 is a significant piece of BCA, representing 43% of segment revenue and 45% of segment gross profit in 2011. On a company-wide basis, the 737 represented 23% of total sales and 28% of total gross profit. We expect its sales share to reach 24% in 2015 once the rate has moved fully to 42/month.

Figure 3. Boeing Sales (2011)



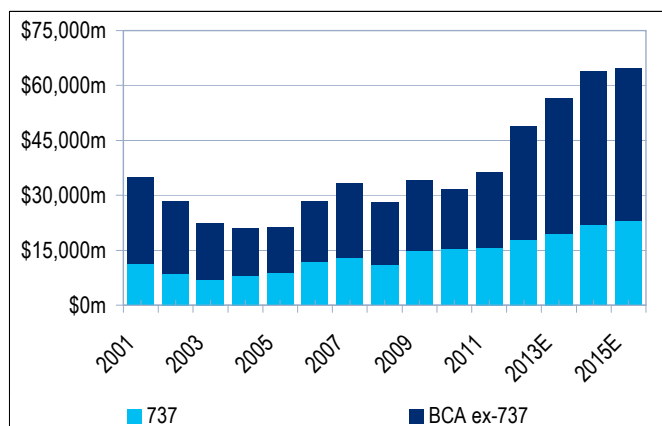
Source: Citi Research

Figure 4. Boeing Gross Profit (2011)



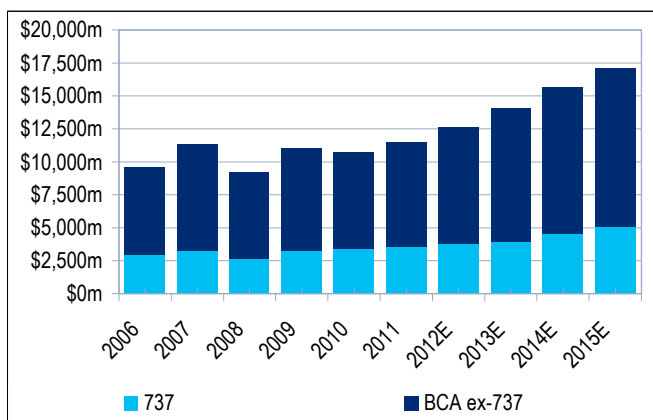
Source: Citi Research

Figure 5. BCA Sales



Source: Citi Research

Figure 6. BCA Gross Profit



Source: Citi Research

## Pricing

Boeing is seeing some pricing pressure in narrow-bodies largely as a result of competition with Airbus. At this point it's not seeing Comac or Bombardier behind this dynamic. However, Boeing claims it's still getting premium pricing vs. Airbus products and that performance improvements in the factory are helping mitigate the pricing pressure.

## Production Process & Margin Opportunity

The 737 is finished exclusively in Renton on two lines producing a combined 35/planes a month. The fuselages arrive by train from Spirit Aerosystems in Wichita, at which point they begin the final assembly process in Renton. The aircraft has been rolling through these factories since the first delivery in the mid-1960s, but a lot has changed over the years due to lean production processes. For instance, the 737 line produces ~2.5x more aircraft with 60% less inventory and a 24% smaller footprint. A big shift came in 2000 when the 737 went from static production (took 22 days for an aircraft to leave the hangar) to a moving line (only takes aircraft 11 days to leave the hangar, moving at 2 inches per minute). Wyse came off confident that she'll be able to find more efficiencies and better production techniques to help offset pricing pressure and maintain program margins.

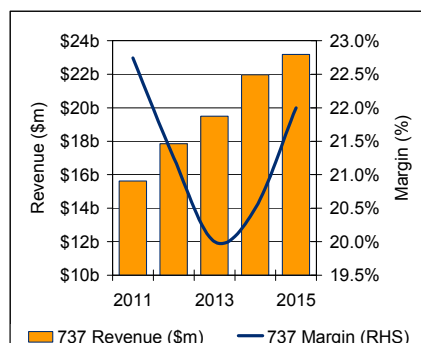
In 3Q12, Boeing expanded the 737 block to include more poorly priced aircraft including end-of-line NGs and initial MAX deliveries. Boeing claims the impact on the program margin to have been largely offset by performance improvements; however our estimates still reflect 300 bps of q/q 737 margin pressure due to the inclusion of the new aircraft. However, we expect 737 gross margins to drift back up over time.

## Production Rate

Renton is coming through the rate break very effectively and hitting record levels of efficiency and productivity. The key focus amidst the production rate increases is driving margin to offset pricing pressure. At the same time, Wyse still sees the market to be skewed toward demand outstripping supply, supporting plans to ramp to 42/month in 1Q14. Line 1 in Renton is now running at 21 aircraft/month, while the smaller Line 2 is producing at 14/month (each moves at ~2 inches/minute. Hitting the 42/month target will involve Line 2 ramping up to 21/month over the next year. With recent rate breaks having gone off smoothly, we do not see any significant roadblocks to achieving the 42/month rate.

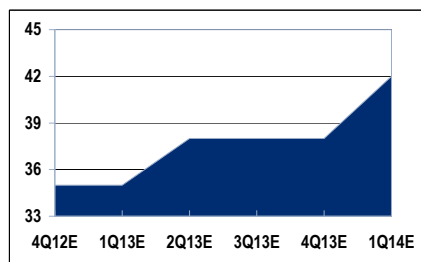
Over the long-run, persistent global air travel growth likely supports even higher production rates. Some have even thrown around rates as high as 60/month to meet emerging market needs. However, it's still TBD what a new small airplane will look like and how many it will seat. To be sure, a larger plane would be able to meet capacity requirements with increasing production rates as much.

Figure 7. 737 Sales and Margin Outlook



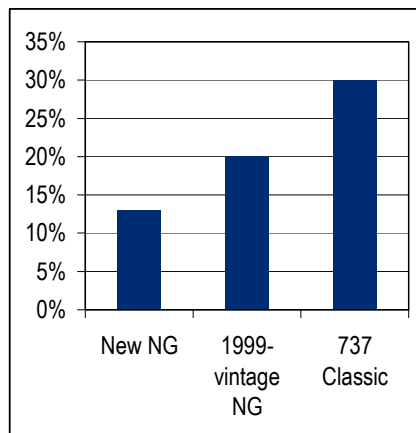
Source: Citi Research

Figure 8. 737 Monthly Production Rate



Source: Citi Research

Figure 9. MAX Performance Improvement



Source: Citi Research

## MAX Transition

In electing to go with a re-engine over a new NB aircraft, Boeing chose the easier route but it's not one without its challenges. The bigger fan on the new GE engine requires more ground clearance and therefore a larger landing gear, while other parts of the plane require some new designs. However, Boeing management maintains (and has done so since the MAX was introduced last summer) that the changes are relatively straight-forward. The most complex piece of the puzzle is the new CFM engine, which recently passed through CFM's "Tollgate 3," which is a bit ahead of the firm concept milestone Boeing recently achieved. Boeing also notes that the MAX will be the LEAP's third EIS, in addition to Airbus and COMAC (helping retire some of the risk). Overall, the MAX is on schedule, with firm configuration set for sometime in 2013, setting the table for detailed design work and eventually the 1st flight in 2016, and EIS in 2017.

Boeing highlights that the oft-quoted MAX performance improvement of 13% is only vs. new NGs rolling off the line today. The MAX is 20% better than initial NGs and 30% better than Classics.

## Production

BA is making sure that new MAX builds won't get in the way of an NG line that should be humming at 42/month by the time MAX' first flight rolls around. To do this, it's clearing out space next to Line 1 in Renton for the initial builds. As the new production stands up, employees will train each other so that eventually Boeing can collapse NG and MAX manufacturing into Lines 1 & 2 in Renton.

Forefront in Wyse's mind is how poorly Boeing managed the 1998 transition from 737 Classic to NG, which resulted in the company having to halt production for several months while it caught up. Wyse does not expect a repeat due to a new management culture and there being less complexity in the transition to MAX. On the management side, late-90s Boeing management appeared to over-commit to customers regarding delivery guarantees of the new NGs and the ramp. These days, BA manages the rate increases a lot more conservatively and limits the numbers of early customers. From a complexity standpoint, the NG required new tooling and a new build process in addition to a new engine to build an aircraft that would fly higher, faster, and farther. As previously mentioned, the major change involved with the MAX is a new engine. Most of the supply chain and build processes are identical between the planes. The unexpected complexity and overly-ambitious management culture of 1998 resulted in the master schedule being changed 8 times (it shouldn't change even once) and in the line falling 2-3 months behind. It was at that point that Boeing began focusing on lean production and in 2000 the 737 line went from static production to a moving line.

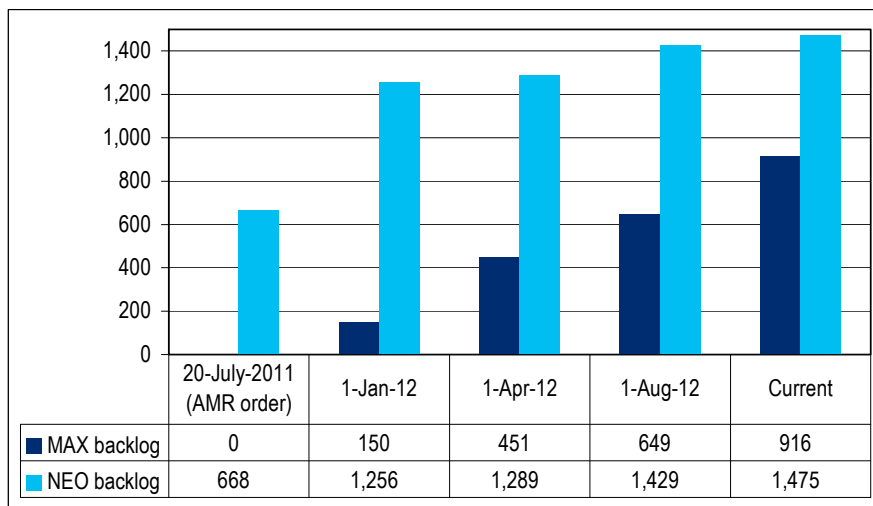
## MAX Orders

MAX orders have steadily built over the year almost reaching the ~1,100 target Boeing has set at the beginning of 2012. We expect continued orders into 2013 as the MAX reaches order parity with the NEO.

**In our view, the 737 MAX will catch up to the A320 NEO in terms of orders, suggesting the continuation of a relatively even market split between Boeing & Airbus.**



Figure 10. 737 MAX vs. NEO Backlog

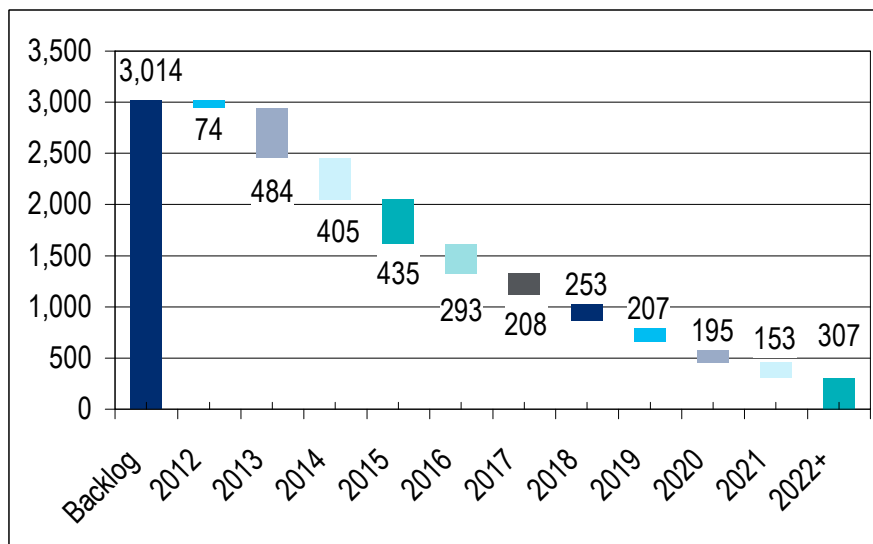


Source: Ascend

## Total Backlog

At 3,014 planes, the total 737 backlog represents ~6 years of backlog at announced production rates.

Figure 11. 737 Backlog Delivery Waterfall



Source: Ascend

## Other Production Aircraft

### 787

787 production appeared to be progressing to plan, although moving relatively slowly on the stationary line vs. the high-margin 777 being manufactured on a moving line. Two interesting tidbits we were reminded of last week: the two engines options on the 787 are essentially interchangeable, allowing lessors to more easily re-market the plane. Also, Boeing has FFAA approval for the 787 to receive heavy maintenance checks every 12 years vs. metal aircraft requiring the check every 6 years.

### Production Rate

The line should reach 5/month by year-end including Renton and Charleston. Boeing activated the surge line over the summer to help cushion potential delays as well as prepare for the transition to 787-9, which should see its first final assembly begin in mid-2013 (and first delivery in 2014). We expect 787 deliveries to increase from 41 in 2012E to 136 in 2014E driven by aircraft delivering out of EMC and off the line, and then coming back down to 126 in 2015E as the last EMC aircraft delivers in early 2015. The company's still on track to hit 10/month by the end of 2013, something echoed by PCP during our Primus factory tour.

### Change Incorporation

At the end of 3Q12, Boeing had 53 aircraft still in process as part of change incorporation. We estimate there to have been ~20 aircraft delivered out of EMC since September 2011, although they were the more mature vintages requiring relatively fewer changes. Thus, the average aircraft remaining in change incorp is an earlier line number requiring more work. As these deliver, the market should be ready to see some ugly unit margins (especially when the three test aircraft deliver to their VIP customers). However, the number of aircraft in process should begin to drift down as the line produces clean aircraft delivering straight to customers without a stop at change incorp.

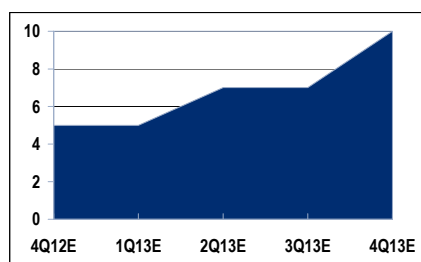
### Margin opportunity

In our view, Boeing has the opportunity to boost margins on the program due to better overhead absorption on higher volumes. Thus in our view, the 1% margin rate we're now assuming on the program could grow over the next few years to 5% in 2015E.

From a unit cost perspective, Boeing is still progressing down the learning curve and highlights that the rate of improvement slows down (vs. the 50% improvement between line #8 and line #66).

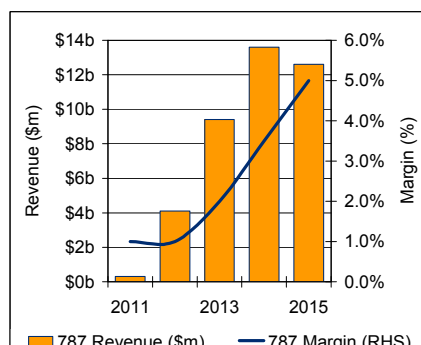
Boeing's goal is to eventually make the 787 as profitable as 737 (~20% est. margin) or 777 (~35% est. margins). For this to happen, the company will have to achieve production rate increases, potentially increase the block size (via new orders), and achieve more pricing power on new sales (which we expect should happen as the plane proves itself in new customers' fleets).

Figure 12. Planned 787 Monthly Production



Source: Citi Research

Figure 13. 787 Sales and Margin Outlook



Source: Citi Research

## 777

At this point, the 777 is a major cash cow with pricing hold up well and ~33-35% gross margins leading the segment. Helping the 777's popularity and robust pricing are the delays Airbus is experiencing with the A350. We expect BA to decide on the new 777 variant in early 2013 to counter the larger A350s that will deliver improved performance due to its composite structure. However, Boeing knows a good thing when it has it, and its production to 8.3/month (100/year) to capture as much market share while the A350 goes through the development process.

The new rate of 8.3/month was previously unheard of barring major capital investment, but Boeing has been able to move to the new rate with minimal facility expansion due to new, efficient manufacturing processes. For instance, there's now a machine running over the fuselage that automatically drills the holes and is monitored by one worker. Boeing is also working on a wing paint shop that should speed up the process and reduce cost.

### Product Development

Boeing is comfortable with its product development timing and insists it will not introduce a new 777 until it knows the technology required to make a significant improvement is out there. As a reminder, the original 777 was 18 months late to the market (behind the A340) due to the need to better develop twin-engine technology. But one could argue that the delay was worth it seeing the success the 777 has had vs. the 4-engine A340 which is no longer in production. Thus, Boeing is cognizant about over-promising will thus decide on a 777X when it's ready. We note that it's unlikely to make any decision while the engineers contract is still being negotiated.

## 747

The 747-8 is produced in Everett at a rate of 2/month. The rate's likely to stay as is for the foreseeable future. Hiccups along the way of the 747-8 development process had put the program in a forward-loss position, set to book 0% margins for a while.

### Backlog

We consider the 747 backlog to be the weakest among Boeing's in-production aircraft (at least the 767 has the multi-decade tanker contract). From a passenger standpoint, airlines appear more willing to go with the two-engine 777 or for higher-capacity missions Airbus' A380. Meanwhile, the freighter market is still in the doldrums due to macro weakness, thus pressuring freighter orders. In our view, only 5 orders YTD is short of Boeing's initial estimates heading into a year in which they expected to announce more passenger orders. Our analysis from October showed that the 2/month production rate is relatively well-supported by backlog, but we would need for more orders to support future rates. For more, see [In-Depth Backlog Analysis Adds Comfort to the Long Thesis](#).

## Boeing Capital

We hosted a dinner with Rob Young of Boeing Capital Investor Relations.

Boeing Capital (BCC) is essentially a lender of last resort for aircraft sales. The current portfolio of 269 aircraft is worth \$4.1b, far below the 500 aircraft worth \$13b in late 2001. Most of the financings are "niche-y" aircraft that might not enjoy as much demand in the capital markets, with 40% of the portfolio comprised of 717s, followed by 757s.

BCC has not financed any aircraft YTD despite holding \$18b of commitments, and it does not expect to have to finance any next year either. Commitments are typically driven by US carriers who aren't eligible for EXIM and other airlines needing a backstop (for various reasons, including delivery being years away or being able to tell corporate boards that financing is in place). However, BCC financing is typically expensive vs. the open market and therefore most commitments do not end up being financed. One "exception" is Air India, when BA had to offer a bridge loan to facilitate a delivery.

Overall, BCC sees liquidity as being generally available to finance all the aircraft planned for delivery despite macro uncertainty and European banks stepping back from the market. There are two developments impacting aircraft financing:

1. **Basel III** is causing some banks to tighten up with a few exiting the space. However, other banks are stepping up with new entrants from Russia, UAE, China getting involved in the financing market. BCC also sees bond markets grow increasingly interested in aircraft financing (bond markets represented 1-2% of all financing in 2011 vs. 6% in 2012E vs. 15% in 2013E).
2. **The Aircraft Sector Understanding (ASU)** governs the rates that ECAs (export credit agencies) charge. It was originally supposed to be fully implemented in 2013, but was negotiated to grandfather in several older aircraft deals so that buyers get the pricing they originally agreed to.

BCC also noted that it's seeing some pressure on aircraft useful lives, compressing by ~1 yr recently (NBs to 24 & WBs to 34). However, could see this reverse if fuel prices come down and older aircraft regain some value.

## Summary of our Long Thesis

**In our view, Boeing is in the early stages of a significant up-cycle.**

In our view, Boeing is only in the early stages of a significant up-cycle production, delivery, and cash move in the company's direction. This is in line with our global aerospace industry view that the recovery cycle is heading strongly into Phase 2 in which OEs benefit from increased production rates.

We were rather vocal in January that 2012 would belong to Boeing. Ramping production rates, 787 risk retirement, 737 MAX order flow, and an improving cash story underpinned our "Year of Boeing" thesis. While these fundamentals have played out, our stock call has not given investor concern over the strength of the company's backlog, the potential for peaking order rates and now non-cash pension headwinds.

However, in our view, today's Boeing story is more about cash deployment and less about the near-term vagaries of daily order blips, 787 production rate speculation and non-cash pension expenses. The backlog and working capital are built, difficult development projects are coming to a close, and execution is in keen focus. Now it's time to generate cash returns for shareholders, and with free cash yields likely pushing the mid-teens by mid-decade (on current prices), we view this as highly likely. As such, we remain buyers of the stock and expect Board-level cash deployment decisions, continued 787 execution, and increasing investor confidence with the company's backlog to act as catalysts.

### ■ Key Investment Points:

- **Backlog** appears to support announced production rate increases given a bow-wave of aging planes and the efficiency gains offered by new products.
- **Orders** should be less important for the next several years as Boeing heads swiftly into a "backlog burn" era. In our view, building aircraft and cash deployment are what matter. The long-term demand outlook also supports production plans given the prospects of global economic growth and replacement rates.
- We expect sentiment on the **787** program to continue to improve as BA executes on the production rate ramp, which should help consolidate valuation at ~15x FTM earnings. With clean planes rolling off the lines, the 787 is accelerating into the sweet spot: full rate production on a locked-down design.
- The **free cash flow** story is cranking and with it come cash returns to shareholders. With the 787/747 programs winding down, R&D spending and working capital headwinds should dissipate. Boeing also benefits from production rate increases. At this point, we expect the company to generate ~\$10 in FCF /share in 2015E, representing a ~14% yield at current share levels. **We expect a 20% dividend increase in December and a \$2b repurchase program to be announced in January.**

### ■ Catalysts:

- Cash deployment decisions in December
- 787 production ramp
- Defense wins (Qatar, Korea, UAE, domestic F-18)

## Boeing Co.

### Company description

Headquartered in Chicago, Illinois, Boeing (BA) provides a diverse set of products and services to the aerospace and defense market. The company operates in three lines of business: Boeing Commercial Airplanes, Boeing Defense, and Boeing Capital. It is one of two major commercial airplane manufacturers in the world (the other is Airbus), and one of three major defense fixed-wing aircraft makers in the United States (the others are Lockheed Martin and Northrop Grumman). Boeing also builds military helicopters. The company merged with one of its major rivals, McDonnell Douglas, in 1997 in a \$13b stock-swap.

As a result of its vast footprint, Boeing can be engaged in several massive competitions simultaneously. Today, Boeing is competing with Airbus on narrow and wide-body commercial airplanes, and with Lockheed Martin on fighter jets. Boeing also provides numerous support and integration services to its commercial and defense customers. The company generated 2010 sales of \$64b and operating margins of 7.7%.

### Investment strategy

We rate Boeing (BA) Buy (1). We recommend building positions in the company in light of our positive view on: 1) The aerospace cycle given strong backlogs and persistent demand for fuel-efficient aircraft; 2) Improved earnings visibility given recent announcements to hike production rates on their more profitable planes; 3) Improved cash flow visibility given the wind-down of the 787 and 747-8 development programs, which by our estimate should release working capital; 4) A resilient outlook for the defense business given the company's participation in several high profile contests; and 5) The outlook for shareholder friendly cash deployment in the form of higher dividends and share repurchases.

### Valuation

We apply a sum-of-the-parts valuation methodology to Boeing. To the commercial business (68% of 2014 segment income) we apply a 15x FTM P/E multiple, in line with commercial aerospace peers. In our view, a premium multiple is warranted due to the production up-cycle we're embarking upon as well as the relative resiliency of the commercial aerospace market. We apply a 10.6x multiple to the defense business (32% of income), representing a 20% discount to the market. This is a slight premium to our target defense multiple (25% discount) due to BDS' premium backlog visibility and international content. This gives us a blended target multiple of 13.6x, which yields an \$84 target price when applied to our 2014 EPS estimate of \$6.19.

### Risks

The commercial aerospace industry is intrinsically risky given its vulnerability to unpredictable shocks that cannot be incorporated into earnings models, such as terrorism, volatile oil prices, and epidemics. Furthermore, the industry is highly correlated to economic growth, and relies on economic expansion for air traffic growth. The company's other exposure is the defense market, which is subject to changes in public opinion, global threats to the U.S. and its allies, the state of the federal budget, and the condition of existing U.S. and allied military equipment.

Boeing's shares may materially underperform our target price should the broader economy slip back into recession, resulting in decreased airline traffic and plane orders. Shares would also underperform to the extent that DoD budgets were severely cut. The company is also subject to intense commercial competition with Airbus, especially in the narrow-body segment, where defending market share could come at the expense of margin. If the impact on the company from any of these factors proves to be greater/less than we anticipate, we believe the stock will likely have difficulty achieving our target price or could outperform it.

## Appendix A-1

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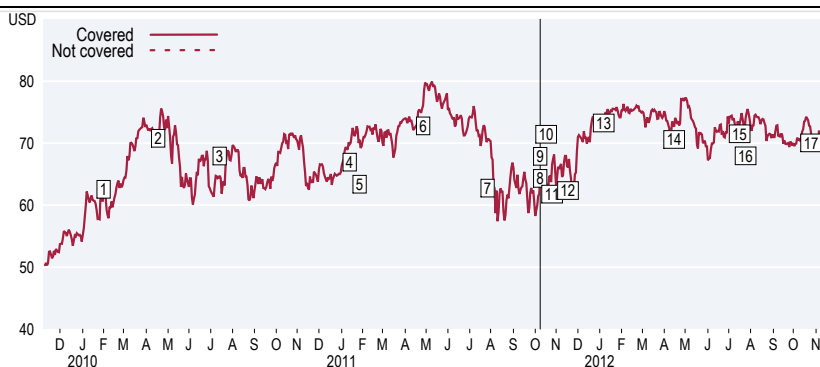
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#### Boeing Co. (BA)

##### Ratings and Target Price History Fundamental Research

Analyst: Jason Gursky

Covered since July 15 2010



	Date	Rating	Target Price	Closing Price
1	31-Jan-10	2H	*\$59.00	60.60
2	19-Apr-10	2H	*\$73.00	70.96
3	14-Jul-10	*1H	*\$80.00	64.75
4	13-Jan-11	1H	*\$85.00	69.83
5	27-Jan-11	1H	*\$84.00	70.56
6	27-Apr-11	1H	*\$90.00	76.12

\* Indicates change

	Date	Rating	Target Price	Closing Price
7	27-Jul-11	1H	*\$85.00	70.63
8	8-Oct-11	Stock rating system changed		
9	8-Oct-11	*1	85.00	61.81
10	18-Oct-11	1	*\$87.00	63.47
11	26-Oct-11	1	*\$78.00	66.56
12	17-Nov-11	1	*\$82.00	66.09

	Date	Rating	Target Price	Closing Price
13	6-Jan-12	1	*\$87.00	73.98
14	16-Apr-12	1	*\$89.00	72.68
15	17-Jul-12	1	*\$93.00	73.11
16	25-Jul-12	1	*\$89.00	74.03
17	25-Oct-12	1	*\$84.00	71.54

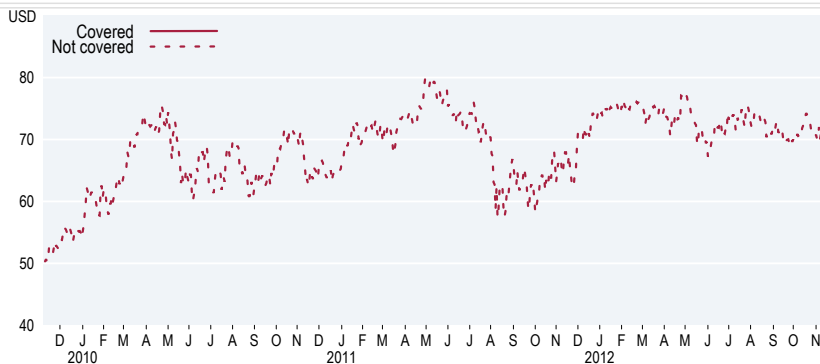
Rating/target price changes above reflect Eastern Standard Time

#### Boeing Co. (BA)

##### Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Jason Gursky

Covered since July 15 2010



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Data current as of 4 Oct 2012

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