20 April 2012 | 54 pages

The Itinerary: Citi's Global A&D Weekly

I Can't Go Back to Coach, But I Might Have to; Bizjets Still Broken

- Industry Overview
- Weekly

- **In Focus: Bizjet Market's Still Stuck in Coach** — The vaunted bizjet market recovery has yet to show its face in full-force, as recent earnings reports from TXT and COL told of some improved atmospherics on the demand front, but highlighted our concerns of an over-capacitized SMID-cabin industry (deliveries still 50-60% off the peak) that is encountering pricing pressure & high demand elasticity from customers. Meanwhile, we highlight the disconnect forming in the commonly held perception (perhaps, *mis*perception) that corporate earnings foretell bizjet deliveries. To us, the low end of the bizjet market today resembles the PC industry of the early 1990s and 2000s which saw its profitability levels permanently impaired when faced with similar market dynamics. While that period opened up PCs to an entire new class of users, it's unlikely that everyone gets their own bizjet this time around. And with deliveries unlikely to reach prior peaks, we're all still stuck in coach. *Page 3*

- **The Week Ahead** — A busy US earnings week features aero distributor BEAV, engine-maker UTX (Neutral, covered by Deane Dray), and our Buy-rated A&D names: Boeing, General Dynamics, Northrop Grumman, Lockheed Martin, and Raytheon. On Thursday, Buy-rated Cobham and Neutral-rated Meggitt host their AGMs and issue interim management statements. We could also see a contract for LHA 7 next week (benefits HII), which the Navy has expected to award by the end of April. Also Thursday, the House Armed Services Committee begins marking up the FY13 budget. *Page 7*

- **The Week That Was** — Jason Gursky previewed US 1Q12 A&D earnings season, and commented on Neutral-rated Textron and Rockwell Collins earnings, while Stephen Trent wrote on Embraer's neutral 1Q12 jet delivery report. Jason Gursky also commented on the impacts of last weekend's tornados in Wichita. *Page 9*

- **Core Global A&D Recommendations** — We like Boeing, EADS, and Bombardier as commercial aero OEs; Precision Castparts as a commercial supplier; Rolls Royce as an engine-maker; and Raytheon and Lockheed Martin as defense primes. *Page 15*

- **The Global A&D Weekly** — Our weekly publication covering the Aerospace & Defense (A&D) industry draws insights and analysis from our global A&D team covering North America, Europe, and Latin America. Inside this report you will find: 1) a weekly focus item; 2) our global investment thesis; 3) summary of our global coverage universe; 4) company one-pagers; 5) important industry data points and trends; and 6) forward calendars highlighting important industry dates and upcoming Citi-sponsored events.

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

On the Itinerary

Focus: Bizjets Still a Bit Broken

The broad bizjet recovery still refuses to show itself, likely a function of the fact that SMID-cabins have turned into more of a spot market business, while new entrants and over-capacitization continue to weight on pricing.

The stubbornly shy business jet recovery continues to elude industry as used inventories exert pressure on pricing and as production capacity (especially among the small cabins) appears to be on the verge of some right-sizing as Hawker Beechcraft explores its options amidst financial stress. We remind investors that Honeywell's 2010 forecast called for a "rather robust recovery starting in 2012," only to revise the outlook a year later to "weak but positive growth starting in 2012." With 1Q12 behind us, prognostications look to be finally proving true with some mild pick-up this year. However, OEs are still talking about pricing pressures, realizing disappointing margins, and the industry (at least for the small cabins) has become particularly turns-based. As far as we're concerned, recent earnings reports from Neutral-rated Textron (TXT) and Neutral-rated Rockwell Collins (COL) affirm the view that we're still *Waiting for Godot* when it comes to a broad-based business jet recovery.

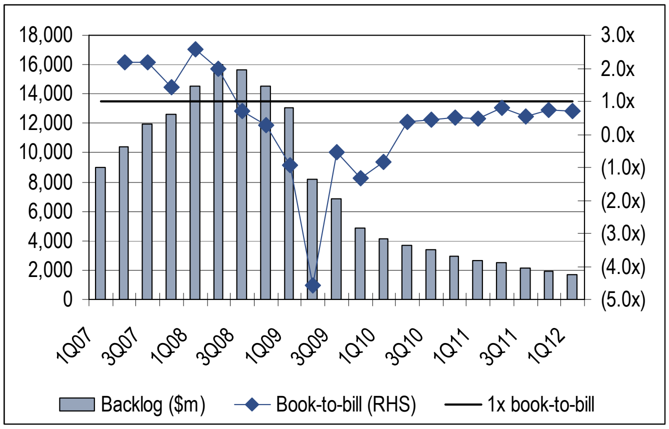
The New Spot Market

It's a tale of two cities when it comes to orders as the market is split by cabin size. Larger jets (especially new platforms) are enjoying robust order activity among the super-wealthy whose demand curve is relatively inelastic. We covered this point in last November's *Itinerary* (The Bigger the Better). Consider the strong backlog for Buy-rated General Dynamics' (GD) G650, a large-cabin bizjet getting ready to begin delivering to customers mid-year and enjoying a backlog stretching until 2016.

At the other end of the spectrum, we're seeing small-cabin bizjets becoming a largely spot/turns-based market. Cessna (part of TXT) recently reported its lowest backlog ever ($1.7b), representing sequential erosion of 10% and a 0.72x book-to-bill. TXT says order activity is picking up, with the Cessna booking more orders in 1Q12 than in 1-3Q11 combined, but we'd point out that it's a pretty low hurdle to clear. With the new turns-based market looking to be more of the rule than the exception, we do not expect SMID-cabin bizjet makers to be able to say with much certainty or be able to provide much leeway when they expect to increase production rates.

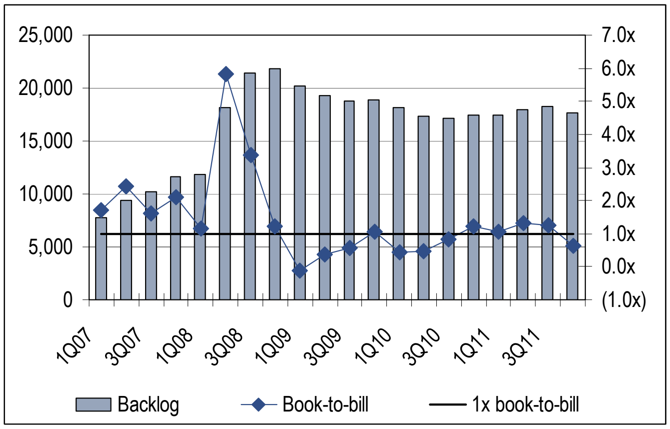
This phenomenon is clearly demonstrated in the trailing four years of backlog and book-to-bill data for Cessna and Gulfstream, with Cessna currently 90% of its peak backlog vs. Gulfstream's 19%. We note that Cessna's backlog has been fallen every quarter since the peak partly due to restructuring and right-sizing.

Figure 1. Cessna Since 1Q07



Source: Company reports, Citi Investment Research and Analysis

Figure 2. Gulfstream Since 1Q07



Source: Company reports, Citi Investment Research and Analysis

Excess Production Capacity

Industry deliveries are down 47% since the 2008 peak, but only one company has left market. For that reason, we believe the industry is running at only ~53% utilization (closer to 47% at the low end of the market) and it's unlikely for deliveries to re-test the peaks anytime soon.

By our count, Eclipse is the only bizjet producer to have left the market since deliveries peaked in 2008 at 1,315. Highlighting the speed of the financial crisis, Eclipse delivered 161 aircraft that year (64% growth y/y) before declaring bankruptcy in November 2008. Since then, we have mostly seen bizjet makers restructure and right-size, which in our view has continued to leave too much capacity in the small-cabin market, especially with a new market entrant (Embraer). We note that industry deliveries are 47% off their peak, while tooled capacity largely remains and is only increasing with new market entrants (Figure 4).

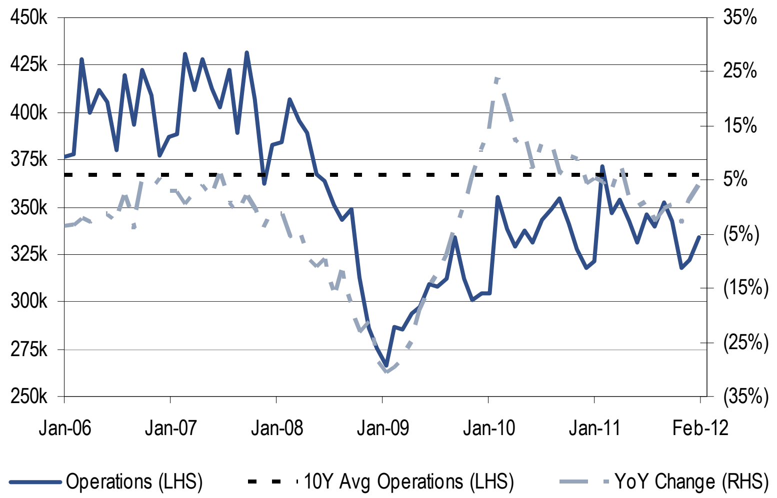
That trend might be getting ready to change as Hawker Beechcraft finds itself in dire straits. Among the small-cabin OEs, Hawker was the only one to see its deliveries fall in 2011 to 12 (vs. 23 in 2010 vs. 95 in 2007). Indeed, it appears as if some capacity is getting ready to exit the market, although this all depends on what strategic direction Hawker goes in. We note that Hawker's financial situation has thus far caused it to reduce its production expectations for the year (thus impacting Rockwell Collins' sales guidance for FY12). We also note that Textron has commented that certain parts of Hawker's portfolio could be interesting, although we'd doubt that they'd buy the commercial business since there is considerable overlap between the two portfolios. Cessna could theoretically be more interested in Hawker's relatively robust military trainer business, although it too is suffering from new competition posed by Embraer.

Utilization & Aftermarket

Despite the soft order and production environment, aftermarket demand persists among business jet owners looking to upgrade recent purchases, or spruce up old jets they're readying for re-sale. Utilization is still growing (although behind last year's pace), driving non-discretionary aftermarket demand as well. In 1Q12, Cessna reported 18% y/y aftermarket growth vs. 9% growth in 2011. COL has seen 7.6% aftermarket growth FYTD, and expects it to accelerate through the rest of the company's fiscal year (ends September) on the way to realizing low double-digit growth in FY12.

The most recent FAA data that bizjet operations are still fragile as 2010 comps made it tough to show y/y growth in 2011. There are some green shoots, as February saw 4% y/y growth in operations (vs. December 2011 which saw a 3% decline).

Figure 3. Business Jet Operations



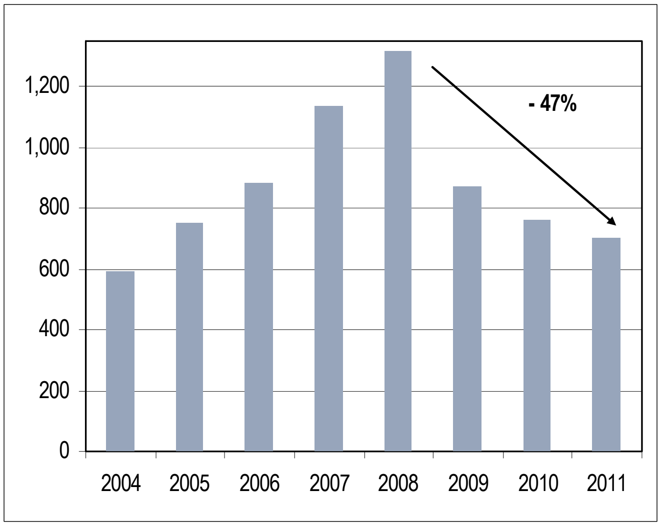
Source: FAA

Deliveries

In 2011, small cabin deliveries rebounded off all-time lows, while medium cabins continued to plod along the bottom. Meanwhile, large cabins were ~flat due to Dassault's weakness but are in striking distance of 2008's peak.

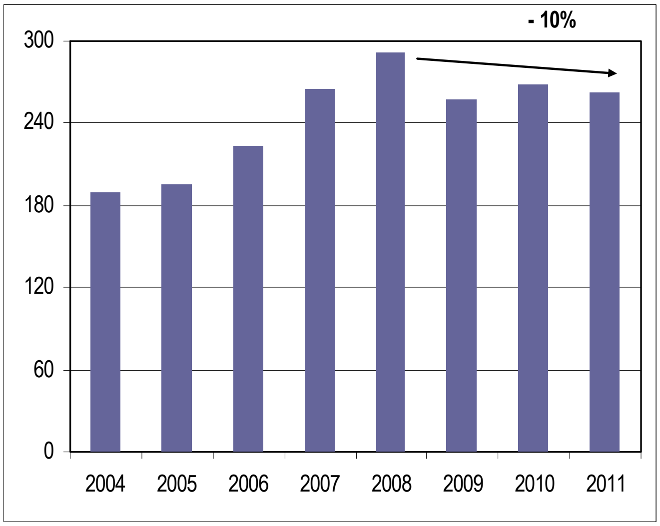
Small cabin deliveries grew 29% in 2011, turning in their most robust growth since 1997, as the market segment rebounded off its worst delivery year since 1996. Higher vale medium jets were up 1%, while the large cabins fell 2% solely due to Dassault's 34% drop (Bombardier, Embraer, and Gulfstream were up 10%, 18%, and 20%, respectively). On the whole, industry deliveries were down 8% in 2011 to 703, or 47% off the 2008 peak. Meanwhile, small cabins are 53% off their peak, mediums 61% off theirs, and larges only 10% off theirs. This supports our view that the industry continues to be over-capacitized considering the fact that we're unlikely to re-test prior peak deliveries anytime soon.

Figure 4. Industry Deliveries



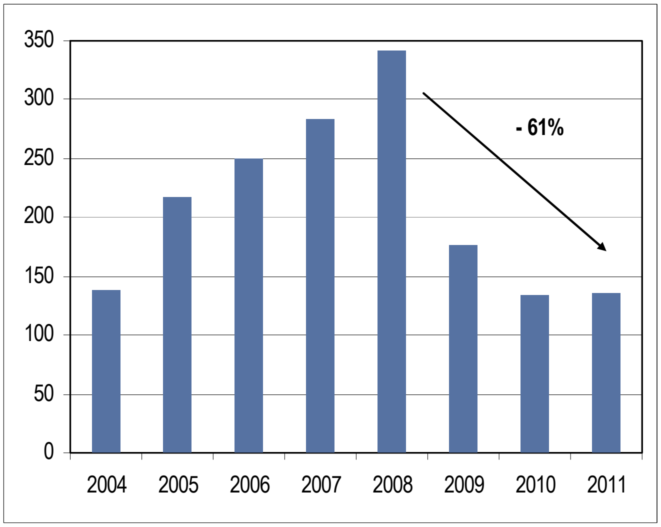
Source: GAMA

Figure 5. Large Cabin Deliveries



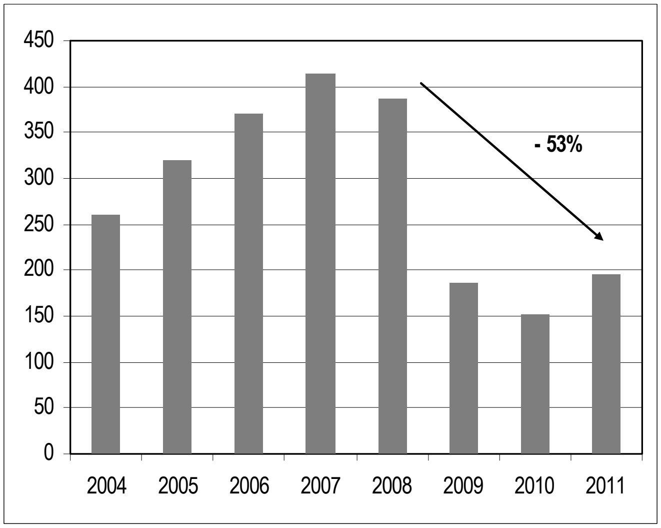
Source: GAMA

Figure 6. Medium Cabin Deliveries



Source: GAMA

Figure 7. Small Cabin Deliveries



Source: GAMA

The Delivery Disconnect

The market might be myopic in its focus on corporate profitability as the best predictor of business jet deliveries, since the correlation erodes for more recent periods. Indeed, the last 5 years of data points have been dispersed across both sides of the long-term trend line, and we do not necessarily expect the market to return to trend particularly soon.

There was a time when corporate profitability was considered the best indicator of business jet deliveries. True enough, there is a 71% correlation between deliveries and S&P 500 EPS since the 1960s. However, past performance is not necessarily a predictor of future results, as we've seen the market break the rules several times over the last 5 years. Specifically, the delivery spike in 2008 was far above where the long-run regression line would have predicted, while 2010 and 2011 underperformed the historic average. We would argue that the market is unlikely to snap back as quickly to the long-term trend this time around because corporates are generating earnings partly by reducing spending on things like business jets. For this reason, we would not be surprised if 2012 bucks the trend-line again (Figure 8). In fact, the correlation comes down to 59% if you only look at the data since 1990, and there is no correlation in the data taken since 2000.

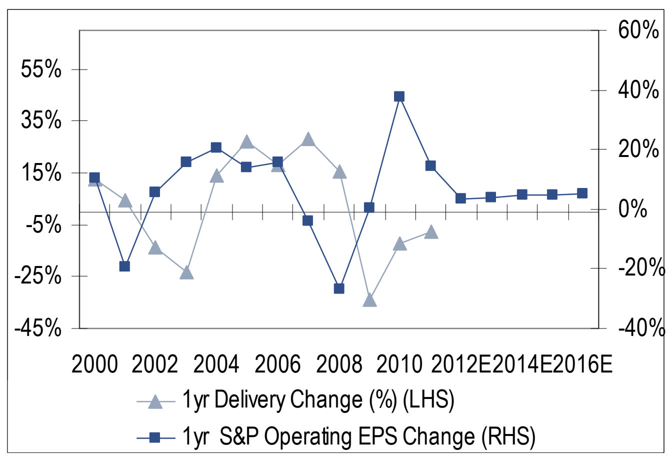
We also consider the pattern that delivery growth has typically lagged earnings growth by a year (Figure 9). Once again, we see a disconnect forming in that strong earnings growth in 2010 did not lead to a delivery increase. And with Citi expecting relatively modest S&P 500 earnings growth through 2016 (5% CAGR), industry deliveries are unlikely to snap back particularly soon.

Overall, we do not believe that corporate profitability is the best predictor of business jet deliveries in a market that is still dealing with a used inventory overhang, pressured pricing, over-capacitization issues, and new entrants.

Figure 8. Deliveries vs. EPS (1963-2011)

Source: Citi Investment Research and Analysis

Figure 9. Earnings Growth vs. Delivery Growth



Source: Citi Investment Research and Analysis

The Weeks Ahead & Upcoming Citi Events

Figure 10. Week Ahead

Date	Time	Event	Commentary	Ticker(s)
23-Apr-12	9:00 AM ET	B/E Aerospace earnings call	Not covered by Citi	BEAV
24-Apr-12	8:00 AM ET	UTX 1Q12 earnings call	Neutral-rated, covered by Deane Dray	UTX
25-Apr-12	9:00 AM ET	GD 1Q12 earnings call	Buy-rated General Dynamics. See preview below.	GD
25-Apr-12	10:30 AM ET	BA 1Q12 earnings call	Buy-rated Boeing See preview below.	BA
25-Apr-12	11:30 AM ET	NOC 1Q12 earnings call	Buy-rated Northrop Grumman. See preview below.	NOC
26-Apr-12	-	Cobham AGM & 1Q12 IMS		COB
26-Apr-12	-	Meggitt Agm & 2Q12 IMS		MGGT
26-Apr-12	9:00 AM ET	RTN 1Q12 earnings call	Buy-rated Raytheon. See preview below.	RTN
26-Apr-12	3:00 PM ET	LMT 1Q12 earnings call	Buy-rated Lockheed Martin. See preview below.	LMT

Source: Citi Investment Research and Analysis. NB (UTX.N; US$80.40; 2)

Jetting Into the Quarter: 1Q12 A&D Preview - Aero Gaining Steam, Defense is Steady as Sequester Looms

Figure 11. Month Ahead

Monday	Tuesday	Wednesday	Thursday	Friday
Apr 23	**Apr 24**	**Apr 25**	**Apr 26**	**Apr 27**
BEAV earnings Expect LHA 7 contract this week (for HII)	UTX earnings	BA, GD, NOC earnings	LMT, RTN, LLL earnings Cobham AGM & 1Q12 IMS Meggitt AGM & 2Q12 IMS	
Apr 30	**May 01**	**May 02**	**May 03**	**May 04**
BA Annual General Meeting	DGI earnings		ATK earnings	Rolls Royce IMS
May 07	**May 08**	**May 09**	**May 10**	**May 11**
	Wells Fargo Industrial & Construction Conf	HII earnings		Rheinmetall 1Q12 results
May 14	**May 15**	**May 16**	**May 17**	**May 18**
Boeing Investor Conference (St. Louis) EBACE: European Bizjet Show	Boeing Investor Conference (St. Louis) DGI @ JPM Conference	EADS 1Q12 Results GEOY @ JPM Conference	PCP earnings RBC A&D Conference	

Source: Companies, Industry Sources, Citi Investment Research and Analysis

Figure 12. Citi-Sponsored Events (please contact your salesperson for more info)

Date	Description	Location	Companies
June 22, 2012	Newport News facility visit	Virginia, US	HII
July 9 - 13, 2012	Farnborough Air Show	UK	Boeing, Bmbd, BAE & more
2H12	Primus facility visit	Seattle, US	Precision Castparts
2H12	RTN mgmt meetings & facility tour	Boston, US	Raytheon
Sep 19 - 20, 2012	Citi Global Industrials Conference	Boston, US	TBD

Source: Citi Investment Research and Analysis

The Week in Review

- **Tornados** in the Midwest US last weekend damaged the aerospace supply chain, most notably Spirit AeroSystems, a major supplier on Boeing's commercial platforms. Jason Gursky commented on the expected impacts of the tornados (see links below), and the company (SPR) intends on bringing its workforce back on April 23. We expect commercial aero companies to have a tough time raising guidance for the year during the coming earnings seasons considering the unknown impacts of this production snag. However, in our view, the SPR shutdown does not impact our underlying belief in the coming aerospace production ramp and our view that investors should own OE-exposed companies going into this ramp.

Recent Publications

We provide quick access to recent research from Citi's global A&D team.

- Jason Gursky previewed 1Q12 US A&D earnings
  - Jetting Into the Quarter: 1Q12 A&D Preview - Aero Gaining Steam, Defense is Steady as Sequester Looms
- Jason Gursky commented on the Wichita tornados:
  - Boeing Co. (BA) - Wichita Tornados Temporarily Set Back Aero Suppliers
  - Boeing Co. (BA) - Wichita Update
- Jason Gursky commented on US earnings:
  - Textron Inc. (TXT) - A Saved by the Bell Rerun, but Cessna's Still Clipped
  - Rockwell Collins, Inc. (COL) - Wingless Hawk Preys on Sales; Maintain Neutral
- Stephen Trent commented on Embraer deliveries
  - Embraer (ERJ) - 1Q12 Jet Deliveries Rise Y-O-Y, But Below Our Bullish Forecast. Backlog Softens

Commercial Aero Order/Delivery Tracker

451 of the 1,100+ MAX commitments are included in Boeing's order tally (150 from launch customer Southwest, 100 from Norwegian Air, 201 from Lion Air).

Figure 13. Monthly Gross Orders

Month	Boeing Total	Airbus Total	Industry Total
Jan-11	34	32	66
Feb-11	21	8	29
Mar-11	98	29	127
Apr-11	2	100	102
May-11	27	7	34
Jun-11	48	601	649
Jul-11	115	15	130
Aug-11	127	234	361
Sep-11	59	23	82
Oct-11	7	193	200
Nov-11	96	149	245
Dec-11	287	217	504
Jan-12	150	91	241
Feb-12	237	6	243
Mar-12	53	3	56
Apr-12	4	11	15
2011	**921**	**1,608**	**2,529**
2012	**444**	**111**	**555**

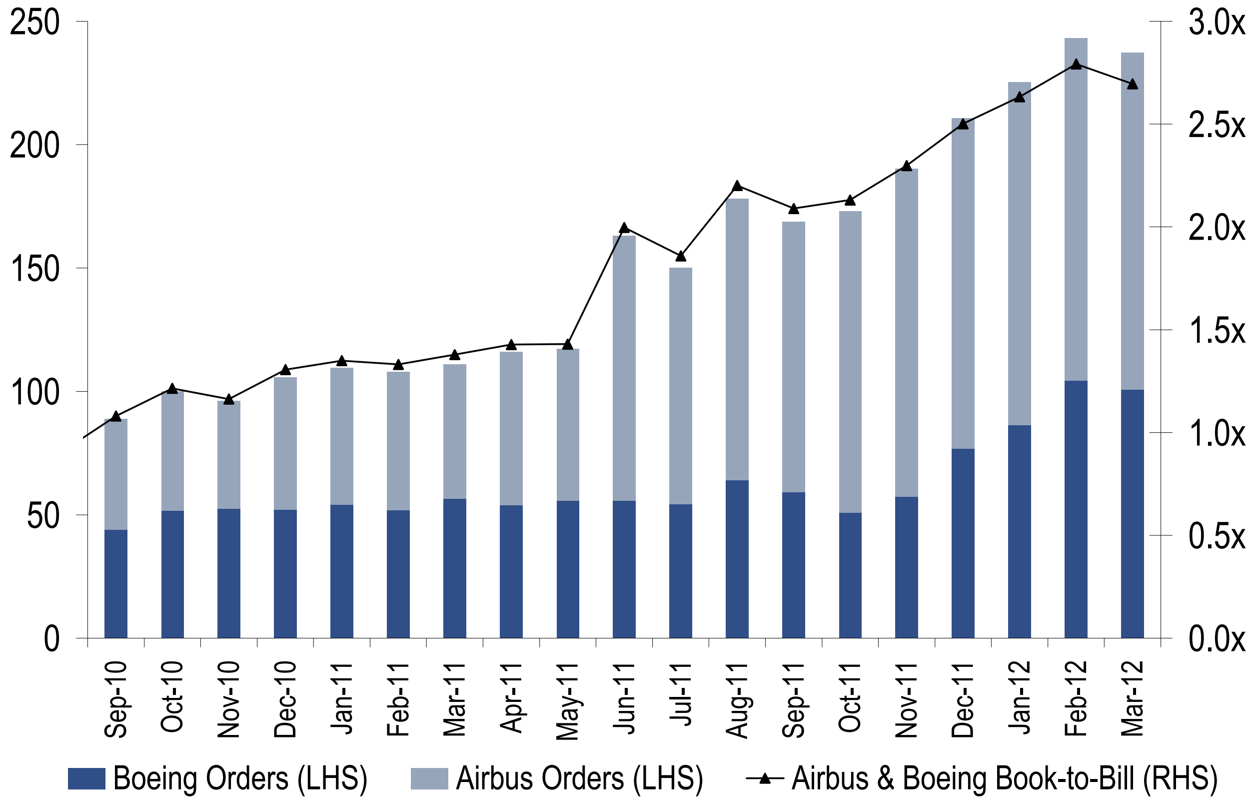
Source: CIRA, Boeing, Airbus, Ascend

Figure 14. Monthly Deliveries

Month	Boeing Total	Airbus Total	Industry Total
Jan-11	26	33	**59**
Feb-11	35	40	**75**
Mar-11	43	46	**89**
Apr-11	37	48	**85**
May-11	39	50	**89**
Jun-11	42	41	**83**
Jul-11	38	40	**78**
Aug-11	48	36	**84**
Sep-11	41	40	**81**
Oct-11	38	44	**82**
Nov-11	39	59	**98**
Dec-11	51	57	**108**
Jan-12	38	37	**75**
Feb-12	46	47	**93**
Mar-12	53	47	**100**
Apr-12	26	23	**49**
2011	**477**	**534**	**1,011**
2012	**163**	**154**	**317**

Source: CIRA, Boeing, Airbus, Ascend

Figure 15. Rolling 12m Avg. Gross Orders & Book-to-Bill



Source: Citi Investment Research and Analysis, Boeing, Airbus

DoD Contracts Tracker

Announced DoD contract awards are decent indicators of backlog directionality, although the numbers will never match perfectly.

LMT received a $260m contract, adding two F-35s to LRIP V which is still being finalized.

Below we review announced DoD contract values for our North American defense companies under coverage.

Figure 16. Weekly US DoD Orders ($m)

Date	BA	GD	LMT	RTN	Total
19-Apr-12	9		61		**71**
17-Apr-12		110			**110**
13-Apr-12			311	100	**411**
Total	**9**	**110**	**372**	**100**	**592**

Source: Citi Investment Research and Analysis, DoD

Figure 17. Quarterly Contract Values ($m)

Quarter	BA	COL	GD	LMT	NOC	RTN	TXT	HII	Total
1Q10	1,437	40	1,426	3,020	745	2,277		163	**9,107**
2Q10	2,901	60	2,688	9,376	1,796	1,897		693	**19,411**
3Q10	18,665	279	1,173	13,852	8,450	4,280	12	122	**46,834**
4Q10	1,941	95	1,443	9,907	1,179	1,105	335	939	**16,945**
1Q11	10,541	8	1,110	4,645	400	1,049	3,745	320	**21,817**
2Q11	3,840	13	1,362	4,920	1,502	1,752	375	2,314	**16,080**
3Q11	3,903	212	4,857	3,932	1,883	2,571	804	1,861	**20,022**
4Q11	17,876	102	1,603	16,482	1,675	3,350	477	478	**42,044**
1Q12	18,549	90	1,557	4,192	2,581	1,761	1,476	564	**30,771**
2Q12	**159**	**14**	**323**	**2,048**	**95**	**168**	**94**	**60**	**2,961**
q/q									
1Q11	443%	(92%)	(23%)	(53%)	(66%)	(5%)	nm	(66%)	**29%**
2Q11	(64%)	77%	23%	6%	275%	67%	(90%)	622%	**(26%)**
3Q11	2%	1,467%	257%	(20%)	25%	47%	114%	(20%)	**25%**
4Q11	358%	(52%)	(67%)	319%	(11%)	30%	(41%)	(74%)	**110%**
1Q12	4%	(12%)	(3%)	(75%)	54%	(47%)	210%	18%	**(27%)**
y/y									
1Q11	(87%)	(99%)	(94%)	(94%)	(98%)	(95%)	nm	(96%)	**(90%)**
2Q11	32%	(78%)	(49%)	(48%)	(16%)	(8%)	nm	234%	**(17%)**
3Q11	(79%)	(24%)	314%	(72%)	(78%)	(40%)	nm	1,429%	**(57%)**
4Q11	821%	7%	11%	66%	42%	203%	42%	(49%)	**148%**
1Q12	76%	1,080%	40%	(10%)	545%	68%	(61%)	76%	**41%**

Source: Citi Investment Research and Analysis, DoD

4Q11's y/y growth is primarily driven by several large aero items including a C-17 support contract to Boeing worth up to $11.75b, $4b to LMT for F-35 LRIP V, $1.4b to BA for P-8s, and $1b to LMT for F-22 upgrades.

Representing either new agreements or exercised options on old agreements, contract announcements are typically added to backlog (not recorded as sales). Contract award data does not match up perfectly with backlog since companies sell to non-DoD customers and via different processes. But, announced contracts can offer some insight into backlog trends. Commercially focused companies and/or component providers (such as COL and TXT) are not likely to screen as well as the primes, and contract awards can sometimes be quite lumpy (especially true for HII and GD shipbuilding businesses).

Where Are We in A&D?

Let's quickly catch up on where we are in Global A&D.

Where are we in civil aerospace?

Figure 18. Aero Recovery Cycle

	Early Cycle	Mid Cycle	Late Cycle
AMS	X		
Comm OE		**X**	
Bizjet OE			X

Source: Citi Investment Research and Analysis

Airlines continue to look profitable amidst careful capacity management and resilient demand despite economic uncertainty. Moving forward, we expect NEO orders to slow over the next few months (having garnered over 1,200 orders to-date), and 737 MAX commitments (1,100+) continue to flip to firm orders (451 from Southwest, Norwegian, and Lion Air are the only ones in the book). In our view, strong demand for the NEO and MAX is driven by customer desire for more efficient aircraft.

In our view, the aerospace recovery cycle is entering the second phase where we typically see OE production rates increase. Meanwhile, regional and bizjets are following the more traditional path of an aftermarket-led recovery with still limited visibility into production rate increases.

Where are we in defense?

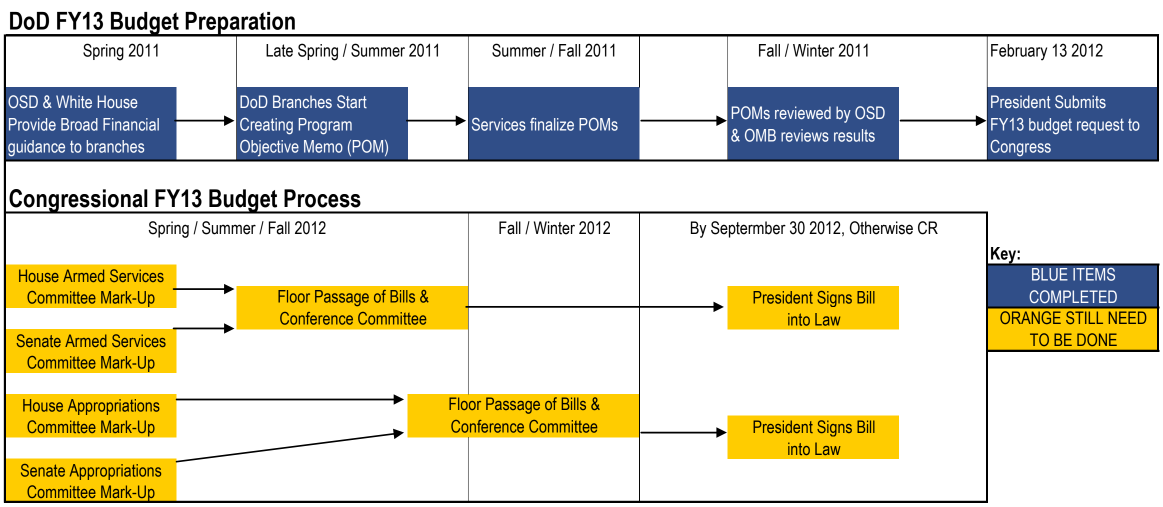
US Congressional committees will mark up the FY13 budget over the coming months, while the entire Congress will work on avoiding sequestration.

The FY12 DoD base budget finished up at $531b (+ $116b OCO) vs. $553b base request ($118b OCO request). The FY13 base request was for ~$525b and ignored sequestration. The Republicans are proposing to add to the FY13 budget.

In our view, US defense budgets are the primary driver of the global defense market, with the US making up ~50% of world military expenditures. However, this does not imply that as US defense spending goes, so does the market. Global security can be a zero-sum game, so as the US ramps down, foreign buyers typically ramp up (particularly in unstable regions).

We expect Congress to debate through most of 2012 how to avoid the sequestration mechanism tripped when the Super Committee failed in late November. The FY13 budget was introduced on February 13 and proposed a $525b base budget for FY13 + $88b OCO. The budget proposal ignores sequestration and reflects only Tranche 1 of the debt deal despite the Super Committee having failed in late November. We remind investors that automatic spending cuts under sequestration would not go into effect until January 2013. Consensus is that Congress doesn't do anything to disarm the trigger until after the election. The House Armed Services Committee (HASC) is schedule to begin marking up the FY13 proposal on April 26.

Figure 19. Defense Budget Cycle Snapshot



Source: DoD, Citi Investment Research and Analysis

Global Investment Thesis

Key Investment Points

We are constructive on commercial aerospace industry fundamentals given announced OE production rate increases, airline capacity growth, and accelerating demand for aftermarket services. We are also constructive on certain defense stocks given the disconnect between valuations and likely spending outcomes.

Production rate increases of roughly 40% and continued order demand affords a high degree of visibility.

- **High Commercial OE Visibility** – Boeing and Airbus plan to increase production rates by roughly 40% over the next several years and both companies are essentially sold out through 2015. Furthermore, book-to-bill ratios remain well above 1 as airlines continue to look to replace older, less efficient planes. In our view, this affords investors a good deal of revenue visibility in the near-to-medium-term. That said, we rate **Boeing and EADS** as Buys given high revenue visibility, improving cash flow dynamics, and (for Boeing) low consensus expectations for the company's defense business. We also like **PCP, WAIR, and RR** at this point in the cycle as they're well positioned to take advantage of OE production rate increases. At the lower end of the commercial aerospace market, we are less constructive considering increasing competition and our view that global demand for sub-100 seat planes is less robust. We consider **Bombardier** better positioned than **Embraer**.

Aftermarket growth may be softening in the face of economic uncertainty and airlines' capacity discipline; however, some companies are more resilient than others.

- **Resilient Aftermarket Growth** – We expect aftermarket growth to be resilient in 2012 for several companies (platform specific) as airline capacity grows modestly, maintenance work deferred during the recent recession is completed, and the bow-wave of planes produced during the 2005/6 timeframe begin to undergo normalized major maintenance work. By our estimate, this should lead to improving profitability for aftermarket suppliers given the high incremental margin levels of this type of work. In our view, these dynamics are not fully reflected in consensus estimates, and as such we are constructive on **Rolls-Royce** and **Safran**.

We prefer large cabin suppliers to those addressing the small/mid cabin market.

- **BizJets Still Waiting for Broad-based Recovery** – Demand for small and mid-sized jets remains tepid given the uncertain macro environment and the relatively high number of used planes available for sale. That said, demand for large cabin planes appears inelastic and growth is set to resume this year. As such, we rate **General Dynamics** and **Bombardier** as Buy and **Textron** as Neutral.

We are more selective on defense depending given specific end-market dynamics and valuation.

- **We See Defense Stocks Pricing in Too Much Bad News** – At current levels, defense stocks appear to be pricing in negative defense spending growth in perpetuity. This outlook is misplaced, in our view, given the persistent threat environment and the sticky nature of defense spending, particularly in the United States. We note that even the most draconian long-term budget proposals to date suggest flat nominal defense spending over the next 10 years (i.e. not dramatically negative). As such, we have Buy ratings on **GD, LMT, NOC** and **RTN** in the United States. In Europe, we are more selective with Buy ratings on **BAE** (yield and valuation) and **Cobham** (buybacks, restructuring, disposals), and a Sell rating on **Finmeccanica** (restructuring challenges, a stretched balance sheet, depressed end-market outlook).

Valuation

Commercial aerospace companies are trading in line with historical norms, by our measure, given the current timing of the cycle. As such, we do no expect any major changes in valuation levels and/or approaches to this group over the next 12 months.

Our work shows US defense companies are trading at a ~25-30% discount to the broader market (vs. the 25% discount at which we find they traded during historical periods of similar demand and industry structure). We also note that shares appear to be pricing in perpetual declines in defense spending. Given our less draconian view on defense budgets, we believe shares are likely to re-rate or at least hold to historic levels as investor concern about the future trajectory of defense spending abates. Our US defense prime price targets are based on pension-adjusted EPS which we consider the more normalized earnings stream due to a recent accounting change (for more, see FAS/CAS – Why You Should Care).

Key Risks

Key risks include the ability of suppliers to deliver on planned production rate increases and of OEMs on development programs, macro uncertainty, and greater than expected deceleration of defense spending growth. Defense spending is also at risk given budget sequestration which is set to go into effect in January 2013 (forced 10% y/y reduction).

Upcoming Catalysts

1. All eyes on the 787 production ramp
2. Bizjet order flows & whether it remains a spot market (at least for SMID cabins)
3. How does the US congress deal with the looming sequester
4. US Presidential Election (November)

Global Stock Selection & Discussion

In the tables below, we sum up our global stock selection. This includes a summary of our core recommendations (i.e. our favorite names), a breakdown of our global coverage, and how our estimates compare to consensus.

Figure 20. Core Global A&D Recommendations and Key Investment Points

Name	Rating	Current Price (Apr-19)	Target Price	ETR	Current FTM P/E	Target FTM P/E	Key Investment Points
Boeing	Buy	USD 73.10	USD 89	24%	15.2x	15.0x	- New planes to drive top-line growth, especially 747 & 787 - Robust backlog and production increases provide earnings visibility - Cash generation to improve over time with development projects winding down, although likely to be somewhat tempered by 737 MAX development
Bombardier	Buy	CAD 4.13	CAD 7.70	89%	8.3x	13.2x	- Growing large-cabin bizjet demand - Cseries activity posied to heat up - Growth in emerging market transportation supplementing the Franco-German backbone
EADS	Buy	EUR 30.85	EUR 34.50	14%	14.8x	11.5x	- EADS should become a "cash machine" as EBIT rises & investment plateaus - Attractive growth and margin expansion driven by production rate increases - Strong backlog represents ~7 years of production (including planned rate increases) - Good play on Citi EMARP theme w/ > 60% of backlog to the emerging markets
Lockheed Martin	Buy	USD 90.34	USD 108	24%	11.2x	10.4x	- F-35 program to survive and drive longer-term growth - Positive long-term drivers for missile defense - Robust FCF likely continues, supporting attractive dividends & repurchases
Precision Cast	Buy	USD 172.08	USD 199	16%	17.0x	17.0x	- Strong aerospace content on old & new platforms, with attractive 787 exposure - Set to take advantage of secular trend toward increased IGT (gas turbine) usage - Exposed to emerging mkts via Chengde ownership stake (China) and India demand
Raytheon	Buy	USD 52.53	USD 64	25%	10.0x	10.4x	- Significant international exposure (~25%) helps offset weak domestic demand - Positive long-term drivers for missile defense - Largely program agnostic buisness model reduces risk - Industry-leading margins
Rolls-Royce	Buy	GBP 8.44	GBP 8.70	5%	14.3x	13.6x	- Civil aftermarket recovery, rising OE deliveries - Targets to double sales organically every 10 years (7% CAGR) - Strong balance sheet (42p/sh avg net cash at 1H11) - Upside from Marine & Energy ($400bn+ market opportunity over 20 yrs, per RR)

Source: Citi Investment Research and Analysis, FactSet

Figure 21. Global Coverage Summary

Name	Ticker	Rating	Mkt Cap (USD $m)	Current Price (as of Apr-19)	Target Price	ETR
Buy						
BAE Systems	BA-LON	1	$15,086	GBP 2.91	GBP 3.40	23%
Boeing	BA	1	$55,123	USD 73.10	USD 89	24%
Bombardier	BBDb.TO	1	$5,940	CAD 4.13	CAD 7.70	89%
Chemring Group	CHG-LON	1	$1,176	GBP 3.70	GBP 5.19	44%
Cobham	COB-LON	1	$4,130	GBP 2.40	GBP 2.50	8%
EADS	EAD-FR	1	$33,175	EUR 30.85	EUR 34.50	14%
Embraer	ERJ	1	$6,377	USD 35.29	USD 32	(7%)
General Dynamics	GD	1	$25,009	USD 68.93	USD 88	30%
Huntington	HII	1	$1,910	USD 38.09	USD 46	21%
Lockheed Martin	LMT	1	$29,380	USD 90.34	USD 108	24%
Northrop Corp	NOC	1	$15,666	USD 61.02	USD 69	16%
Precision Cast	PCP	1	$25,128	USD 172.08	USD 199	16%
Raytheon	RTN	1	$17,990	USD 52.53	USD 64	25%
Rolls-Royce	RR-GB	1	$24,448	GBP 8.44	GBP 8.70	5%
Safran	SAF-PAR	1	$14,083	EUR 25.60	EUR 30	20%
Wesco Aircraft	WAIR	1H	$1,304	USD 15.18	USD 19.50	28%
Neutral						
DigitalGlobe	DGI	2	$575	USD 12.20	USD 14.75	21%
Meggitt	MGGT-LON	2	$5,061	GBP 4.07	GBP 4.00	1%
MTU Aero Engines	MTX-DE	2	$4,222	EUR 61.17	EUR 58	(3%)
QinetiQ	QQ-LON	2	$1,644	GBP 1.55	-	-
Rheinmetall	RHM-ETR	2	$2,299	EUR 43.38	-	-
Rockwell Collins	COL	2	$8,719	USD 55.85	USD 63	15%
Textron Inc	TXT	2	$7,457	USD 26.35	USD 27	3%
Thales	HO-PAR	2	$7,129	EUR 26.55	EUR 30	16%
Sell						
Finmeccanica	FNC-MIL	3	$2,600	EUR 3.32	EUR 2.60	(22%)

Source: Citi Investment Research and Analysis, FactSet

Figure 22. Revenue Estimates: CIRA vs. Consensus

	Citi Revenue Est. (m)			Consensus Revenue Est. (m)		
	2012	2013	2014	2012	2013	2014
BAE Systems	£19,840	£19,680	£19,570	£19,588	£19,844	£20,177
Boeing	$79,287	$86,191	$92,740	$79,043	$85,442	$90,701
Bombardier	$18,256	$19,008	$18,745	$19,220	$20,586	$21,449
Chemring Group	£820	£851	£897	£819	£844	£878
Cobham	£1,742	£1,769	£1,802	£1,729	£1,767	£1,765
DigitalGlobe	$363	$390	$441	$372	$406	$496
EADS	€ 54,470	€ 58,470	€ 63,890	€ 52,776	€ 55,463	€ 58,844
Embraer	$6,193	$6,520	$1,279	$6,201	$7,169	$7,990
Finmeccanica	€ 17,530	€ 17,550	-	€ 17,072	€ 17,338	€ 17,665
General Dynamics	$33,030	$33,504	$33,923	$33,177	$33,351	$33,701
Huntington	$6,557	$6,428	$6,348	$6,597	$6,581	$6,569
Lockheed Martin	$45,570	$45,968	$46,386	$45,623	$45,076	$44,786
Meggitt	£1,649	£1,759	£1,879	£1,639	£1,737	£1,848
MTU Aero Engines	€ 3,215	€ 3,438	€ 3,659	€ 3,199	€ 3,474	€ 3,755
Northrop Corp	$25,147	$25,089	$25,012	$25,073	$24,653	$24,338
Precision Cast	$7,184	$8,403	$9,469	$7,224	$8,341	$9,335
QinetiQ	£1,450	£1,421	£1,411	£1,471	£1,433	£1,465
Raytheon	$24,325	$24,439	$24,539	$24,512	$24,127	$23,850
Rheinmetall	€ 4,920	€ 5,070	€ 5,220	€ 4,899	€ 5,160	€ 5,261
Rockwell Collins	$4,834	$5,012	$5,207	$4,940	$5,179	$5,451
Rolls-Royce	£12,740	£13,600	£14,530	£13,098	£14,649	£15,754
Safran	€ 12,926	€ 13,837	€ 14,787	€ 13,106	€ 14,106	€ 15,289
Textron Inc	$12,601	$13,171	$13,674	$12,401	$13,098	$13,570
Thales	€ 13,970	€ 14,010	€ 14,050	€ 13,611	€ 13,766	€ 13,929
Wesco Aircraft	$787	$835	$907	$785	$891	$984

Green = at least 2% above consensus

Source: Citi Investment Research and Analysis Estimates, Thomson

Figure 23. EPS Estimates: CIRA vs. Consensus

	Citi EPS Est.			Consensus EPS Est.		
	2012	2013	2014	2012	2013	2014
BAE Systems	39.6p	39.3p	39.2p	40.2p	40.8p	41.9p
Boeing	$4.54	$5.77	$6.55	$4.46	$5.66	$6.53
Bombardier	$0.56	$0.58	$0.66	$0.47	$0.56	$0.64
Chemring Group	55.5p	56.6p	60.0p	56.1p	58.5p	61.4p
Cobham	22.4p	23.2p	24.0p	21.0p	22.0p	22.9p
DigitalGlobe	$0.33	$0.65	$1.01	$0.47	$0.87	$0.92
EADS	€ 2.19	€ 2.99	€ 4.00	€ 1.87	€ 2.55	€ 3.22
Embraer	$1.47	$2.43	$2.67	$2.46	$2.99	$3.54
Finmeccanica	€ 0.64	€ 0.72	-	€ 0.46	€ 0.66	€ 0.79
General Dynamics	$7.23	$7.69	$8.16	$7.32	$7.70	$8.29
Huntington	$3.05	$3.95	$4.95	$2.99	$3.94	$4.80
Lockheed Martin	$7.85	$9.09	$10.10	$7.88	$8.50	$9.44
Meggitt	35.6p	38.6p	42.2p	34.9p	37.9p	41.3p
MTU Aero Engines	€ 4.36	€ 4.67	€ 5.04	€ 4.28	€ 4.85	€ 5.41
Northrop Corp	$6.71	$7.54	$8.04	$6.57	$6.77	$6.99
Precision Cast	$8.37	$10.15	$11.68	$8.38	$10.04	$11.51
QinetiQ	17.7p	14.5p	14.5p	17.2p	14.6p	14.8p
Raytheon	$5.06	$5.97	$6.96	$5.06	$5.57	$6.08
Rheinmetall	€ 5.31	€ 5.97	€ 6.54	€ 5.40	€ 5.88	€ 6.29
Rockwell Collins	$4.42	$4.84	$5.42	$4.48	$5.03	$5.59
Rolls-Royce	59.5p	64.1p	68.4p	56.6p	62.4p	68.5p
Safran	€ 2.05	€ 2.41	€ 2.70	€ 2.02	€ 2.37	€ 2.70
Textron Inc	$1.98	$2.24	$2.50	$1.94	$2.30	$2.70
Thales	€ 3.04	€ 3.38	€ 3.73	€ 2.97	€ 3.37	€ 3.67
Wesco Aircraft	$1.07	$1.21	$1.36	$1.06	$1.26	$1.43

Red = at least 2% below consensus

Source: Citi Investment Research and Analysis Estimates, Thomson

Global Comp Table

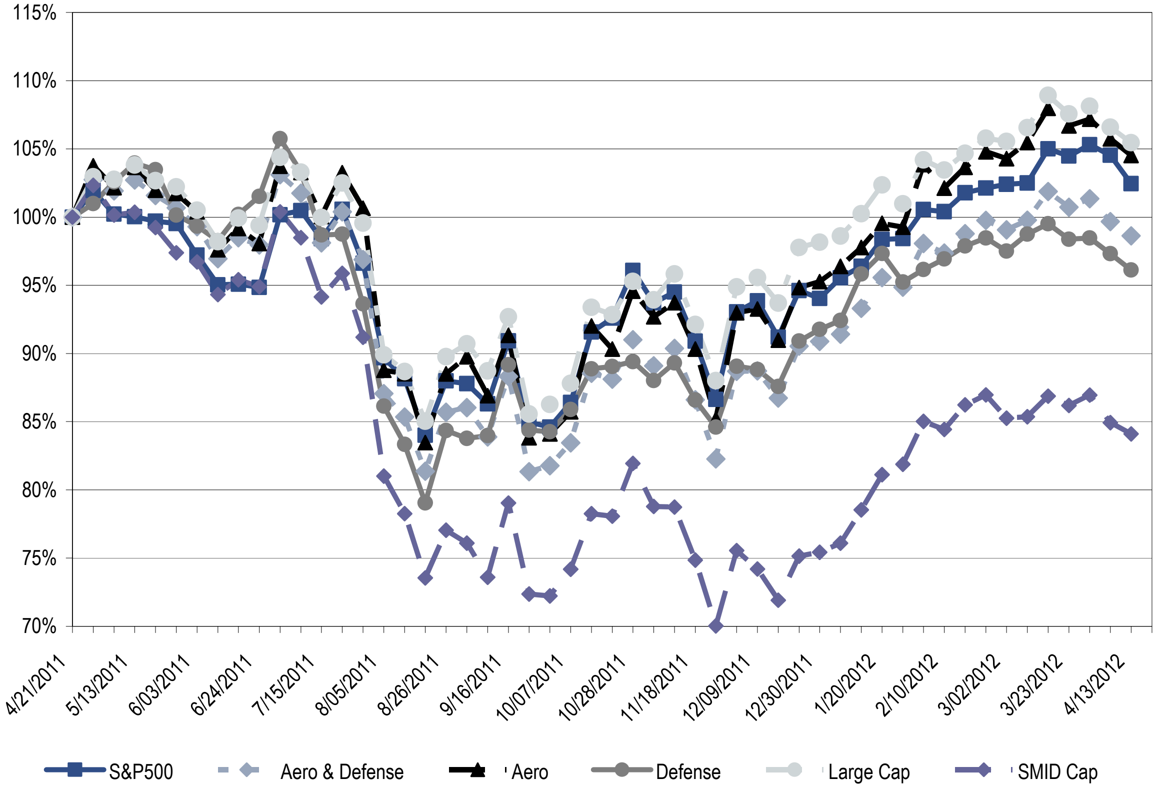
Figure 24. Global Comps

As of April 19, 2012	Company Data				Valuation Multiples			Price Performance		
	Citi Rating	Local Crncy	Market Cap (USD)	Dvd Yield (%)	FTM P/E	2012 P/E	EV/ EBITDA (LTM)	Price (Local)	LTM	52-Week Range (Local)
Large Cap										
BAE Systems PLC (BA-LON)	1	GBP	$15,086	6.5%	7.1x	7.2x	5.0x	2.91	(10%)	2.4 - 3.5
Boeing Co. (BA)	1	USD	$55,123	2.4%	15.2x	16.3x	7.7x	73.10	(3%)	56.0 - 80.7
EADS (EAD-FR)	1	EUR	$33,175	1.5%	14.8x	16.4x	8.7x	30.85	45%	19.1 - 31.4
General Dynamics Corp. (GD)	1	USD	$25,009	2.9%	9.3x	9.4x	6.1x	68.93	(5%)	54.0 - 75.9
Lockheed Martin Corp. (LMT)	1	USD	$29,380	4.4%	11.2x	11.5x	6.9x	90.34	16%	66.4 - 91.6
Northrop Grumman Corp. (NOC)	1	USD	$15,666	3.2%	9.2x	9.3x	4.7x	61.02	(1%)	49.2 - 70.6
Precision Castparts Corp. (PCP)	1	USD	$25,128	0.1%	17.0x	20.5x	13.3x	172.08	16%	136.0 - 179.5
Raytheon Co. (RTN)	1	USD	$17,990	3.8%	10.0x	10.4x	5.9x	52.53	8%	38.4 - 53.2
Rolls-Royce Holdings PLC (RR-GB)	1	GBP	$24,448	-	14.3x	14.8x	10.6x	8.44	35%	5.3 - 8.5
SAFRAN S.A. (SAF-PAR)	1	EUR	$14,083	2.4%	12.0x	12.7x	9.0x	25.60	5%	20.2 - 30.5
Average				**2.7%**	**12.0x**	**12.8x**	**7.8x**		**11%**	
Boeing + Airbus Average				1.9%	15.0x	16.4x	8.2x		21%	
Defense Average				4.2%	9.37x	9.5x	5.7x		1%	
Commercial Average				1.3%	14.7x	16.1x	9.9x		20%	
Note: S&P 500 currently trading at 12.7x FTM P/E										
SMID Cap										
Alliant Techsystems Inc. (ATK)		USD	$1,682	1.6%	7.6x	6.5x	4.4x	50.96	(26%)	48.0 - 76.2
AeroVironment Inc. (AVAV)		USD	$555	-	17.0x	18.8x	7.9x	24.55	(11%)	24.0 - 36.5
Bombardier Inc. Cl B (BBD.B-TSE)	1	CAD	$5,940	2.5%	8.3x	8.8x	5.6x	4.13	(39%)	3.3 - 7.3
Booz Allen & Hamilton Inc. (BAH)		USD	$2,160	2.1%	9.7x	10.8x	6.6x	17.05	(11%)	13.3 - 20.1
BE Aerospace Inc. (BEAV)		USD	$4,598	-	14.9x	15.9x	11.1x	44.20	18%	28.8 - 48.5
CACI International Inc. Cl A (CACI)		USD	$1,616	-	10.0x	10.4x	6.4x	60.86	2%	46.4 - 66.5
Chemring Group PLC (CHG-LON)	1	GBP	$1,176	3.9%	6.5x	6.7x	6.0x	3.70	(45%)	3.6 - 7.0
Cobham PLC (COB-LON)	1	GBP	$4,130	3.4%	11.1x	11.3x	5.4x	2.40	4%	1.6 - 2.4
DigitalGlobe Inc. (DGI)	2	USD	$575	-	19.7x	24.0x	5.9x	12.20	(57%)	11.7 - 29.4
Embraer S/A ADS (ERJ)	1	USD	$6,377	-	13.3x	14.0x	13.3x	35.29	9%	21.0 - 35.3
Exelis Inc. (XLS)		USD	$2,145	3.6%	6.4x	6.3x	3.1x	11.54	NA	8.3 - 13.5
Esterline Technologies Corp. (ESL)		USD	$2,113	-	11.9x	12.7x	10.6x	67.67	(3%)	47.5 - 82.3
Finmeccanica S.p.A. (FNC-MIL)	3	EUR	$2,600	12.0%	6.3x	7.0x	1.6x	3.32	(63%)	2.6 - 9.5
FLIR Systems Inc (FLIR)		USD	$3,677	1.2%	13.5x	14.1x	8.5x	23.42	(31%)	21.9 - 37.3
GeoEye Inc. (GEOY)		USD	$500	-	10.1x	10.1x	4.8x	22.37	(40%)	18.0 - 42.3
Harris Corp. (HRS)		USD	$5,080	3.0%	8.3x	8.5x	6.3x	44.21	(15%)	32.7 - 53.4
Huntington Ingalls Industries Inc. (HII)	1	USD	$1,910	-	11.5x	12.5x	4.8x	38.09	(5%)	22.6 - 41.6
Iridium Communications Inc. (IRDM)		USD	$637	-	10.7x	11.7x	5.3x	8.66	9%	5.5 - 9.5
L-3 Communications Holdings Inc. (LLL)		USD	$6,918	2.9%	8.1x	8.2x	5.7x	69.47	(10%)	58.3 - 88.6
Loral Space and Communications Inc. (LORL)		USD	$1,351	-	NA	NA	13.1x	62.44	(13%)	45.7 - 82.5
ManTech International Corp. Cl A (MANT)		USD	$752	2.6%	9.0x	9.0x	4.4x	31.45	(27%)	29.3 - 46.3
Meggitt PLC (MGGT-LON)	2	GBP	$5,061	2.6%	11.4x	11.8x	9.2x	4.07	16%	3.0 - 4.2
MTU Aero Engines Holding AG (MTX-DE)	2	EUR	$4,222	1.9%	13.7x	14.3x	7.8x	61.17	20%	40.0 - 63.1
Moog Inc. Cl A (MOG.A)		USD	$1,721	-	11.5x	12.2x	7.9x	40.69	(5%)	30.5 - 45.5
Orbital Sciences Corp. (ORB)		USD	$756	-	11.9x	12.3x	5.6x	12.52	(31%)	11.8 - 19.2
QinetiQ Group PLC (QQ-LON)	2	GBP	$1,644	1.6%	10.5x	8.8x	7.5x	1.55	27%	1.0 - 1.6
Rheinmetall AG (RHM-ETR)	2	EUR	$2,299	4.1%	7.8x	8.0x	4.4x	43.38	(26%)	30.0 - 64.7
Rockwell Collins Inc. (COL)	2	USD	$8,719	1.6%	11.7x	12.5x	9.3x	55.85	(12%)	43.8 - 64.9
SAIC Inc. (SAI)		USD	$4,127	4.0%	8.9x	8.9x	9.6x	12.05	(30%)	11.1 - 17.7
Spirit AeroSystems Holdings Inc. Cl A (SPR)		USD	$2,860	-	10.2x	10.8x	9.0x	23.77	(2%)	14.3 - 26.0
Thales S.A. (HO-PAR)	2	EUR	$7,129	2.9%	8.7x	9.1x	3.8x	26.55	(7%)	21.6 - 30.5
Triumph Group Inc. (TGI)		USD	$3,058	0.3%	11.4x	13.0x	7.8x	61.44	45%	39.8 - 66.8
Textron Inc. (TXT)	2	USD	$7,457	0.3%	12.8x	13.6x	8.9x	26.35	3%	14.7 - 29.2
Wesco Aircraft Holdings Inc. (WAIR)	1H	USD	$1,304	-	13.0x	14.3x	8.2x	15.18	NA	8.8 - 16.4
Average				**1.8%**	**10.8x**	**11.3x**	**7.0x**		**(11%)**	
Defense Average				2.5%	9.2x	9.4x	6.1x		(17%)	
Commercial Average				0.7%	11.9x	12.7x	9.2x		1%	

Source: Citi Investment research and Analysis and FactSet

Sector Performance

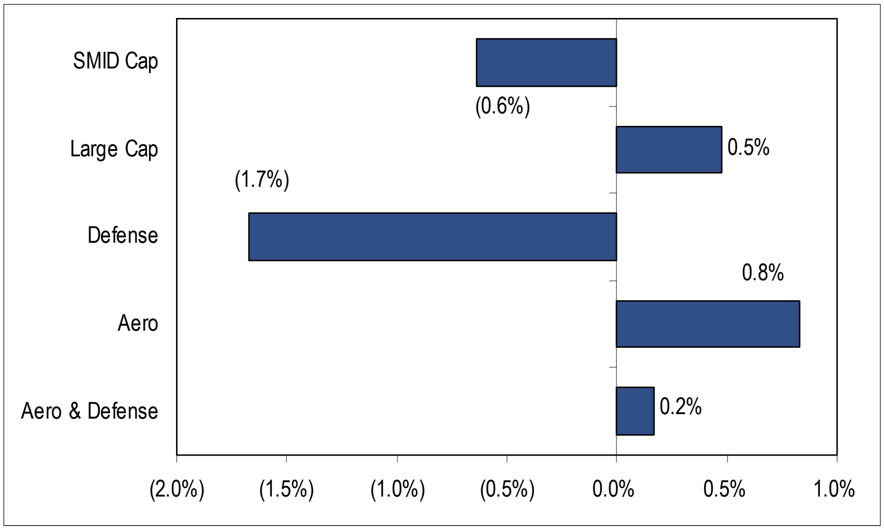
Figure 25. Global Stock Performance TTM



Source: Citi Investment Research and Analysis, FactSet
Aero includes: BA, EADS, PCP, RR, SAF, BBD, BEAV, ERJ, ESL, FLIR, MGGT, MOG.A, SPR, TGI, TXT
Defense includes: BAE, GD, LMT, NOC, RTN, COL, ATK, BAH, CACI, COB, DGI, FNC, GEOY, HRS, IRDM, L3, LORL, MANT, ORB, QQ, RHM, SAIC, HO

Defense has underperformed the trailing month as it has not participated as much in any risk-on trade.

Figure 26. Trailing Month Performance vs. S&P 500



Source: Citi Investment Research and Analysis, FactSet

Company One-Pagers

On the following pages we provide write-ups on each of the companies under CIRA coverage, including a discussion of key investment points, valuation, risks, and upcoming catalysts. They are presented in alphabetical order as follows:

BAE Systems

(BAES.L; £2.97; 1); Price Target = £3.40

Key Investment Points

- **Strong balance sheet and FCF** – Minimal net debt and strong FCF offer scope for EPS-enhancing acquisitions or equity buyback.
- **Discount to US peers incongruous** – BAE derives ~45% of its sales from the US (& less than 30% from the UK) yet trades at c20% 2012E P/E discount to US primes.
- **Key BAE programs safe** – Eurofighter & JSF are unlikely to be axed due to their strategic importance. BAE also benefits from Saudi Typhoon ramp-up & sizeable Tornados support activity.
- **Robust services portfolio** – c48% of sales from services (mainly readiness & sustainment) which is unlikely to be impacted by program cuts.
- **Attractive valuation** – BAE's current low P/E reflects investor concerns over growth. Stock offers attractive (& secure) DPS yield & DPS growth, in our view. Further potential buybacks will serve to make the annual dividend more secure by reducing closing share count.

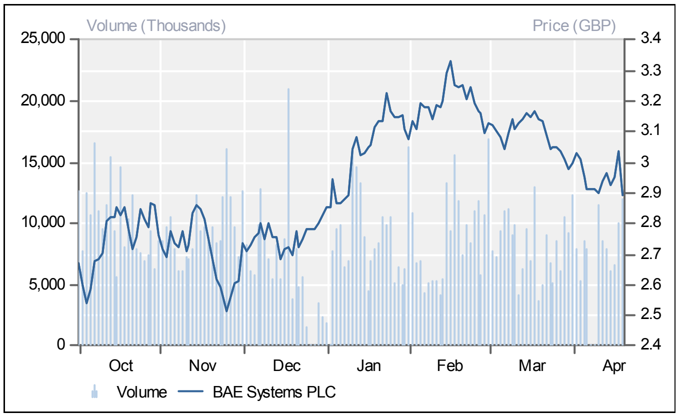
Key Risks

- **Challenging UK outlook** – The SDSR announced a number of major program cuts, but budgets still appear stretched and the MOD looks likely to endure a sustained period of austerity.
- **Middle East unrest** – Could slow BAE's Saudi business.
- **Acquisition risk** – BAE could be tempted to buy growth through acquisitions. We would prefer it to retire equity.

Valuation

Our DCF-derived 340p TP is based on conservative assumptions: WACC of 8.6%, 0% sales growth from 2012E & in the terminal period & a terminal margin assumption of 8% vs. c10% currently. Our DCF also assumes no buybacks (which could enhance balance sheet efficiency & reduce the share count). Our TP implies 8.7x 2013E P/E (vs. ~12x LT avg.) & 7.3x 2013E EV/EBIT (vs. 8.9x LT avg.).

Figure 27. Recent Stock Performance



Source: FactSet

Figure 28. CIRA vs. Consensus Estimates

£millions	2012E	2013E	2014E
Citi			
Revenue	£19,840	£19,680	£19,570
EPS	39.6p	39.3p	39.2p
Consensus			
Revenue	£19,588	£19,844	£20,177
EPS	40.2p	40.8p	41.9p

Source: Citi Investment Research and Analysis (basic eps), Thomson

Boeing

(BA.N; US$73.50; 1); PT = $89

Key Investment Points

- **The Year of Boeing** – We expect 2012 to be ‘the year of Boeing’, driven by several factors: a book-to-bill pushing 2x, execution on the 787 ramp, execution on free cash flow story, and international defense orders.
- **Improving revenue and earnings visibility** – Revenue visibility is improving for the near-to-medium term given plans to increase production rates by roughly 40% over the next several years. Earnings visibility, meanwhile, is also improving given the ramping production rate ramps and the wind-down of development costs associated with the 787 and 747-8.
- **Improving cash flow visibility** – We believe the wind-down of the 787 development program will release working capital and support robust free cash flow at least through 2013, although the 737 re-engining will somewhat temper any near-term "R&D holiday."
- **Defense opportunities** – Strong positions on military helos (Chinooks, Apaches) and in the international defense market set the defense unit up as an attractive, albeit slower growing, complement to the stronger commercial side.

Key Risks

- Intrinsically risky commercial aerospace industry subject to external shocks.
- Challenging production ramps, especially on 787.

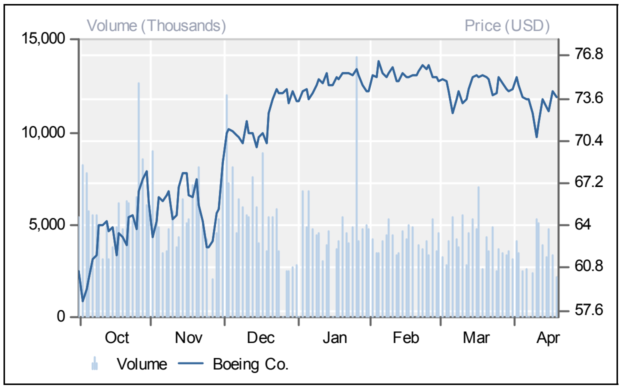
Valuation

Our target price uses a 15x multiple applied to our FTM EPS estimate one year from now. This valuation is roughly in line with what commercial aero has seen in anticipation of production increases.

Upcoming Catalysts

1) 787 ramp progress (ongoing); **2)** execution of the FCF story through continued positive cash generation; **3)** a decision on the future of the 777; **4)** More 737 MAX orders; **5)** Winning one or more major international competitions for fighter jets.

Figure 29. Recent Stock Performance



Source: FactSet

Figure 30. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$79,287	$86,191	$92,740
EPS	$4.54	$5.77	$6.55
Consensus			
Revenue	$79,043	$85,442	$90,701
EPS	$4.46	$5.66	$6.53

Source: Citi Investment Research and Analysis, Thomson

Bombardier

(BBDb.TO; C$4.03; 1); PT = C$7.70

Key Investment Points

- **Large cabin business jets main boost to aerospace** – Looking at the largest (highest margin, highest deposit requirement) segment of the global business jet market, we see Bombardier as well-positioned to capitalize on the ongoing rebound in wide-body business jet demand (particularly from customers in emerging Asia and the middle east). This area, (not commercial aerospace) actually reflects the "lion's share" of Bombardier aerospace's operating cash flow.

- **Now also time to watch the CSeries** – Bombardier had notched a CSeries firm from its 7th customer, while the program has also found a launch customer (on top of an LOI from Korean Air). As we move through the next two years, we see Bombardier capturing some share of the (ca. 110-140 seat) global commercial narrow-body market (specifically among that segment of the market not currently served by Airbus).

- **What about trains?** – We believe that Bombardier's (rolling stock, systems & signaling, etc.) transportation segment has been "great for business". Representing roughly one-third of consolidated EBITDA, we see Bombardier continuing to add new business to this segment, with a current (record) transportation backlog of US$34bn.

Key Risks

- **CRJs** – We see some risk that ongoing tepid CRJ demand could lead to a production cut (and at least some negative headline risk).

- **Retaliation by other OEMs** – Competitor "noise" regarding CSeries efficiency, or lack of market share, could have a negative impact on the stock.

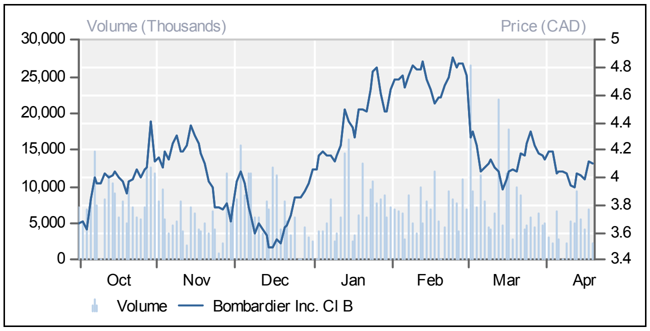
Valuation

We value Bombardier at a target price of C$7.70 using a blend of 6.0-7.0x forward EV/EBITDA (75% weight) and a 15-18x P/E (25%).

Upcoming Catalysts

Additional CSeries order wins, in addition to earnings surprises, could drive the stock higher. Conversely, any *new concerns* about Republic's ability/willingness to take delivery on its CSeries order could be negative.

Figure 31. Recent Stock Performance



Source: FactSet

Figure 32. CIRA vs. Consensus Estimates

$millions CAD	2012E	2013E	2014E
Citi			
Revenue	$18,256	$19,008	$18,745
EPS	$0.56	$0.58	$0.66
Consensus			
Revenue	$19,220	$20,586	$21,449
EPS	$0.47	$0.56	$0.64

Source: Citi Investment Research and Analysis, Thomson

Chemring

(CHG.L; £3.83; 1); PT = £5.19

Key Investment Points

Chemring is covered by Citi's UK SMID Analyst, Hugo Mills. He can be reached at hugo.mills@citi.com.

- **Strong growth profile** – Continued strong demand for counter IED products, sole provider of countermeasures for Typhoon and JSF, strong demand for munitions from non-NATO countries & a record order book underpin management target for 10-15% organic growth medium term. Chemring targets 40% group revenues from non-NATO in 5 years (vs. 25% now).
- **Acquisition potential** – Chemring's niche positioning and strong revenue growth profile could be attractive to the large defense primes faced with anemic growth outlook. Chemring's own track record with acquisitions is strong (19 acquisitions since 2006). Post equity placement, it will have £140-150m to spend on acquisitions which could be 8% EPS accretive if done at similar multiples as in the past
- Better than average growth prospects (10-15% organic growth medium term vs. low single digit growth for primes) are not adequately reflected in valuations.

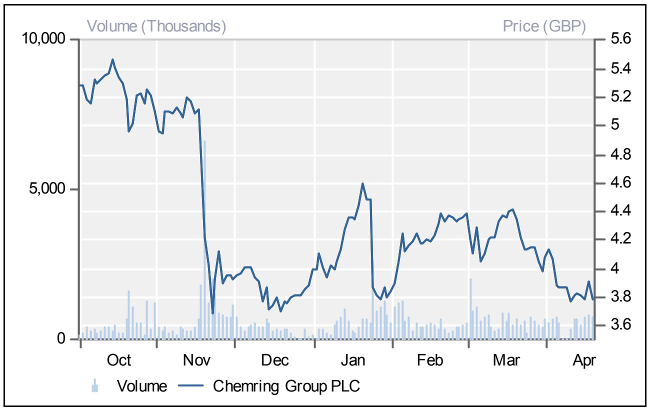
Key Risks

- Defense budgets remain under pressure in the US and UK which could delay/curtail potential orders. A more rapid US withdrawal from Afghanistan than currently planned could reduce earnings. A short order cycle means potential delays in budget approvals would impact Chemring sooner than the larger primes.
- Despite record order book, visibility is limited to 12-18 months. But, the consumable nature of CHG's products ensures repeat orders within ~1-2 years.

Valuation

Target price is based on DCF and implies a 2012E P/E of 10.5x (vs. historical one-year forward P/E of 11.7x).

Figure 33. Recent Stock Performance



Source: FactSet

Figure 34. CIRA vs. Consensus Estimates

£millions	2012E	2013E	2014E
Citi			
Revenue	£820	£851	£897
EPS	55.5p	56.6p	60.0p
Consensus			
Revenue	£819	£844	£878
EPS	56.1p	58.5p	61.4p

Source: Citi Investment Research and Analysis, Thomson

Cobham

(COB.L; £2.37; 1); PT = £2.50

Key Investment Points

- **Positioned in faster growing market sub-segments, civil upside** – We believe Cobham can outgrow the overall defense market thanks to its positions in faster growing sub-segments (such as C4ISR). One-third of Cobham is commercial, which delivered +12% organic sales growth in 1H11.
- **Strong financial track record** – Has delivered double-digit EPS CAGR 2000-2010A with a strong cash conversion record (83% since 2000).
- **Disciplined acquirer** – Cobham has made 54 acquisitions since 2001 with strong financial discipline (EPS accretive in year 1, payback by year 3). With a handful of exceptions (e.g. Sparta), Cobham's acquisition track record has been good.
- **Potential M&A target** – As a mid-cap & on account of its positioning in attractive C4ISR markets, Cobham could be an attractive takeover target, we believe.
- **Cost cutting, disposals, buybacks** – Whilst management cannot materially influence top-line growth, it has announced buybacks, the disposal of non-core and non-performing assets, and a cost cutting initiative (Excellence in Delivery).

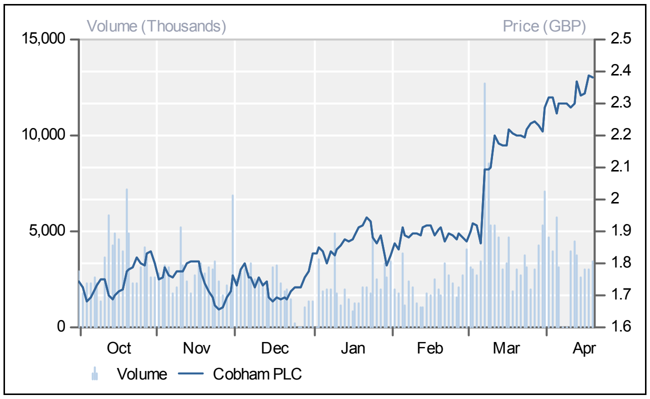
Key Risks

- **Lack of organic growth** – Given no organic growth since 1H09, Cobham has de-rated significantly and may not be able to justify its valuation premium.
- **New CEO** – We believe Cobham needs to fill in the vacant CEO role ASAP to restore investor confidence.
- **US procurement delays** – Orders could be depressed due to US FY12 defence budgets being operated under the restrictive 'continuing resolution' mechanism for the first 3 months of the fiscal year.

Valuation

Our TP is based on 7.5x 12E EV/EBIT, lower than COB's LT avg. (9.5x) due to lower organic growth prospects but is in-line with the BAE's target multiple to reflect COB's strong earnings growth prospects (driven by cost savings) and cash conversion.

Figure 35. Recent Stock Performance



Source: FactSet

Figure 36. CIRA vs. Consensus Estimates

£millions	2012E	2013E	2014E
Citi			
Revenue	£1,742	£1,769	£1,802
EPS	22.4p	23.2p	24.0p
Consensus			
Revenue	£1,729	£1,767	£1,765
EPS	21.0p	22.0p	22.9p

Source: Citi Investment Research and Analysis (basic eps), Thomson

Digital Globe

(DGI.N; US$12.92; 2); PT = $14.75

Key Investment Points

- **Pressured government revenue** – The summer 2010 signing of the Enhanced View (EV) contract clarified 10 years revenues, worth $3.55b. However, fiscal pressures are threatening to reduce the EV program. In our view, this threat has been moving DGI shares, of late, and contributes to uncertainty in the stock.
- **Fuzzier "product-based" opportunities** – DGI is looking for strong annual growth over the long-term from its more commercially focused product-based services, which leverage existing satellite capabilities to provide the customer with a more valuable product.
- **Dual uncertainties** – In our view, both the non-core and core businesses are pressured by some uncertainty in on-going demand and growth potential. As such, we view the risk/reward on shares to be fairly balanced at this point.

Key Risks

- EV contract subject to federal government budget pressures.
- Developing commercial opportunities could be more expensive than anticipated, eating into expected margin trajectory.
- Satellite development subject to cost and schedule overruns, and launch failure.

Valuation

Shares are trading at a premium to the defense space. We believe DGI deserves to trade at a discount given its highly concentrated exposure not only to a single customer (NGA comprises ~60% of sales), but to a single program.

Upcoming Catalysts

1) Information services acquisition could drive confidence in new company strategy
2) New customer announcements over the year (especially DAP)
3) Results of White House study of EV program (expected April)

Figure 37. Recent Stock Performance

Source: FactSet

Figure 38. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$363	$390	$441
EPS	$0.33	$0.65	$1.01
Consensus			
Revenue	$372	$406	$496
EPS	$0.47	$0.87	$0.92

Source: Citi Investment Research and Analysis, Thomson

EADS

(EAD.PA; €30.90; 1); PT = €34.50

Key Investment Points

- **Growth –** Strong earnings growth expected off a depressed base; 65% EPS CAGR 2011E-13E.
- **Very good visibility –** €500bn order backlog (=6-7 years of production), underpinned by air travel growth in emerging markets and replacement demand in developed markets.
- **Rising aircraft production rates –** A320 rates projected to go up from 34/month to 42/month by 4Q12, with high incremental margins. A330 rates are also rising and A380 losses projected to close out by 2014/2015.
- **"Cash Machine" –** Extremely cash generative medium term as EBIT improves and investments plateau; 13% FCF yield in 13E rising to >20% from 15E.
- **Beneficiary of strong US dollar –** Material transactional FX exposure. Significant hedging limits short term impact.

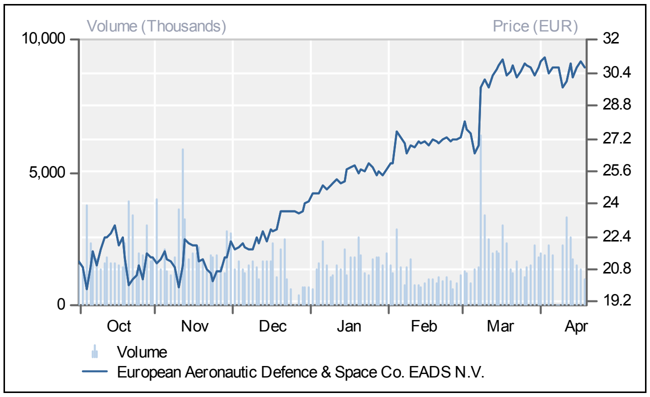
Key Risks

- **Program risks** – With three aircraft programs (A400M, A350, A320NEO) concurrently under development, program risk remains high. Mgmt. closely monitoring A350 development, limiting risk of large-scale delays/charges.
- **Growing acquisition risks** – Given large net cash and EADS' desire to rebalance portfolio away from Airbus. Been a disciplined acquirer so far.
- **Funding Gap** – Exit by some French banks from aircraft financing may create a potential funding gap in 12E and beyond. However, we see Asia/ME financiers and ECAs stepping in to plug the gap. OEMs likely to be "lenders of last resort".
- **Complex shareholding, government stake** – Limits EADS' ability to restructure business and increases potential for government interference.

Valuation

Our TP is based on DCF to reflect EPS growth prospects from 2013E onwards & FX impact on valuation. Key DCF assumptions include 10% WACC, 2.5% LT growth, 7.2% group margins (7.5% Airbus margins @ $1.33/€). Our TP implies a P/E of 11.5x 13E (vs. 13.7x LT avg.)

Figure 39. Recent Stock Performance



Source: FactSet

Figure 40. CIRA vs. Consensus Estimates

€millions	2012E	2013E	2014E
Citi			
Revenue	€ 54,470	€ 58,470	€ 63,890
EPS	€ 2.19	€ 2.99	€ 4.00
Consensus			
Revenue	€ 52,776	€ 55,463	€ 58,844
EPS	€ 1.87	€ 2.55	€ 3.22

Source: Citi Investment Research and Analysis, Thomson

Embraer

(ERJ.N; US$34.72; 1); PT= $32

Key Investment Points

- **Rated Buy** — We continue to see competitive (and other) headwinds face Embraer's core commercial and bizjet segments. However, we now consider the stock more reasonably valued.

- **Politicians and planes shouldn't mix (but they do)** — We have long expressed our concern about commercial jet orders generated by politicians. While Embraer landed Chinese orders following President Rousseff's official state visit to that country, why should we believe that China and Russia will not support their indigenous OEMs, as the latter look to expand within their huge home markets? At the same time, it would be folly on our part to ignore (what seems to be) the Brazilian government's tacit support of Embraer.

- **Smaller bizjets not as good** — We do not understand why anyone should be forecasting a hockey stick-style recovery on the lowest end of the market, in light of relatively high global inventory levels, and debt crises and high unemployment in the US and EU. That being said, we expect recovery (but a slow one).

Key Risks

- **Competition** – New aircraft such as the CSeries, SSJs (Sukhoi) and ASJs (COMAC) threaten to erode EJet market share. Moreover, the COMAC-Bombardier alliance presents greater challenges in the Chinese market.

- **Order concentration** – Recent problems with JetBlue highlight the risks of having large portions of backlog concentrated around just a few customers

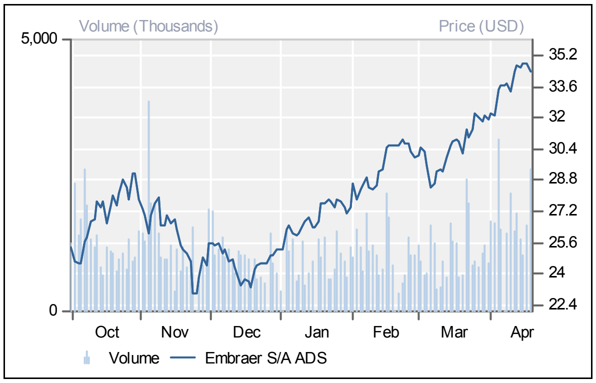
Valuation

We arrive at our target using a blend of 8.0x 2011E EV/EBITDA (80% weight), and 0.4x EV/firm order backlog range (20%).

Upcoming Catalysts

Negative catalysts could include tepid delivery reports, as well as increasing (global) inventory levels of narrow-body business jets. Conversely, a large E195 order from a "new" customer could act as a positive catalyst.

Figure 41. Recent Stock Performance



Source: FactSet

Figure 42. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$6,193	$6,520	$1,279
EPS	$1.47	$2.43	$2.67
Consensus			
Revenue	$6,201	$7,169	$7,990
EPS	$2.46	$2.99	$3.54

Source: Citi Investment Research and Analysis, Thomson

Finmeccanica

(SIFI.MI; €3.50; 3); PT= €2.60

Key Investment Points

- **Extensive restructuring** – Necessary to overcome material industrial issues in aeronautics & rolling stock and weak demand in defense electronics. Difficult to gauge restructuring progress as no specific margin or RoCE targets are provided. Restructuring track record (e.g. for Ansaldo Breda) not encouraging. Italian government stake (32%) and large Italian employee base (57% of workforce in 10A) further potential obstacles to thorough restructuring.
- **Stretched balance sheet, poor cash conversion** – FCF/EBITA conversion has averaged 47% since 2001. No FCF expected in 2012E (after €-471m in 2011E). 2012E Net Debt/EBITDA c2.0x. Limits FNC's ability to supplement anemic EPS growth through acquisitions/buybacks.
- **Non-core disposals to reduce debt** – €1bn divestments targeted by end-12E may prove difficult to achieve. Exit valuations may reflect FNC is a forced seller.
- **Corporate governance** – Some current & former employees under investigations over bribery allegations. Former chairman and his wife (who headed Selex, a FNC subsidiary) recently forced to resign.

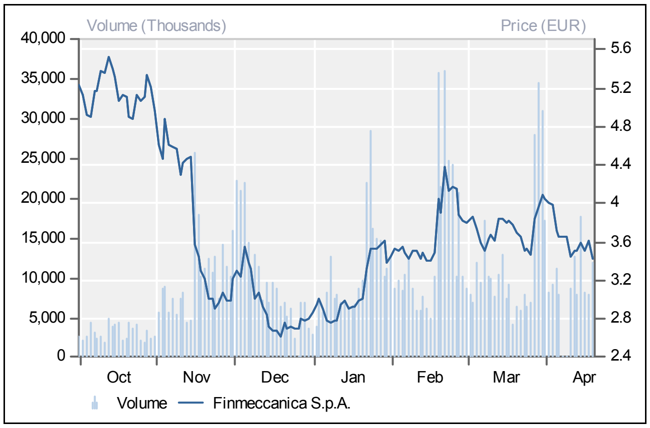
Key Risks

- **Defensive characteristics** – FNC offers significant EM exposure, a large order backlog (2.5yrs revenue) spread across several programs (JSF, Eurofighter, C27J, helicopters), and >1.0x book-to-bill, which could prevent earnings downside. Civil/commercial businesses could recover strongly from 2012E.
- **Potential disposals** – Eventual full disposal of non-core Energia & Breda could crystallize SOTP upside (and reduce indebtedness).
- **Successful restructuring** – New CEO may push harder to deliver margin improvements. Has a successful track record in managing helicopter business.

Valuation

Our €2.60 TP is based on on 6.0x 2012E EV/EBIT, a 15% discount to implied target EV/EBIT for closest European peer BAE due to FNC's worse profit outlook, weaker cash conversion, greater restructuring risks and a worse financial track record.

Figure 43. Recent Stock Performance



Source: FactSet

Figure 44. CIRA vs. Consensus Estimates

€millions	2012E	2013E	2014E
Citi			
Revenue	€ 17,530	€ 17,550	-
EPS	€ 0.64	€ 0.72	-
Consensus			
Revenue	€ 17,072	€ 17,338	€ 17,665
EPS	€ 0.46	€ 0.66	€ 0.79

Source: Citi Investment Research and Analysis, Thomson

General Dynamics

(GD.N; US$69.66; 1); PT = $88

Key Investment Points

- **Gulfstream playing in the right place** – GD's bizjet portfolio plays in the more attractive top end of the market. As such, we expect Gulfstream to see resilient demand for existing models, with growth anchored by the new G650 over the long run.
- **Defense business looks resilient** – We believe recent DoD announcements have reset budget expectations to more realistic levels thus eliminating a potential leg down in estimates and share performance.
- **Mix shift overtime likely leads to valuation re-rating** – Shares of GD currently demand a defense industry multiple of ~10x. However, we expect investors to increasingly apply a sum-of-the-parts valuation and re-rate shares as the aerospace segment contributes more profit (19% in 2009A growing to ~30% in 2013E). As such, we use an 11.3x multiple to set our target price.

Key Risks

- While our numbers currently bake in a 6-month delay in G650 deliveries due to a test plane crash in April, the company still expects 12 deliveries in 2H11. If the FAA certification drags on longer than anticipated, the company may be forced to reduce 2011 guidance.
- Combat systems business exposed to pressured tactical and Army budgets which could create more of a downside than currently anticipated.

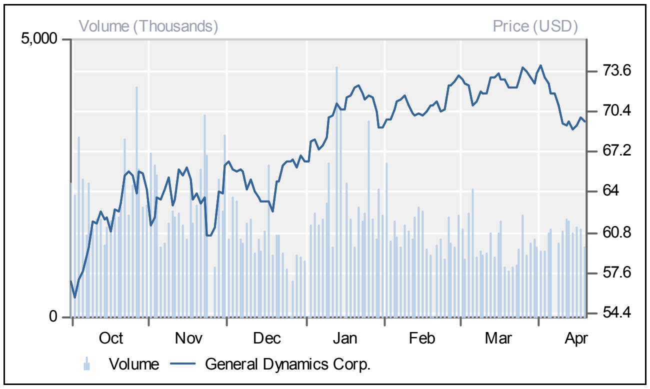
Valuation

We apply a blended defense/commercial multiple of 11.4x (vs. 10-yr avg. of 14x) to our FTM EPS to arrive at our price target

Upcoming Catalysts

Full FAA certification of G280 and G650 solidifies confidence in new bizjet platforms and their ability to deliver completed aircraft on time (currently sees mid-year)

Figure 45. Recent Stock Performance



Source: FactSet

Figure 46. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$33,030	$33,504	$33,923
EPS	$7.23	$7.69	$8.16
Consensus			
Revenue	$33,177	$33,351	$33,701
EPS	$7.32	$7.70	$8.29

Source: Citi Investment Research and Analysis, Thomson

Huntington Ingalls Industries

(HII.N; US$39.47; 1); PT = $46

Key Investment Points

- **Strong revenue visibility, albeit at zero growth** – The US Navy's 30-year shipbuilding plan lays out long-term goals and supports relatively steady acquisition of HII's core products over the next few decades: carriers, submarines, and amphibious ships.

- **Broken margins create room for improvement** – Some poorly priced ships in the backlog (LPDs 22-25 at zero margin) and Mother Nature (Hurricane Katrina) conspired to create underperforming segment margins of 4.4% in 2010 vs. GD's 10%. Re-baselining contracts, consolidating facilities, and instilling more discipline in yards should contribute to margin improvement over time.

- **Cash generation likely allows for improved net debt position** – We expect near-term cash headwinds from restructuring costs to abate, especially in 2013-14 when we expect the company to be able to begin collecting on these costs. This should allow for leverage ratios to improve and opens the potential to see a dividend over the longer run.

Key Risks

- Higher-than-estimated closure costs at Avondale could prompt further charges.

- Fiscal pressures prohibit the Navy from maintaining an 11-carrier fleet.

Valuation

Our target price is derived by applying a 9.9x multiple to our pension-adjusted FTM EPS est. 12 months from now, which we consider a "normalized" earnings stream given the recent accounting change better harmonizing CAS and FAS pension expense.

Upcoming Catalysts

1) March 28: 4Q11 earnings
2) ~4Q12 follow-on competition for DDG-51s
3) By end of April: LHA 7 contract

Figure 47. Recent Stock Performance

Source: FactSet

Figure 48. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$6,557	$6,428	$6,348
EPS	$3.05	$3.95	$4.95
Consensus			
Revenue	$6,597	$6,581	$6,569
EPS	$2.99	$3.94	$4.80

Source: Citi Investment Research and Analysis, Thomson

Lockheed Martin

(LMT.N; US$90.17; 1); PT = $108

Key Investment Points

- **F-35 Joint Strike Fighter (JSF) still the fighter of choice** – Despite headline risk due to ongoing government reviews and shifting international orders, the jet remains the fighter of choice for the Air Force, Navy, Marines, and international allies.

- **Strategically aligned platforms** – Includes air transport (C-130), communications (SBIRS, AEHF), smaller naval vessels (LCS), and missile defense (Aegis, PAC-3, THAAD). We believe these end-market exposures help insulate LMT’s portfolio from broader domestic cuts, with potential upside from international demand for C-130s, F-16s, F-35s, and THAAD.

- **Resilient cash flow and dividend** – The defense business model continues to provide strong cash generation, supporting LMT's industry-leading dividend yield. The company also commits to returning at least 50% of operating cash flow to shareholders; this has been closer to 70-80% over the past three years.

Key Risks

F-35 is a favorite target of fiscal hawks considering its record price tag and historical cost over-runs.

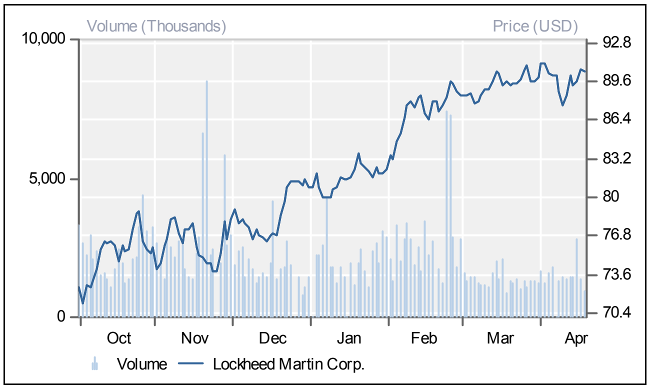
Valuation

Our target price applies a 10.6x multiple to our pension-adjusted FTM EPS estimate 12 months from now, a slight premium to the defense sector which has historically traded at a 25% discount to the market during an era of stabilizing demand following a build-up. We assign this premium based on LMT's exposure to the F-35 which represents revenue and margin expansion opportunity. We exclude pension due to the recent accounting change better harmonizing CAS and FAS pension expense.

Upcoming Catalysts

1) Definitization of $4b LRIP 5 contract
2) F-35 partners meeting (early March) clarifies international commitment
3) Aegis re-compete (vs. Raytheon)
4) More international THAAD orders helps offset FY13 domestic reduction

Figure 49. Recent Stock Performance



Source: FactSet

Figure 50. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$45,570	$45,968	$46,386
EPS	$7.85	$9.09	$10.10
Consensus			
Revenue	$45,623	$45,076	$44,786
EPS	$7.88	$8.50	$9.44

Source: Citi Investment Research and Analysis, Thomson

Meggitt

(MGGT.L; £4.07; 2); PT = £4.00

Key Investment Points

- **Aftermarket exposure** – About 30% of group sales are exposed to civil aero aftermarket, of which half is large jets and half business/regional jets. 2012E outlook for business jet aftermarket is uncertain with recent FAA data showing a decline in monthly US business jet operations.
- **Defence** – MGGT derives c40% of its group sales from Defence, which is heavily US-exposed. An uncertain US defence outlook, with potential for -10% decline in FY13 budget due to sequestration, could weigh on MGGT's defence business.
- **Lowered Margin Outlook** – MGGT expects faster growth in civil OE activities and a c£16m FX headwind to have "a moderating impact" on 2012E EBIT margins.
- **Balance Sheet** – MGGT is more indebted than its peer group. If macro situation worsens, the market is likely to disproportionately favour companies with strong balance sheets, we believe.

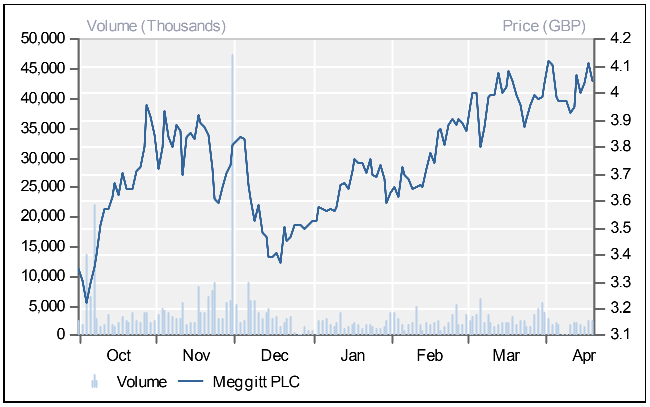
Key Risks

- **Upside Risks** – (1) Stronger than anticipated organic sales growth, particularly in high-margin civil aerospace aftermarket activities; (2) raised PSA merger synergy targets and/or cost savings target; (3) Meggitt finds itself as an acquisition target.
- **Downside Risks** – (1) Greater than expected slowdown in 2012 air traffic growth; (2) failure to achieve PSA synergy targets; (3) risk of overpayment on further large acquisitions; (4) greater than expected FX headwind

Valuation

Our 400p target is based on 9.0x 2013E EV/EBIT, a similar multiple used to value MGGT's civil aero peers. Our target implies 2013E P/E of 10.4x, broadly in-line with the company's historical average.

Figure 51. Recent Stock Performance



Source: FactSet

Figure 52. CIRA vs. Consensus Estimates

£millions	2012E	2013E	2014E
Citi			
Revenue	£1,649	£1,759	£1,879
EPS	35.6p	38.6p	42.2p
Consensus			
Revenue	£1,639	£1,737	£1,848
EPS	34.9p	37.9p	41.3p

Source: Citi Investment Research and Analysis (basis eps), Thomson

MTU Aero Engines

(MTXGn.DE; €61.65; 2); PT = €58

Key Investment Points

- **Civil Aftermarket Growth** – c58% of group sales are from civil aero aftermarket, where we expect +5% growth in 2012E vs. MTU's guidance of 5-10%, suggesting upside to our 2012E forecasts.
- **Positions on growth engines** – MTU has 15-18% stake in GTF (which powers NEO, CSeries) and GEnx (787, 747-8). Both engines have large (and rising) backlogs. In the long term, the planned increase by MTU in its stake on V2500 and GTF should underpin above avg. aftermarket growth prospects.
- **Good visibility** – MTU has a 2020 organic sales target of €6bn, implying c8% CAGR 2010A-20E. Long-term margin target is >12% (vs. 11% guidance for 11E).
- **Potential acquisition** – MTU reportedly submitted an "indicative offer" for Volvo Aero, per Reuters (1 Dec). Besides enlarging MTU's engine component offering, Volvo could add several RR engines (including the Trent XWB) to its portfolio.
- **Strong balance sheet** – MTU has minimal net debt, which we believe offers opportunities for EPS-enhancing acquisitions or increased shareholder returns.

Key Risks

- **Defense business at risk from German budget cuts** – Potential downside risk to guidance of flat revenues in FY12E.
- **Limited margin upside –** Despite targeting €6bn sales by 2020E (7% CAGR 11A-20E), MTU expects margins to be >12% vs. 11.2% in 11A.
- **Depressed cash flow –** Mgmt. guided for €50m+ pa FCF in 12E & 13E (2011 Investor day), significantly below €116-208m pa in 2004-11.
- **Ramp-up in Civil OE activity could pressure margins** – Pricing on new OE engines could be weak if Pratt aggressively pursues market share on the NEO.
- **Significant transactional FX exposure** – Due to $ sales and € costs in civil aero. Hedging mitigates short-term FX impacts, but valuation remains sensitive.

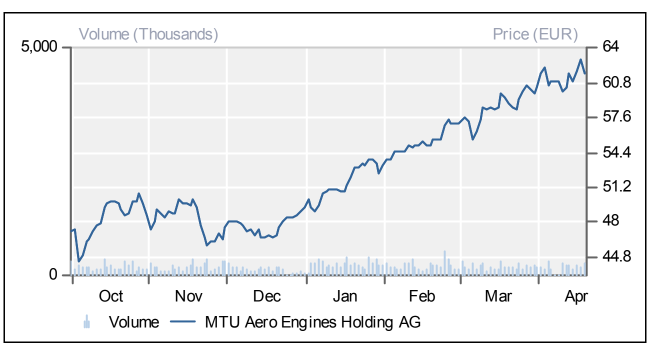
Valuation

Our €58 TP (=c12x 13E P/E) is based on DCF (9.2% WACC, 2.7% terminal growth).

Upcoming Catalysts

1) Acquisitions (Volvo/V2500 stake increase)

Figure 53. Recent Stock Performance



Source: FactSet

Figure 54. CIRA vs. Consensus Estimates

€millions	2012E	2013E	2014E
Citi			
Revenue	€ 3,215	€ 3,438	€ 3,659
EPS	€ 4.36	€ 4.67	€ 5.04
Consensus			
Revenue	€ 3,199	€ 3,474	€ 3,755
EPS	€ 4.28	€ 4.85	€ 5.41

Source: Citi Investment Research and Analysis (basic eps), Thomson

Northrop Grumman

(NOC.N; US$61.29; 1); PT = $69

Key Investment Points

- **Digging in the right spots** – NOC is uniquely positioned in two long-term growth areas (a rarity in the defense space): 1) fighter jets via LMT's JSF (20% content) and BA's F/A-18 (40% content); and 2) UAVs via RQ-4 Global Hawk, its BAMS derivative, Firebird/scout, and UCAS. We admit that JSF and RQ-4 both suffer from headline risk making for short-term turbulence, but we still believe they are the platforms of choice for joint operations and international partners.

- **Bottom-line & cash story** – NOC is a self-professed bottom-line story, with a resilient portfolio anchored by the above-mentioned platforms, boosted by margins that can grow based on continuing cost reduction and portfolio right-sizing. Furthermore, recent announcements indicate that dividends and buybacks will be a priority area for NOC going forward.

Key Risks

- Lowest international exposure of the primes (10%) makes NOC more vulnerable to domestic fiscal pressures.

- Shifting strategic priorities and fiscal pressure could preclude expected sales on headline aeronautics programs.

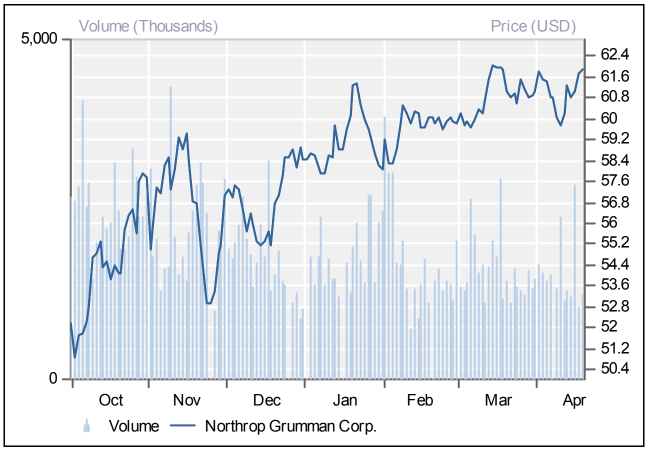
Valuation

Our target price applies a 9.9x multiple to our pension-adjusted FTM EPS estimates, in line with the defense sector historically trading at a 25% discount to the market during an era of stable demand following a build-up. We exclude pension due to the recent accounting change better harmonizing CAS and FAS pension expense.

Upcoming Catalysts

1) Resolution of JSF LRIP IV and F-18 MYP negotiations
2) Resolution of Global Hawk Block 30 termination discussions

Figure 55. Recent Stock Performance



Source: FactSet

Figure 56. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$25,147	$25,089	$25,012
EPS	$6.71	$7.54	$8.04
Consensus			
Revenue	$25,073	$24,653	$24,338
EPS	$6.57	$6.77	$6.99

Source: Citi Investment Research and Analysis, Thomson

Precision Castparts

(PCP.N; US$171.24; 1); PT = $199

Key Investment Points

- **Attractive content across the aerospace spectrum** – Aero OEM production rate increases, improving energy consumption, and a recovery in industrial markets (auto, machinery, & construction) allow for robust late-cycle growth.
- **Secular trends offer long-term growth** – Emerging market exposure in energy production, particularly in India, should allow for sustainable long-term secular growth. Low natural gas prices and erosion of nuclear power demand could lead to increased use of Industrial Gas Turbines (IGTs), while inquiries into oil and gas applications for seamless pipe are growing.
- **Attractive incremental margins** – The company made significant capacity investments during the last cycle, and current utilization is now at 70-80%. We estimate PCP could add up to $1.5b in sales with little additional capex or overhead, and expect margins to be able to sustain above prior peak levels.

Key Risks

- Narrow customer base with 14% of sales to GE and 8% to Rolls and a significant portion to Boeing, levered to what can be a volatile aero industry.
- Fiscal pressures preclude new builds of defense platforms, potentially pressuring PCP's 12% sales exposure to military customers.

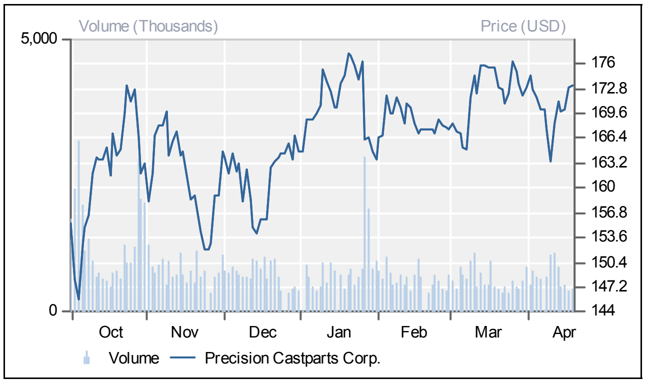
Valuation

Our target price is derived by applying a 17x multiple to our FTM EPS estimates vs. the 14x FTM P/E for the market. We consider this premium appropriate in light of the fact that the company is likely to participate in the early phases of aircraft production ramps and an increase in energy market demand.

Upcoming Catalysts

1) 787 production ramp progression better synchs PCP rates
2) Continued strong IGT orders as positive gas/coal pricing persists
3) Acquisitions build confidence in further sales and EPS growth
4) Developments in O&G market which is a relatively new, yet large, opportunity

Figure 57. Recent Stock Performance



Source: FactSet

Figure 58. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$7,184	$8,403	$9,469
EPS	$8.37	$10.15	$11.68
Consensus			
Revenue	$7,224	$8,341	$9,335
EPS	$8.38	$10.04	$11.51

Source: Citi Investment Research and Analysis, Thomson

QinetiQ

(QQ.L; £1.53; 2)

Key Investment Points

- **Cautious on FY Mar13E** – We forecast -13% YoY EPS. 1H12 outperformance and FY12E guidance upgrade were driven by the lumpy Global Products business, which may not prove repeatable in FY13E.
- **Tough UK environment** – UK defence budgets squeezed by commitments to large weapons programs and increased competition for services contracts. Also a lumpy global products business makes earnings volatile & difficult to predict.
- **US in-sourcing & slower growth** – US consulting, previously a double-digit growth area, has contracted due in-sourcing, budget cutbacks, greater scrutiny before contract awards and government's preference for smaller contractors.
- **Very Good Restructuring Progress** – ND/EBITDA objective achieved well before target timeframe. Onerous UK employment contracts renegotiated; headcount cut leading to impressive margin growth in UK Services despite sales headwinds.
- **No target price** – Whilst QQ is undoubtedly doing a good job in cutting costs & driving cash flows, limited medium-term visibility leaves us struggling to identify material catalysts for the stock over the next 12 months. Hence we do not assign a target price to QQ.

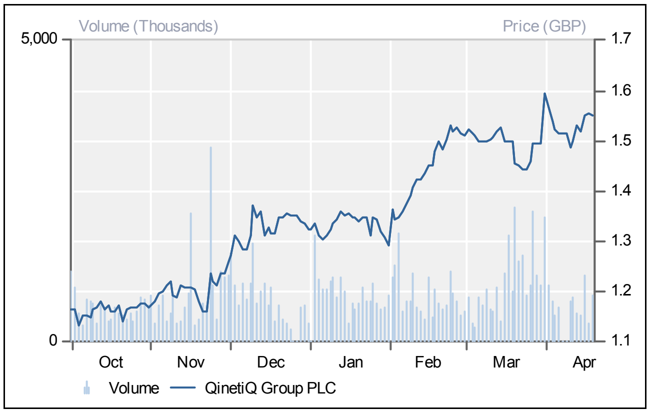
Key Risks

- **Upside Risks** – (1) Greater than expected margin and cash flow upside from restructuring; (2) Continued outperformance in the Global Products business; (3) QQ finds itself to be an acquisition target; (4) Tempo of Afghan operations remains elevated, instead of declining.
- **Downside Risks** – (1) Uncertainty in US defence environment continues for longer than expected, further hurting investor sentiments towards defence stocks; (2) Margin progress could be capped due to continued top-line weakness; (3) QQ engages in acquisitions to bolster top-line growth, bringing with it the associated risks of overpayment, poor integration etc.

Upcoming Catalysts

FY Mar12 results (expected May 2012)

Figure 59. Recent Stock Performance



Source: FactSet

Figure 60. CIRA vs. Consensus Estimates

£millions	2012E	2013E	2014E
Citi			
Revenue	£1,450	£1,421	£1,411
EPS	17.7p	14.5p	14.5p
Consensus			
Revenue	£1,471	£1,433	£1,465
EPS	17.2p	14.6p	14.8p

Source: Citi Investment Research and Analysis (basic eps), Thomson

Raytheon

(RTN.N; US$52.70; 1); PT = $64

Key Investment Points

- **Defending against fiscal pressures** – RTN's diversified product mix (> 8,000 programs & no single program comprising more than 5% total revenue) provides insulation from program cuts. Further strength comes from industry-leading international exposure (25% of sales vs. peers at ~10%). Also, RTN is well positioned in a budget constrained environment that puts a premium on upgrading platforms instead of acquiring new ones.

- **Leading margins** – Last year, RTN posted margins of 11.5%, ~150-200 bps above competitors' driven by its mature portfolio and strong international exposure.

- **Strong balance sheet drives s/h returns** – Net debt to EBITDAP finished 2011 at 0.2x with $4b of cash on the balance sheet. We expect resilient cash flow generation over the next few years driven by in-demand products and over the longer-term potentially by pension accounting chances. We expect cash to continue to be deployed back to shareholders in the form of dividends and repurchases (from 2006-11 RTN returned 82% of OCF to shareholders).

Key Risks

- International delays & slowed domestic sales preclude growth and backlog targets for 2012

- Still has $70m in receivables tied to UKBA project that could be written down

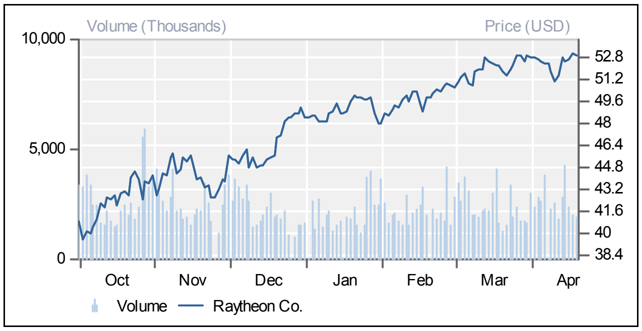
Valuation

Our target price applies a 10.6x multiple to our pension-adjusted FTM EPS estimate 12 months from now, representing a slight premium to the defense sector which has historically traded at a 25% discount to the market during a comparable spending environment. We assign a premium based on leading international exposure and margins. We exclude pension due to the recent accounting change better harmonizing CAS and FAS pension expense.

Upcoming Catalysts

1) International contract announcements create confidence around sales growth expectations; **2)** Aegis re-compete vs. LMT (2012)

Figure 61. Recent Stock Performance



Source: FactSet

Figure 62. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$24,325	$24,439	$24,539
EPS	$5.06	$5.97	$6.96
Consensus			
Revenue	$24,512	$24,127	$23,850
EPS	$5.06	$5.57	$6.08

Source: Citi Investment Research and Analysis, Thomson

Rheinmetall AG

(RHMG.DE; €44.33; 2)

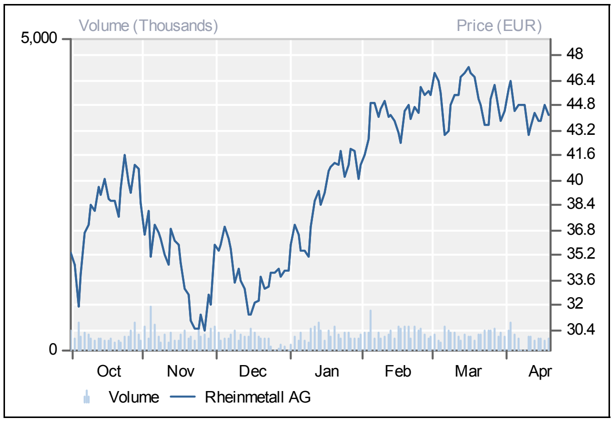
Key Investment Points

- **Cautious on Autos volumes –** Management restructured the Autos business significantly in the last downturn reducing both breakeven level & working capital. However, we are cautious on Autos volumes for 2012E due to RHM's exposure to Europe where production volumes look likely to fall this year. Achieving RHM's target EBIT margin of 7-8% could prove difficult in the absence of volume growth, in our view.
- **Good prospects in Defence but visibility limited –** Despite budgetary headwinds in Germany, RHM's strong product range in Defence and a number of export opportunities could support earnings. However, estimating organic growth prospects for defence is difficult with the additional risk of contract delays.
- **Potential Autos IPO** – Could unlock SoTP value. However, unlikely near-term due to capital market uncertainties.

Key Risks

- **German Defence Cuts** – Germany plans to cut its order for Puma tanks (RHM stake 50%) from 410 to 350, per Reuters (18 Oct 11). RHM is relying on export contracts to support growth, albeit competition for these is intense.
- **Acquisition risks remain high** – Given RHM's history of acquisitive growth.
- **Autos business faces low cost competition** – Whilst some products have a high technology content (e.g. pistons, emissions regulation systems, lightweight engine blocks, pumps), there is a chance that some more commoditized products may face increase competition from abroad.

Figure 63. Recent Stock Performance



Source: FactSet

Figure 64. CIRA vs. Consensus Estimates

€millions	2012E	2013E	2014E
Citi			
Revenue	€ 4,920	€ 5,070	€ 5,220
EPS	€ 5.31	€ 5.97	€ 6.54
Consensus			
Revenue	€ 4,899	€ 5,160	€ 5,261
EPS	€ 5.40	€ 5.88	€ 6.29

Source: Citi Investment Research and Analysis, Thomson

Rockwell Collins

(COL.N; US$57.21; 2); PT = $63

Key Investment Points

- **Mixed market share dynamics** – In our view, new air transport platforms (including 787 and 747-8) and new business jet wins (including Bombardier Global 5000 and Global Express) set COL up to see its OE business outgrow the market in 2011 and 2012. Lacking a recovery in light bizjets, however, it will be difficult to maintain outperformance in 2013 onwards.

- **New competitor could pressure top-line** – Garmin's entry into the avionics market could pressure COL's position, especially in light of the fact that we expect Cessna to refresh some of its lighter fleet over the next few years.

- **Shares fully valued** – Shares trade at ~13.5x 2012 EPS est., in line with where we would expect to see a commercially driven company with 60% defense exposure (slight discount to commercial but premium to defense names). As such, we believe shares are already pricing in many of the positive developments on the horizon and are therefore fairly valued given potential risk/reward.

Key Risks

- COL growth trajectory put in jeopardy by unclear recovery in light bizjet market and rising competition for in-flight navigation systems (from Garmin).

- Majority (60%) defense exposure impedes total growth.

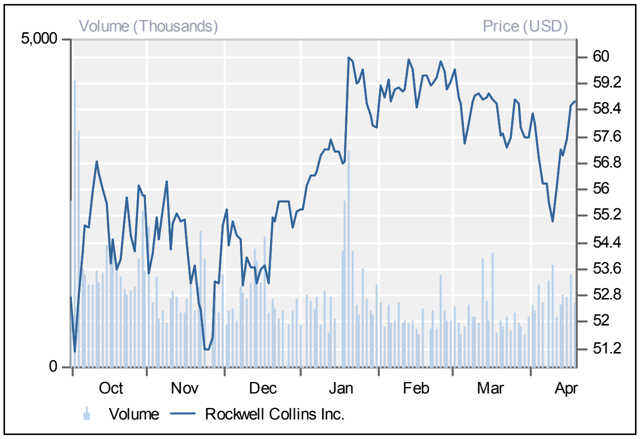
Valuation

Our SOTP analysis yields an 12x blended multiple based on applying 8.8x to the defense business and 15x multiple to the commercial business.

Upcoming Catalysts

1) DoD budget action sheds light on JTRS
2) Uptick in light bizjet demand and OE production rates
3) Avionics content wins on new platforms
4) By end of year: BA decides on 737 MAX sub-systems

Figure 65. Recent Stock Performance



Source: FactSet

Figure 66. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$4,834	$5,012	$5,207
EPS	$4.42	$4.84	$5.42
Consensus			
Revenue	$4,940	$5,179	$5,451
EPS	$4.48	$5.03	$5.59

Source: Citi Investment Research and Analysis, Thomson

Rolls Royce

(RR.L; £8.28; 1); PT = £8.70

Key Investment Points

- **Attractive Growth Prospects** – RR expects 7-8% organic sales CAGR to 2021E, which together with some potential margin upside may result in 10-12% EPS CAGR over the same period, in our opinion.
- **Wide body** – RR has c50% share on higher value, higher margin wide body engines, with positions on all major growth platforms (787, A350, A380).
- **IAE Exit** – Exiting IAE (13% of Civil Aero sales) for $3-4bn makes strategic sense and does not diminish group growth prospects, in our view. RR is developing next-gen NB engine jointly with P&W (entry into service expected mid-2020s).
- **Significant aftermarket exposure** – c28% of group sales come from high-margin civil aero aftermarket. Long-term "power by the hour" servicing contracts smooth cash flows and profits and offer good long-term visibility.
- **Marine & Energy** – $320bn market in Marine & $120bn in Energy over 20yrs.
- **Tognum acquisition** – Tognum is strategically complementary to Marine & Energy activities & could be 8-10% EPS accretive from 2012E.
- **Significant net cash** – c£1.5bn net cash expected by 12E (post Tognum & IAE)

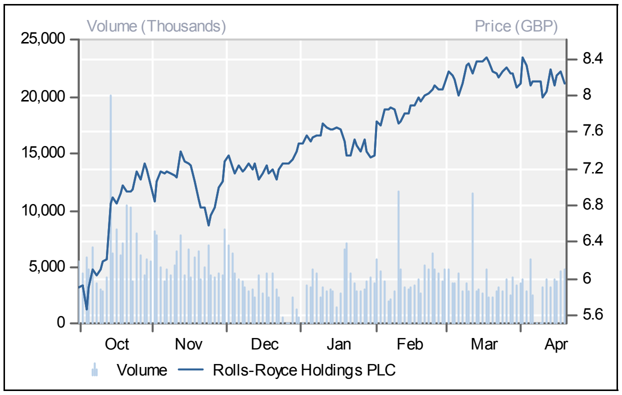
Key Risks

- **Development risks on new engines** – Potential delays in A350XWB (first delivery 1H14) where RR is the sole source engine supplier. RR must offer a redesigned engine for the larger -1000 variant, necessitating additional R&D.
- **Accounting & disclosure** – Criticized for capitalizing loss on engines sold into Total Care contracts and high net capitalized R&D.
- **Not present on re-engined narrow body aircraft** – RR has chosen not to participate in the A320NEO, on account of concerns over the program's longevity.

Valuation

Our 870p TP (=c14x 13E P/E) is based on a 10x 13E EV/EBIT, in line with RR's historical average. A SOTP approach suggests £9-16/share, on our estimates, based on applying the IAE exit multiple to the remainder of RR's civil business.

Figure 67. Recent Stock Performance



Source: FactSet

Figure 68. CIRA vs. Consensus Estimates

£millions	2012E	2013E	2014E
Citi			
Revenue	£12,740	£13,600	£14,530
EPS	59.5p	64.1p	68.4p
Consensus			
Revenue	£13,098	£14,649	£15,754
EPS	56.6p	62.4p	68.5p

Source: Citi Investment Research and Analysis (basic eps), Thomson

Safran

(SAF.PA; €26.77; 1); PT = €30

Key Investment Points

- **Robust Civil OE Outlook** – Underpinned by increase in NB production rates, 787 ramp-up and higher 777 production. SAF has exposure on these platforms. CFM56 has c75% market share in the narrow body engine market.
- **Leap-X prospects –** A sole source position on 737Max and c50% market share on A320NEO implies Leap-X is likely to retain its dominance in the re-engined narrowbody market vs. competition.
- **Strong earnings growth –** SAF's medium-term guidance implies 13-17% EBIT CAGR 11A-15E on 7% sales CAGR driven by significant margin improvement.
- **Fast growing security business** – Three large acquisitions in 3 years. Double-digit market growth expected with strong positions in biometrics and detection.
- **FX Tailwinds** – SAF expects c€400m cum. EBIT benefit 11-14E from stronger $.

Key Risks

- **Acquisition risk** – SAF has c€3bn firepower at 2.5x ND/EBITDA. Despite pre-defined financial criteria, we see risk of overpayment, poor integration, unrelated diversification and unfriendly takeovers.
- **Depressed cash conversion –** due to higher R&D (on LEAP-X), capex and working capital, although SAF guides for >50% FCF:EBIT on avg. over 11A-15E.
- **Defense business at risk from budget cuts** – Although relatively small at 11.5% of 2010A sales.
- **30% French govt. stake** – Limits ability to restructure; risk of govt. interference.

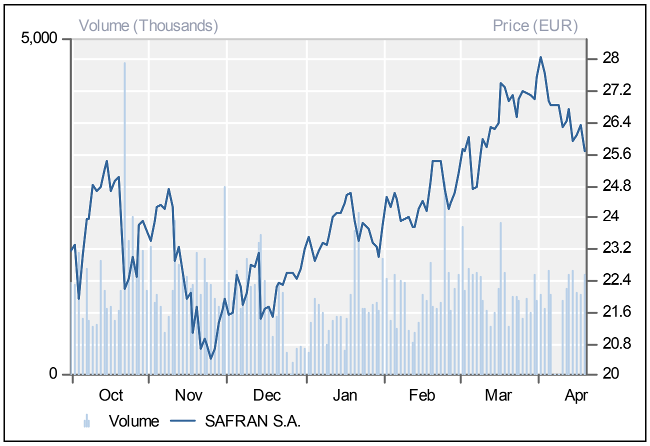
Valuation

Our €30 TP (=c12x 13E P/E) is based on DCF (9.5% WACC, 2.6% terminal growth).

Upcoming Catalysts

1) Further 737Max orders (LEAP-X sole source engine)

Figure 69. Recent Stock Performance



Source: FactSet

Figure 70. CIRA vs. Consensus Estimates

€millions	2012E	2013E	2014E
Citi			
Revenue	€ 12,926	€ 13,837	€ 14,787
EPS	€ 2.05	€ 2.41	€ 2.70
Consensus			
Revenue	€ 13,106	€ 14,106	€ 15,289
EPS	€ 2.02	€ 2.37	€ 2.70

Source: Citi Investment Research and Analysis (basic eps), Thomson

Textron

(TXT.N; US$27.35; 2); PT = $25

Key Investment Points

- **Commercial aero takes some work** – Although Cessna is working to reduce its cost base, robust demand still isn't materializing for small bizjets, while the segment is only getting busier with new entrants (i.e. Embraer), forcing TXT to maintain elevated R&D through 2013. In addition, Cessna has limited pricing power with both customers and suppliers. Meanwhile, Bell requires further R&D through 2013 to regain lost market (from 55% peak down to 15%), although the Bell recovery appears to be well underway.

- **Defense pressures partly mitigated by UAV & helo** – While slowing op tempo pressures armored vehicle and precision weapon sales, we expect Bell military and UAVs to provide a backstop to an otherwise pressured defense business.

- **Macro risks in Industrial segment** – The industrial business is exposed primarily to auto manufacturing (mostly Europe) and tools which have yet to see appreciable downticks in demand although we are cautious heading into weaker GDP. Meanwhile, the segment's golf and turf businesses are still under pressure

Key Risks

- Unimpressive small bizjet demand, overcapacity, and new entrants drive further underperformance at Cessna.

- The expensive V-22 Osprey is often mentioned as a potential target for budget cuts/cancellation.

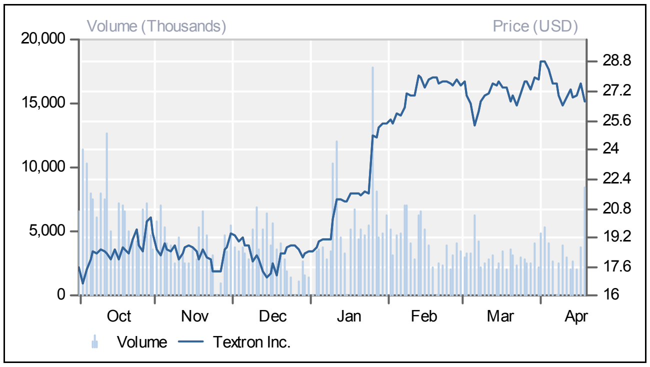
Valuation

Our blended multiple of 11.7x is based on a SOTP approach which applies an 8.4x multiple to defense (30% discount to the market), a 13.4x multiple to commercial and industrial (3-year average FTM PE market multiple), and 7x to finance. Our PT is based on applying the blended multiple to our FTM EPS estimate in 12 months.

Upcoming Catalysts

1) Bizjet environment including operations and used market activity.
2) Defense procurement decisions including V-22 and Canada TAP-V

Figure 71. Recent Stock Performance



Source: FactSet

Figure 72. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$12,601	$13,171	$13,674
EPS	$1.98	$2.24	$2.50
Consensus			
Revenue	$12,401	$13,098	$13,570
EPS	$1.94	$2.30	$2.70

Source: Citi Investment Research and Analysis, Thomson

Thales

(TCFP.PA; €27.00; 2); PT = €30

Key Investment Points

- **Restructuring upside** – Management aims to raise margins from c5% currently to those achieved by European peers (9-11%). Guidance is for 6% EBIT margin in 12E (5.3% in 11A).

- **CEO Luc Vigneron brings restructuring experience** – Vigneron raised Nexter's margins from negative to positive 10-12% over a 10-year period, and was put in place as Thales CEO after Dassault bought Alcatel stake.

- **Some exposure to civil/commercial recovery** – A diversified mix of businesses, with exposure to civil aerospace (avionics, in flight entertainment) and commercial recovery (rail signaling, ticketing).

Key Risks

- **"Slow burn" restructuring story** – Benefits unlikely before 14E, interim progress hard to gauge due to lack of a long-term margin or RoCE target. We expect limited bottom-line benefits (net of better pricing & R&D). Challenging defence end-markets could make targeted cost savings difficult to achieve.

- **French govt. stake (27%)** – France to push for greater defence industry consolidation amidst budget constraints; potential risk of shareholder unfriendly M&A. Thales recently raised stake in DCNS (majority state-owned) from 25% to 35% for €260m; in talks with Nexter to merge ammunitions business.

- **One off Charges** – Potential further provisions on problem contracts

- **Defence Budget cuts** – Likely in France and elsewhere in Europe.

Valuation

Our €30 TP is based on a P/E of 8.5x applied to 2014E EPS & discounted back 1 year at 10% to reflect risks associated with restructuring, plus €1/share for Thales' share of the Rafale / India deal. Our target implies a 2013E P/E of 8.9x (vs. LT avg. of 12.4x).

Figure 73. Recent Stock Performance

Source: FactSet

Figure 74. CIRA vs. Consensus Estimates

€millions	2012E	2013E	2014E
Citi			
Revenue	€ 13,970	€ 14,010	€ 14,050
EPS	€ 3.04	€ 3.38	€ 3.73
Consensus			
Revenue	€ 13,611	€ 13,766	€ 13,929
EPS	€ 2.97	€ 3.37	€ 3.67

Source: Citi Investment Research and Analysis, Thomson

Wesco Aircraft

(WAIR.N; US$15.36; 1H); PT = $19.50

Key Investment Points

- **Revenue and earnings visibility** – High organic revenue and earnings visibility due to announced production rate increases. However, increased revenue visibility is likely to cost margins as the company shifts contract structures.
- **Cross-selling and adjacent market opportunities** – Core growth can be supplemented by expansion into adjacent markets. We currently see MRO growing ~10% annually over the next few years as WAIR develops capabilities to distribute into that end-market. Meanwhile, we expect the company to get traction on their cross-selling efforts on electronic products.
- **Market consolidation** – Still fragmented market with WAIR and chief competitor comprising 35% of the C-class aerospace distribution market. We expect benefits of operating leverage to encourage consolidation and share gains.

Key Risks

- **OEM disintermediation and execution** – OEMs are looking to lower costs by cutting out the middle man. However, we view these opportunities as limited as suppliers are unlikely interested in taking on inventory themselves. Also, the OEMs still need to execute on ambitious production rates.
- **Defense budget** – Roughly 50% the business is exposed to defense, although we expect this to fall to 44% by FY13E. Still, downside risk exists if budgets and the F-35 program are reduced beyond our current expectations.
- **PE ownership** – The Carlyle Group still owns 63% of WAIR, while management and employees own ~15%.

Valuation

Our PT is based on a 13.5x multiple applied to our FTM EPS estimate a year from now. This valuation is in line with the market average over the past three years.

Upcoming Catalysts

1) 787 production ramp
2) Budget clarity on F-35 and ability to ramp (4Q11)
3) Lengthening lead times for C-Class parts

Figure 75. Recent Stock Performance

Source: FactSet

Figure 76. CIRA vs. Consensus Estimates

$millions	2012E	2013E	2014E
Citi			
Revenue	$787.3	$835.5	$907.4
EPS	$1.07	$1.21	$1.36
Consensus			
Revenue	$784.8	$891.3	$983.7
EPS	$1.06	$1.26	$1.43

Source: Citi Investment Research and Analysis, Thomson

Citi Commercial Aero Forecasts and Data

While economic uncertainty pressures long-term demand for new aero platforms, the OEM's large backlogs, constrained supply, and replacement demand help provide upward bias to production and delivery rates. Based on Citi's global GDP growth assumptions, we derive a traffic growth number that itself drives some fleet growth. While the implied demand through 2013E is light vs. planned deliveries, we note that GDP is not the only driver of aircraft demand. In our view, deliveries are also driven by efficiency requirements (more important with higher oil) and emerging market growth (where GDP growth is more supportive of delivery plans). This model assumes passenger traffic growth at 1.65x GDP (vs. a historical range of 1.5-2.0x) and that ~2% of the global fleet is retired each year. For a more detailed discussion of economic sensitivities, please see page 3 of our August 14th note: Countervailing Winds of Commercial Aero Production Rates.

A top-down demand forecast helps provide support for our bottom-up delivery estimates.

Figure 77. Commercial Aero Demand Forecast

	2010	2011E	2012E	2013E	2014E	2015E
In Service Fleet b/f	15,610	16,284	16,930	17,490	18,180	19,050
Deliveries	972	1,066	1,000	1,140	1,340	1,500
Retirements	-298	-420	-440	-450	-470	-500
In Service Fleet c/f	16,284	16,930	17,490	18,180	19,050	20,050
Average age (implied)	11.5yrs	11.4yrs	11.4yrs	11.3yrs	11.1yrs	10.9yrs
Global GDP Growth	4.1%	3.0%	2.6%	3.0%	3.5%	3.8%
Multiplier	1.6x	1.7x	1.7x	1.7x	1.7x	1.7x
Traffic Growth	6.5%	5.0%	4.3%	5.0%	5.8%	6.3%
Implied Delivery Growth	-0.7%	9.7%	-6.2%	14.0%	17.5%	11.9%
Implied Demand (# aircraft)	**972**	**1,066**	**1,000**	**1,140**	**1,340**	**1,500**
Citi Delivery Forecasts (# aircraft)		**1,002**	**1,173**	**1,284**	**1,411**	***NA***
Over / (Under)delivery vs. demand		*(6.0%)*	*17.3%*	*12.6%*	*5.3%*	*NA*

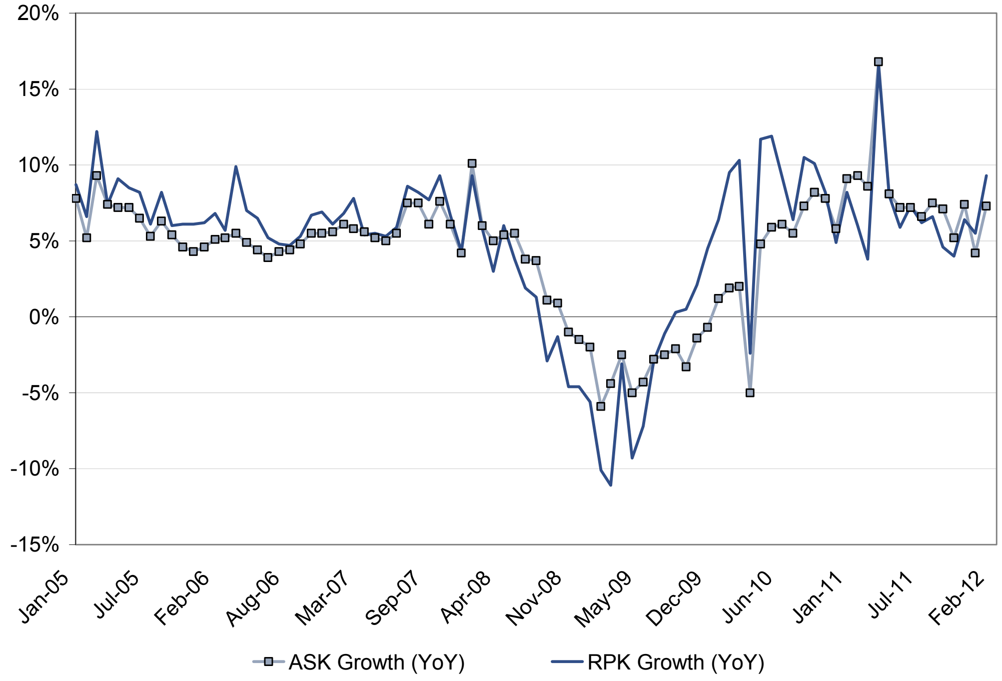
Source: Citi Investment Research and Analysis

Figure 78. Boeing & Airbus Delivery Forecast

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012E	2013E	2014E
737NG	173	202	212	302	330	290	372	376	372	415	443	488
747	19	15	13	14	16	14	8	0	9	36	24	24
767	24	9	10	12	12	10	13	12	20	24	21	18
777	39	36	40	65	83	61	88	74	73	84	100	100
787	0	0	0	0	0	0	0	0	3	41	85	125
Boeing	**281**	**285**	**290**	**398**	**441**	**375**	**481**	**462**	**477**	**600**	**673**	**755**
% Y/Y Change	*(26%)*	*1%*	*2%*	*37%*	*11%*	*(15%)*	*28%*	*(4%)*	*3%*	*26%*	*12%*	*12%*
A320	233	233	289	339	367	386	402	401	421	452	475	497
A330/A340	64	75	80	86	79	85	86	91	87	91	101	109
A350	0	0	0	0	0	0	0	0	0	0	0	10
A380	0	0	0	0	1	12	10	18	26	30	35	40
Airbus	**305**	**320**	**378**	**434**	**453**	**483**	**498**	**510**	**534**	**573**	**611**	**656**
% Y/Y Change	*1%*	*5%*	*18%*	*15%*	*4%*	*7%*	*3%*	*2%*	*5%*	*7%*	*7%*	*7%*
Narrow	432	458	516	646	697	676	774	777	793	867	918	985
Wide	154	147	152	186	197	182	205	195	218	306	366	426
Total	**586**	**605**	**668**	**832**	**894**	**858**	**979**	**972**	**1,011**	**1,173**	**1,284**	**1,411**
% Y/Y Change	*(14%)*	*3%*	*10%*	*25%*	*7%*	*(4%)*	*14%*	*(1%)*	*4%*	*16%*	*9%*	*10%*
Y/Y Growth												
Narrow	(15%)	6%	13%	25%	8%	(3%)	14%	0%	2%	9%	6%	7%
Wide	(13%)	(5%)	3%	22%	6%	(8%)	13%	(5%)	12%	40%	20%	16%
% Y/Y Change	*(14%)*	*3%*	*10%*	*25%*	*7%*	*(4%)*	*14%*	*(1%)*	*4%*	*16%*	*9%*	*10%*

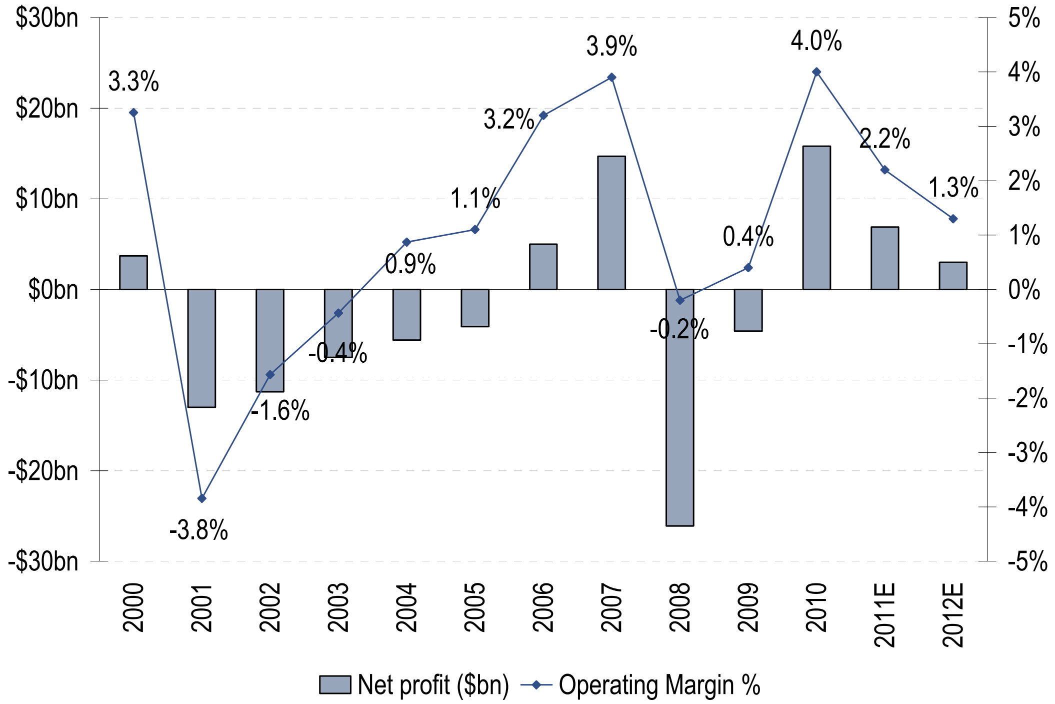
Source: Citi Investment Research and Analysis, Boeing, Airbus

Figure 79. Global Passenger Traffic and Capacity



Source: IATA

Figure 80. Airline Profitability



Source: IATA

Business Jet Data

Bizjet market segmentation supports our Buy ratings on General Dynamics and Bombardier and Neutral rating on Textron.

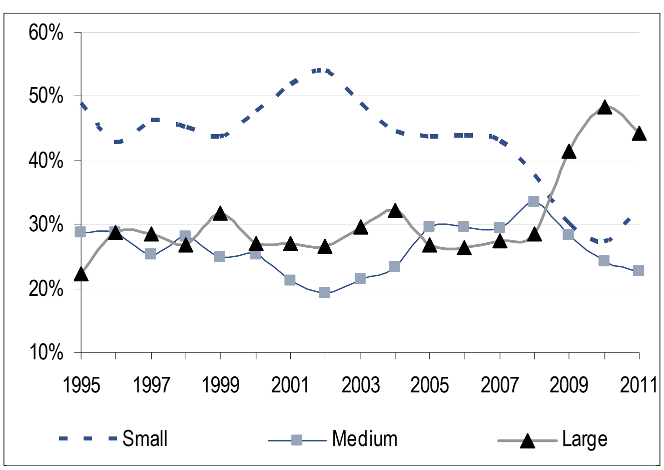
In our view, the bizjet market continues to see separation between the more robust large-cabins and less certain SMID-cabins. Large-cabin sales are expected to pick up this year thanks to some new products hitting the market; mid-cabin production is not expected to begin recovering until late next year; and there continues to be limited visibility on the small-cabins.

Figure 81. BizJet Market Segmentation

Cabin Size	Small				Medium		Large		
Range	Very Short		Short	Short Medium	Medium	Long		Very Long	Ultra Long
Weight	Micro	Very Light	Light	Light Medium	Medium	Medium Heavy	Heavy	Very Heavy	
Bombardier			Learjet 40 Learjet 40XR	Learjet 45 Learjet 45XR	Learjet 60XR Learjet 85	Challenger 300	Challenger 605	Global 5000	Express XRS Global 7000 (2016) Global 8000 (2017)
Embraer	Phenom 100		Phenom 300			Legacy 450 (2014) 500/550 (2013)	Legacy 600 Legacy 650		
Dassault (Falcon)						SMS (delayed) 2000S (2013)	2000EX 2000DX 2000LX	900EX 900DX 900LX	7X
Gulfstream					G150	G200 G280 (2012)	G350	G450	G500 G550 G650
Hawker		Premier I / IA	200 (slowed)	400XP (suspended)	750 900XP	4000			
Cessna	Mustang M2 (2015)	CJ1+ CJ2+	CJ3 CJ4 Encore+	XLS+	Sovereign Latitude (2015)	Citation X Citation Ten (Dec 2011)	Columbus (cancelled)		
Honda	HondaJet (2013)								

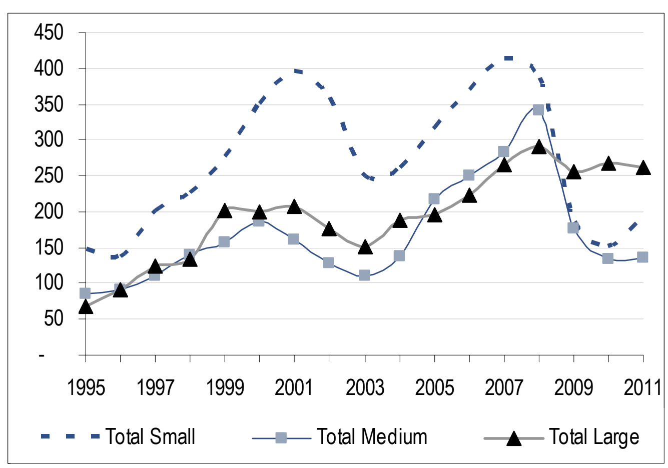
Source: Company Information, Citi Investment Research and Analysis

Figure 82. Delivery Share (1994-2011)



Source: Citi Investment Research and Analysis, GAMA

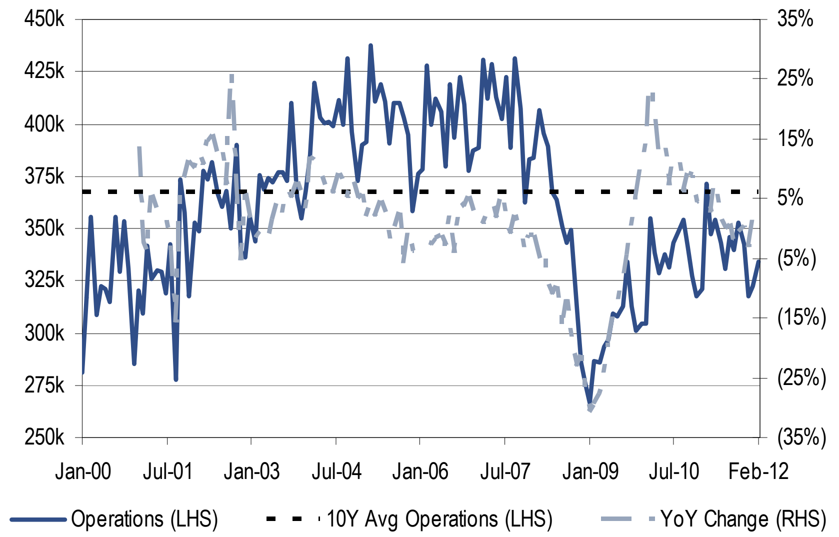
Figure 83. Delivery Quantities (1994-2011)



Source: Citi Investment Research and Analysis, GAMA

Biz jet operations continue to slide on an absolute and y/y basis as economic weakness set in and as comps become more difficult.

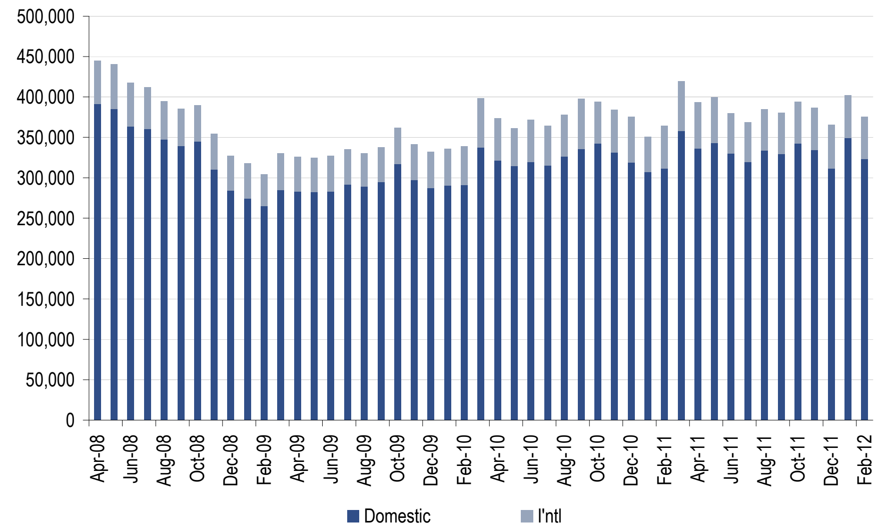
Figure 84. Business Jet Operations (2001-Present)



Source: FAA

Total bizjet operations are still below their 2008 peak.

Figure 85. Biz Jet Operations (Arrivals + Departures)



Source: Citi Investment Research and Analysis, FAA

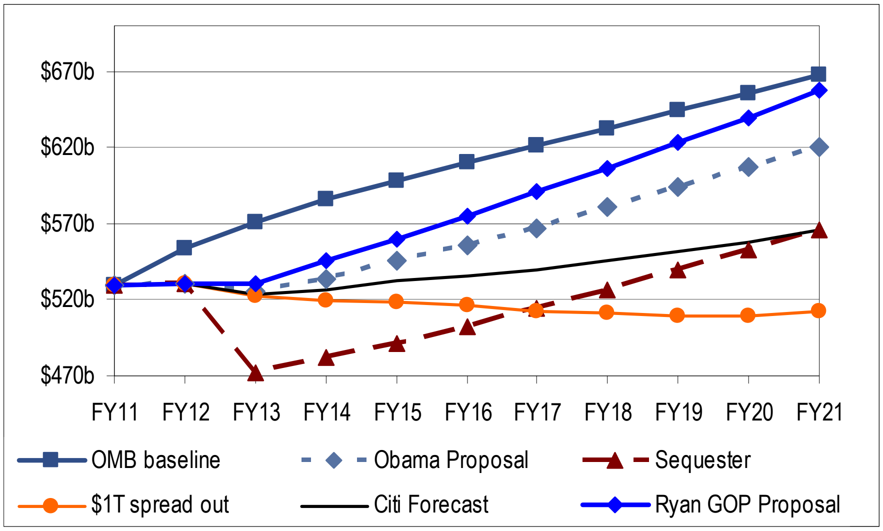
Defense Budget Scenarios

We present a range of possible outcomes for the defense budget. The FY13 budget proposal came in at $525b, in line with Tranche 1 of the BCA (i.e. ignoring sequester which is slated to go into effect beginning in January 2013).

A definitive defense budget forecast is challenging in the current environment given the Super Committee's failure and our view that the full sequestration will not go into effect beginning in January 2013. The range of outcomes is bound at the top by Tranche 1 of the Budget Control Act (~$490b reduction over 10Y) and at the bottom by sequestration (~$1T over 10Y). In 2012, we expect Congress to address the looming sequestration by proposing an alternative budget deal. The deal could include incremental reductions to the defense budget beyond the $490b in Tranche 1 and could total as much as $1T over 10Y. However, an alternative deal calling for a total of $1T of savings over 10Y would be more *spread out*, likely back-end weight the savings, producing a flattish 10Y budget trajectory which is more easily achieved vs. the sudden drop-off forced by sequestration.

The DoD's FY13 budget proposal reflects only Tranche 1. See our take on the budget submission: Keeping Things Fresh - Investment pays more today but that doesn't mean its going away.

Figure 86. DoD Base Budget Scenarios ($current)



Source: Citi Investment Research and Analysis

Figure 87. US DoD Budget Scenarios

	FY11	FY12	FY13E	FY14E	FY15E	FY16E	FY17E	FY18	FY19	FY20	FY21	CAGR FY12-21	CAGR FY11-21	CAGR FY11-16	CAGR FY13-17
OMB baseline	529	554	571	586	598	611	622	633	644	656	668	2.10%	2.35%	2.91%	2.15%
Nominal y/y %		*4.6%*	*3.1%*	*2.7%*	*2.0%*	*2.1%*	*1.8%*	*1.8%*	*1.8%*	*1.8%*	*1.8%*				
Obama Proposal	529	531	525	534	546	556	567	581	594	607	620	1.74%	1.60%	0.99%	1.94%
Nominal y/y %		*0.3%*	*(1.1%)*	*1.7%*	*2.2%*	*1.8%*	*2.0%*	*2.4%*	*2.2%*	*2.2%*	*2.2%*				
Sequester	529	531	472	482	491	502	515	527	539	553	566	0.72%	0.68%	(1.05%)	2.16%
Nominal y/y %		*0.3%*	*(11.1%)*	*2.0%*	*2.0%*	*2.1%*	*2.5%*	*2.4%*	*2.4%*	*2.5%*	*2.4%*				
$1T spread out	529	531	523	519	519	516	512	511	509	510	513	(0.39%)	(0.32%)	(0.50%)	(0.51%)
Nominal y/y %		*0.3%*	*(1.6%)*	*(0.7%)*	*(0.1%)*	*(0.5%)*	*(0.8%)*	*(0.2%)*	*(0.4%)*	*0.1%*	*0.6%*				
Citi Forecast	529	531	524	527	532	536	540	546	551	558	566	0.72%	0.68%	0.26%	0.74%
Nominal y/y %		*0.3%*	*(1.4%)*	*0.5%*	*1.1%*	*0.7%*	*0.7%*	*1.2%*	*1.0%*	*1.2%*	*1.4%*				
Ryan GOP Proposal	529	531	531	545	560	575	591	607	623	640	657	2.40%	2.19%	1.68%	2.70%
Nominal y/y %		*0.3%*	*0.0%*	*2.7%*	*2.7%*	*2.7%*	*2.7%*	*2.7%*	*2.7%*	*2.7%*	*2.7%*				
OCO Est.	158	118	83	50	39	29	19	10	5	2	0	(100%)	(100%)	(29%)	(31%)
Nominal y/y %		*(25%)*	*(30%)*	*(39%)*	*(23%)*	*(25%)*	*(35%)*	*(45%)*	*(55%)*	*(65%)*	*(100%)*				

Source: Citi Investment Research and Analysis

Appendix A-1

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Data current as of 31 Mar 2012	**Buy**	**Hold**	**Sell**	**Buy**	**Hold**	**Sell**
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