22 January 2012 │ 53 pages

The Itinerary: Citi's Global A&D Weekly

Previewing DoD's Budget Preview

- Industry Overview
- Weekly

- **In Focus: DoD's Budget Preview** — Just like last year, the US Pentagon on Thursday will preview its FY13 budget which doesn't come out until early February. We expect DoD to focus on how it will save ~$260b over the next 5 years (ignoring sequestration), which includes reducing/delaying/cancelling certain programs as well as adjusting benefits to constrain personnel & operations cost growth. Defense stocks largely outperformed following last year's budget preview as the market digested the fact that investment was still a priority. It might be tough to see a repeat this year with US Congressional and Presidential politics hanging in the breeze, but we expect the announcement to support our view that defense investment will not be the primary bill payer in the coming drawdown. *Page 3*

- **The Week Ahead** — It's a busy earnings week with CHG, TXT, BA, GD, RTN, PCP, LMT, and WAIR all reporting. DC will also be busy with the President's State of the Union address on Tuesday night and the DoD's FY13 budget preview on Thursday. We could also see a decision in India's $10.5b 126-aircraft fighter jet competition between Eurofighter (EADS/BAE) and Dassault. *Page 8*

- **The Week That Was** — Rockwell Collins reported in-line results but had rosy words for bizjet production rates (sees up double-digits in 2012). Jeremy Bragg reiterated his Buy on BAE Systems and Hugo Mills previewed Chemring's FY11 results. *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.

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Focus: Previewing the DoD Budget Preview

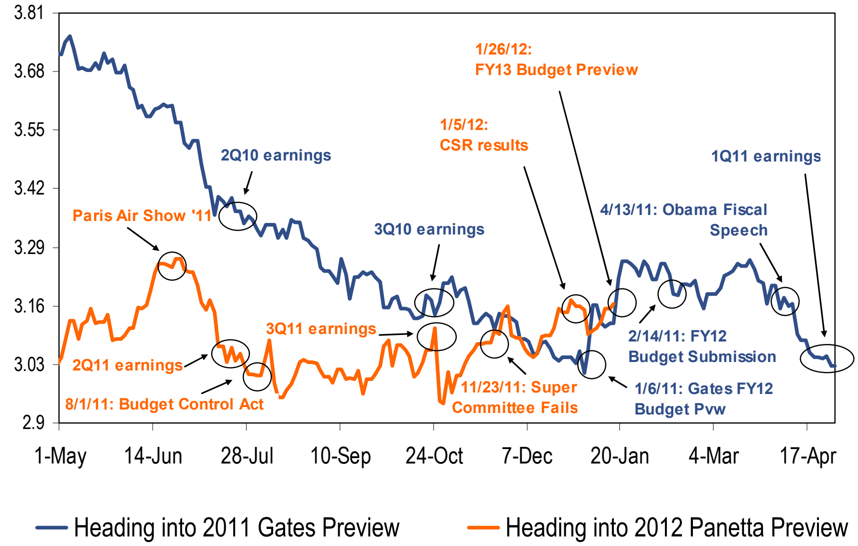
On Thursday, the Pentagon will outline how it expects to cut spending by ~$260b over the next 5Y and the major impacts on various parts of the budget. This will serve as a preview of February's official FY13 budget submission and follows up on the Jan 5 CSR roll-out.

On Thursday (January 26), the DoD will preview how it expects to reduce spending by $490b over the next 10 years. We expect ~$260b of these cuts to come over the 5Y period (FY13-17), ~50% of which we expect to come from the modernization accounts. Thursday's announcement will come ahead of the budget submission on February 6 (expected), in line with former SecDef Gates' practice of previewing major programmatic and policy changes in front of the official budget release. In play on Thursday will be every cost center for DoD, including weapons accounts and personnel/operations costs.

This will be the 2nd leg of a three-leg FY13 budget process: Leg #1 was the qualitative roll-out of the Comprehensive Strategic Review (CSR) on January 5 (see: Underweight Europe, Overweight Asia - New Pentagon strategy calls for focused investment). Leg #3 will be the official submission on February 6. Also worth noting is that President Obama will deliver his State of the Union to Congress on January 24 at which he might further press his case for a new defense footing (among other issues). We note that in the month following the FY12 budget preview on January 6, 2011, US defense primes outperformed the S&P 500 by 500 bps (Figure 1).

US Defense primes outperformed the market last year following Secretary Gates' FY12 budget preview (see blue line). They've also performed better than we expected since the Super Committee failed in late November (see orange line), but we expect the FY13 budget preview to support our view that investment continues to be a DoD priority.

Figure 1. US Defense Primes Around Budget Time (relative px vs. S&P)



Source: Citi Investment Research and Analysis, FactSet

Top 5 Watch-items

1. Composition of the Cuts

Who's paying for the savings? Modernization or personnel/operations? In our view, modernization will contribute more over 5Y (50%) than over 10Y (30%).

We already know the top-line numbers for FY13E-FY17E (Figure 2) and roughly what level of cuts (~$260b) it implies vs. the baseline, but how will they be split up among the different accounts?

We expect the investment account (procurement + R&D) to contribute ~50% of near-term cuts vs. ~30% over the long-term (in line with its regular budget share). DoD may not release these details on Thursday (it might save them for the official submission), but we'll get clues as to where the Pentagon will direct its budget scalpel. Although acquisition programs represent roughly a third of total spending, the fastest growers are personnel costs including retirement and health care. Much like the rest of the economy, one can only achieve so much through discretionary equipment spending vs. the long-run cost curves one can shift by adjusting the mandatory side of the ledger. See Figure 2 for our budget forecast through FY17E, and Figure 3 for our investment account scenarios.

Figure 2. FY13E-FY17E DoD Budget Outlook

	FY13E	FY14E	FY15E	FY16E	FY17E	CAGR FY11-16	CAGR FY13-17
OMB baseline	571	586	598	611	622	2.91%	2.15%
Nominal y/y %	*3.1%*	*2.7%*	*2.0%*	*2.1%*	*1.8%*		
Est FY13 Proposal	523	533	545	556	568	0.99%	2.06%
Nominal y/y %	*(1.4%)*	*1.8%*	*2.3%*	*1.9%*	*2.2%*		
Sequester	472	482	491	502	515	(1.05%)	2.16%
Nominal y/y %	*(11.1%)*	*2.0%*	*2.0%*	*2.1%*	*2.5%*		
Adding: OCO	83	50	39	29	19	(29%)	(31%)
Nominal y/y %	*(30%)*	*(39%)*	*(23%)*	*(25%)*	*(35%)*		
Total DoD							
Est FY13 Proposal	606	583	584	585	587	(3.16%)	(0.81%)
Nominal y/y %	*(6.6%)*	*(3.8%)*	*0.1%*	*0.2%*	*0.3%*		
Sequester	555	532	530	531	533	(5.02%)	(1.00%)
Nominal y/y %	*(14.4%)*	*(4.1%)*	*(0.4%)*	*0.2%*	*0.4%*		

Source: Citi Investment Research and Analysis

Figure 3. Investment Account Scenarios

	FY13E	FY14E	FY15E	FY16E	FY17E	CAGR FY11-16	CAGR FY13-17
OMB Baseline	193	200	201	207	210	3.13%	2.12%
Nominal y/y %	*2.6%*	*3.2%*	*0.7%*	*2.8%*	*1.8%*		
30% Share	179	183	185	190	194	1.44%	2.03%
Nominal y/y %	*0.4%*	*2.4%*	*0.8%*	*2.8%*	*2.1%*		
40% Share	174	178	180	185	189	0.85%	2.00%
Nominal y/y %	*(2.3%)*	*2.1%*	*0.9%*	*2.8%*	*2.2%*		
50% Share	170	173	174	179	183	0.24%	1.97%
Nominal y/y %	*(4.9%)*	*1.8%*	*1.0%*	*2.7%*	*2.4%*		
60% Share	165	167	169	174	178	(0.38%)	1.94%
Nominal y/y %	*(7.6%)*	*1.5%*	*1.0%*	*2.7%*	*2.5%*		
70% Share	160	162	164	168	173	(1.01%)	1.90%
Nominal y/y %	*(10.2%)*	*1.2%*	*1.1%*	*2.7%*	*2.6%*		

Source: Citi Investment Research and Analysis

2. Program Delays & Cancellations

Within the investment account reductions, we expect savings to come from a variety of programs.

- **F-35 (LMT, BAE, NOC):** At a similar roll-out in early January 2011, Secretary Gates announced decisions stemming from the completion of the Technical Baseline Review (TBR): extending the development program, delaying production units (124) beyond the 5-year window, and putting the F-35 B (STOVL) on "probation." Panetta took the B off "probation" on Friday, but we expect a further ~180 aircraft to be delayed out of the 423-plane 5Y plan as DoD works to decrease the overlap between testing and production (aka "concurrency"). At this point, it does not appear as if the US will reduce its ~2,400 intended unit buy, although several JSF coalition partners' orders appear weak at this point. Still, we expect new JSF buyers (Japan, Israel, and potentially Korea) to fill in some of the gaps left by US delays and other partners' reductions.

Figure 4. JSF International Outlook

Consortium	Original	Current Intention		Outlook	Probable
US	2,443	2,443	→	Likely re-baseline of intended buy in Jan/Feb 2012	2,350
UK	138	40 - 60	→	Reduced from 138, w/ option to upsize; will buy 'C' instead of 'B'	50
Italy	131	TBD	→	Defense review puts at least 1/3 at risk; still building domestic facility	50
Turkey	100	100	→	Committed to ordering 2 in Jan 2012 despite concerns of tech access	85
Australia	100	100	→	Committed to 14; will decide in 2012 on entire buy (~$16.8b)	85
Netherlands	85	TBD	→	Delayed 3-4 years; first contract in 2017; urging Denmark/Norway to buy	45
Canada	80	65	→	Govt. supported, but expect Parliament opposition	65
Denmark	48	TBD	→	Delayed decision 2 years; reportedly considering F/A-18 Super Hornet	24
Norway	48	TBD	→	Parliament decision March/April; 1st delivery 2019 relies on missile deal	24
New Partners	**Original**	**Current Intention**		**Outlook**	**Probable**
Israel	0	20	→	20 w/in LRIP 7 & 8, with potential upside (up to 75 through 2030)	30
Japan	0	42	→	Announced winner of F-X comp in Dec 20 2011; likely includes 4 in FY12	42
Potentials	**Original**	**Current Intention**		**Outlook**	**Probable**
Singapore	0	< 100	→	Security cooperation participant; no decision yet	15
South Korea	0	40 - 60	→	F-35 in competition against other platforms	35
Other Euro	0	TBD	→	Put off by economic pressures	0
Total	**3,173**		→	**We see a 9% reduction vs. the original plan →**	**2,900**

Source: Company reports, Citi Investment Research and Analysis

- **V-22 Osprey (BA, TXT Bell Helicopter):** The V-22 is a tiltrotor aircraft, meaning it flies higher, faster, and farther than conventional choppers, and plays a significant role in US operations in Afghanistan and Iraq since it does not need a runway to land. Notably, the V-22 is said to have carried Osama bin Laden's body from Afghanistan to the USS Carl Vinson before it was buried at sea. The current $10.6b multi-year procurement (MYP I) was signed in March 2008 and covers FY08-12. With the total program of record calling for ~459 units (360 Marines, 48 for the Navy, and 50 for Air Force Special Ops), in August Bell-Boeing submitted a follow-on MYP proposal to extend production into 2019. By our estimate, the MYP II proposal includes 122 aircraft (funding acquisition beginning in FY15). Thursday's announcements could adjust the program of record and therefore impact the likely outcome of MYP II, which probably won't be signed until mid-2012. There is also international demand, with India, Israel, Canada, and Saudi Arabia having expressed interest.

Figure 5. V-22 Budget

		FY12	FY13	FY14	FY15	FY16	To complete
USN V-22	Units	30	23	23	23	23	71
	$m	2,317	1,895	1,849	1,889	1,828	6,358
USAF CV-22	Units	6	4	3	0	0	0
	$m	487	291	267	0	0	0
Total V-22	**Units**	**36**	**27**	**26**	**23**	**23**	**71**
	$m	**2,805**	**2,185**	**2,116**	**1,889**	**1,828**	**6,358**

Source: Navy & Air Force FY12 Request

Figure 6. V-22 MYPs

	Signed	Production through	Value ($m)	Quantity
MYP I	2008	2014	$10,600	174
MYP II	2012E	2019	TBA	~98~122

Source: Citi Investment Research and Analysis

- **Global Hawk (NOC)**: Extending the program could save ~$3b over 10Y given that development of new variants has been slow and expensive partly due to rapid fielding and heavy use of the original platform. We still expect the platform to see strong support in any budget decisions given the focus on UAVs, although funding could be slowed.

Figure 7. FY12 Global Hawk Budget Plan

		FY12	FY13	FY14	FY15	FY16	To complete
USAF RQ-4	Units	3	3	3	1	1	13
Procurement	$m	574	484	476	316	204	1,521
USN BAMS	Units	n/a	n/a	n/a	n/a	n/a	TBD
R&D	$m	548	682	228	165	233	TBD
Total	**Units**	**3**	**3**	**3**	**1**	**1**	**TBD**
Global Hawk	**$m**	**1,123**	**1,165**	**705**	**481**	**437**	**TBD**

Source: DoD FY12 Budget Request

- **Army ground vehicles,** specifically JLTV and GCV, have come under significant pressure of late due to the belief that the US would not be participating in any new ground wars any time soon.

  Designed to replace the Humvee, the Joint Light Tactical Vehicle (JLTV), is in initial development stages with several industry teams vying for the contract. Three industry teams were awarded development contracts: Navistar/BAE/NOC, LMT/BAE, and GD/AMG. Oshkosh is also likely to submit a proposal and recent press reports suggest Ford is mulling the same. Amidst this hyper competition, the US Senate proposed cancelling the program due to lack of need, although the final FY12 budget officially funds continued development. Extending the program could save ~$15b over 10Y.

  The Ground Combat Vehicle (GCV) is in an earlier stage vs. JLTV since the 24-month development contracts were only awarded last summer to GD/LMT/RTN/Tognum and BAE/NOC/QQ/iRobot/Tognum/Saft. Delaying that program could save $6b over 10Y. GCV will replace the larger Bradley infantry fighting vehicles, although the Army is thinking about simply replacing the old Bradleys with in-production vehicles including Rheinmetall's and KMW's Puma, or GD's Namer.

Likely cancellations:

Several programs are likely to be cancelled on Thursday.

- **Defense Weather Satellite System (NOC):** $445m request in FY12 which the FY12 omnibus bill cancelled, but left $43m for termination fees to NOC and delegated $125m for a follow-on program.

- **Joint Air-to-Ground Missile (LMT vs. RTN/Boeing):** $235m in R&D funding request in FY12 and slated to be ~$5-8b over 20 years and the last big missile procurement for a long time. JAGM started when DoD ended the Joint Common Missile program in ~2007. The Army and Navy first proposed terminating JAGM in October 2011, a plan which is likely to be approved on Thursday. In place of JAGM, DoD keeps procuring Maverick (RTN), TOW (RTN) and Hellfire (LMT).

- **Light Attack/Armed Reconnaissance (LMT/Hawker vs. Boeing):** Air Force requested $159m in FY12 for this development program which has been repeatedly delayed and reduced over the past few years.

- **C-130 AMP (BA):** $4b over the life of the program and $1.9b FY13-16E. For more, see: C-130 Modernization Program on the Chopping Block.

3. Carrier Count (HII)

While we still expect a relatively stable Naval shipbuilding account, adjustments are likely made that save on operations & personnel costs.

By law, the US must have 11 nuclear aircraft carriers. It will have 10 for a brief period between November (when the Enterprise is decommissioned) and before Ford is delivered in 2015. While the President is reportedly looking to maintain the carrier fleet, we expect the Administration could ask Congress to reduce the legal requirement in order to retire older carriers earlier than planned and continue to build the new models (the Ford Class). This might be politically tough during an election year in which defense issues (and jobs) are touchy subject.

4. Managing personnel costs

Politically-speaking reducing personnel costs are the hardest cuts to get through Congress, but they're also the most effective given the benefit of adjusting long-term cost curves.

We expect DoD to highlight where it can save money outside of the modernization accounts. This includes proposals to curtail health care and retirement costs over the next 10Y. For instance, the Congressional Budget Office estimates that a combination of placing limits on TRICARE benefits and increasing cost sharing could yield $154b over 10Y in budget savings (31% of mandated 10Y savings). Simply consolidating DoD's retail activities could save $9b (2% of mandated 10Y savings).

5. Army on the Defensive

The traditional 1/3 split between the Services is a thing of the past amidst this ground force drawdown. In the last budget, the Air Force took some of the Army's share over the next 5Y. We expect this to hold, with the potential for more Air Force/Navy gains at the Army's expense.

We expect DoD to withdraw 2 army infantry brigades from Europe and instead maintain presence using rotational units. The move would cut 10-15k soldiers from the 42k strong Army presence.

We also expect DoD to set a new target for Army end-strength of ~490k vs. the previous target of 520k (vs. current end-strength of 569k). In our view, this could be worth up to ~$100b over 10Y, 80% of which is related to personnel and operations accounts. For more on personnel reductions see p. 16 of: Cash and Capital Deployment - Positive Trends in 2012 for Aerospace & Defense.

The Weeks Ahead & Upcoming Citi Events

Figure 8. Week Ahead

Date	Time	Event	Commentary	Ticker(s)
24-Jan-12	-	Chemring FY11 results	See Hugo Mills preview on page 9	CHG
24-Jan-12	9:00 PM ET	State of the Union	Obama addresses US Congress	-
25-Jan-12	8:00 AM ET	TXT 4Q11 earnings call	Preview on pg 9; contact us for cheat sheet excel tool	TXT
25-Jan-12	10:30 AM ET	BA 4Q11 earnings call	Preview on pg 9; contact us for cheat sheet excel tool	BA
25-Jan-12	11:30 AM ET	GD 4Q11 earnings call	Preview on pg 9; contact us for cheat sheet excel tool	GD
26-Jan-12	9:00 AM ET	RTN 4Q11 earnings call	Preview on pg 9; contact us for cheat sheet excel tool	RTN
26-Jan-12	10:00 AM ET	PCP F3Q12 earnings call	Preview on pg 9; contact us for cheat sheet excel tool	PCP
26-Jan-12	3:00 PM ET	LMT 4Q11 earnings call	Preview on pg 9; contact us for cheat sheet excel tool	LMT
26-Jan-12	5:00 PM ET	WAIR F1Q12 earnings call	Preview on pg 9; contact us for cheat sheet excel tool	WAIR
26-Jan-12	TBD	DoD FY13 Budget Preview	See focus piece this week	Defense
This week	NA	Potential India fighter decision (could be later in January)	126 jets for ~$10.5b; Eurofighter Typhoon (EADS, BAE) vs. Dassault Rafale	EADS/ BAE

Source: Citi Investment Research and Analysis

Figure 9. Month Ahead

Monday	Tuesday	Wednesday	Thursday	Friday
Jan 23	**Jan 24**	**Jan 25**	**Jan 26**	**Jan 27**
Potential MMRCA decision	Chemring FY11 results President Obama's State of the Union speech	BA earnings GD earnings TXT earnings	LMT earnings RTN earnings PCP earnings WAIR earnings DoD budget detail briefing	
Jan 30	**Jan 31**	**Feb 01**	**Feb 02**	**Feb 03**
Potential Navy NGEN award (HP incumbent)		NOC earnings ERJ 4Q results Pegasus air 100 NB order (sometime in February)		
Feb 06	**Feb 07**	**Feb 08**	**Feb 09**	**Feb 10**
FY13 DoD budget submission		Boeing presentation @ Cowen Conference	RR FY11 results Embraer Investor day	
Feb 13	**Feb 14**	**Feb 15**	**Feb 16**	**Feb 17**
TXT briefing @ Helicopter Expo (Dallas, TX)	Aviation Week acquisition event (DC)	2nd Annual Citi DC Defense Bus Tour	2nd Annual Citi DC Defense Bus Tour BAE FY11 results	

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

Figure 10. Citi-Sponsored Events

Date	Description	Location	Companies
Feb 15 - 16, 2012	DC Bus Tour - Defense Budget Reactions	Washington, DC	NOC, LMT, GD, BA, CACI
May 17, 2012	Newport News facility visit	Virginia, US	HII
July 9 - 13, 2012	Farnborough Air Show	UK	TBD
2H12	Primus facility visit	Seattle, US	PCP
Sep 19 - 20, 2012	Citi Global Industrials Conference	Boston, MA	TBD

Source: Citi Investment Research and Analysis

The Week in Review

Recent Publications

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

- Jason Gursky comments on COL's F1Q12 results:
  - Rockwell Collins, Inc. (COL) - Bizjets beginning to build? Not enough news for us; Still Neutral;
- Jason Gursky previews what will be a busy earnings week for US defense primes:
  - Flight Plan 2012: What to Buy This Year - We Favor BA, PCP, WAIR, RTN, LMT and GD
- Jeremy Bragg commented on EADS' positive new year's press conference & also reiterated his buy on BAE Systems:
  - EADS (EAD.PA) - Upbeat New Year Press Conference;
  - BAE Systems (BAESY) - Kicking the Tyres: Secure Dividend Yield Remains Very Attractive;
- Hugo Mills previews Chemring results:
  - Chemring Group (CHG.L) - Rebuilding the credibility;
- Stephen Trent comments on a Bombardier C-Series order:
  - BOMBARDIER (BBDb.TO) - Switzerland’s PrivatAir Orders 5 CS100s;

150 of the 1000+ MAX commitments are included in Boeing's order tally (all made by launch customer Southwest in December).

Commercial Aero Order/Delivery Tracker

Figure 11. 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	145	260
Aug-11	127	234	361
Sep-11	59	23	82
Oct-11	7	193	200
Nov-11	96	149	245
Dec-11	287	0	287
Jan-12	28	6	34
2011	**921**	**1,521**	**2,442**

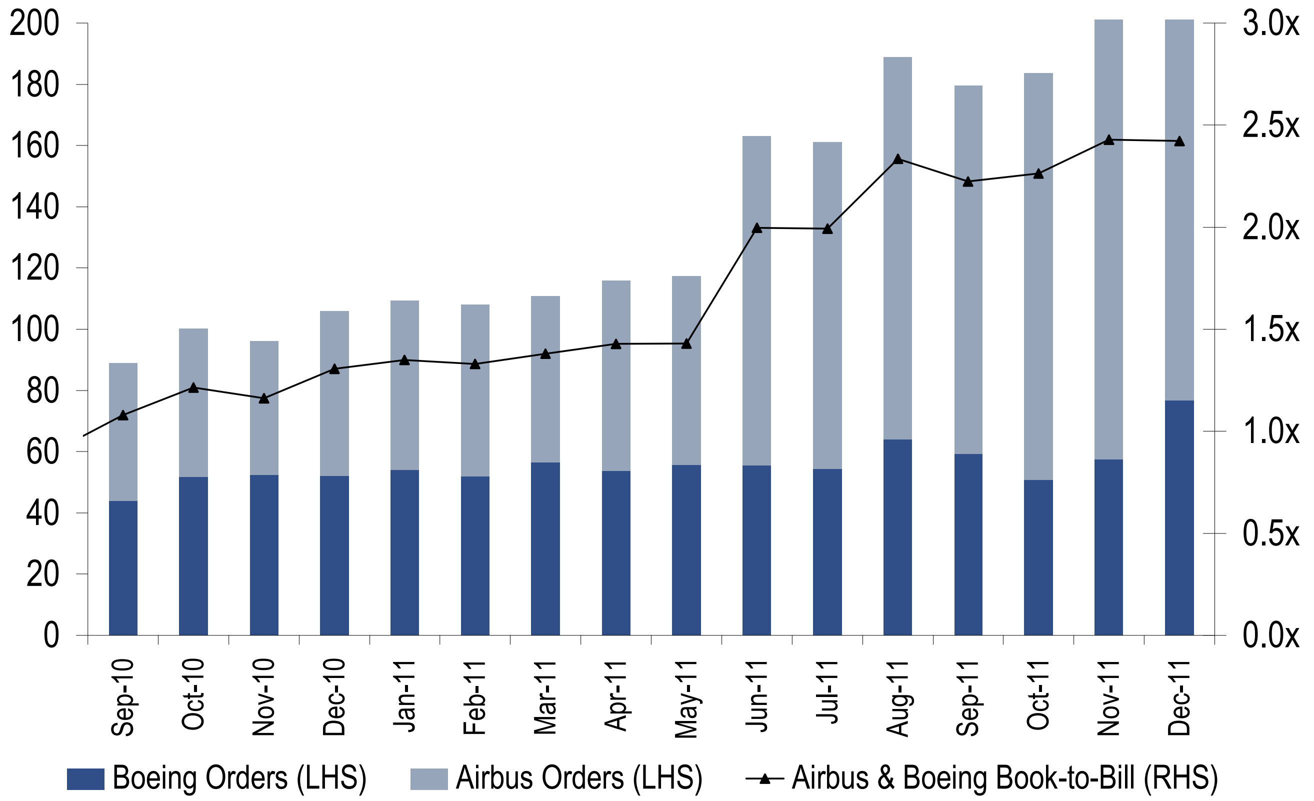
Source: CIRA, Boeing, Airbus, Ascend

Figure 12. 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	54	**105**
Jan-12	15	20	**35**
2011	**477**	**531**	**1008**

Source: CIRA, Boeing, Airbus, Ascend

Figure 13. 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.

BA won the week with a $377m contract for a Wideband Global SATCOM (WGS) satellite.

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

Figure 14. Weekly US DoD Orders ($m)

Date	BA	LMT	NOC	RTN	TXT	Total
20-Jan-12		22	32			**54**
19-Jan-12				30		**30**
18-Jan-12	4	94			4	**101**
17-Jan-12		3	7	15		**25**
13-Jan-12	377					**377**
Total	**380**	**119**	**39**	**45**	**4**	**586**

Source: Citi Investment Research and Analysis, DoD

Figure 15. Running 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	1,867		165	1,316	84	173	166		**3,772**
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%**
y/y									
1Q11	(83%)	(99%)	(93%)	(93%)	(98%)	(94%)	nm	(95%)	**(89%)**
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%**
2011	45%	(29%)	33%	(17%)	(55%)	(9%)	nm	159%	**8%**

Source: Citi Investment Research and Analysis, DoD

3Q11's announced DoD contract value was down ~60% y/y, partly due to tough comps with several large awards in 3Q10 including a $11.9b B-52 sustainment award to Boeing, a $5b CDC IT award to LMT, and a $5.3b F/A-18 award to Boeing.

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 16. 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 1,000 firm orders to-date), as 737 MAX commitments (~850) continue to flip to firm orders (Southwest is the only one in the order book with 150). In our view, strong demand for the NEO and MAX supports customer demand 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?

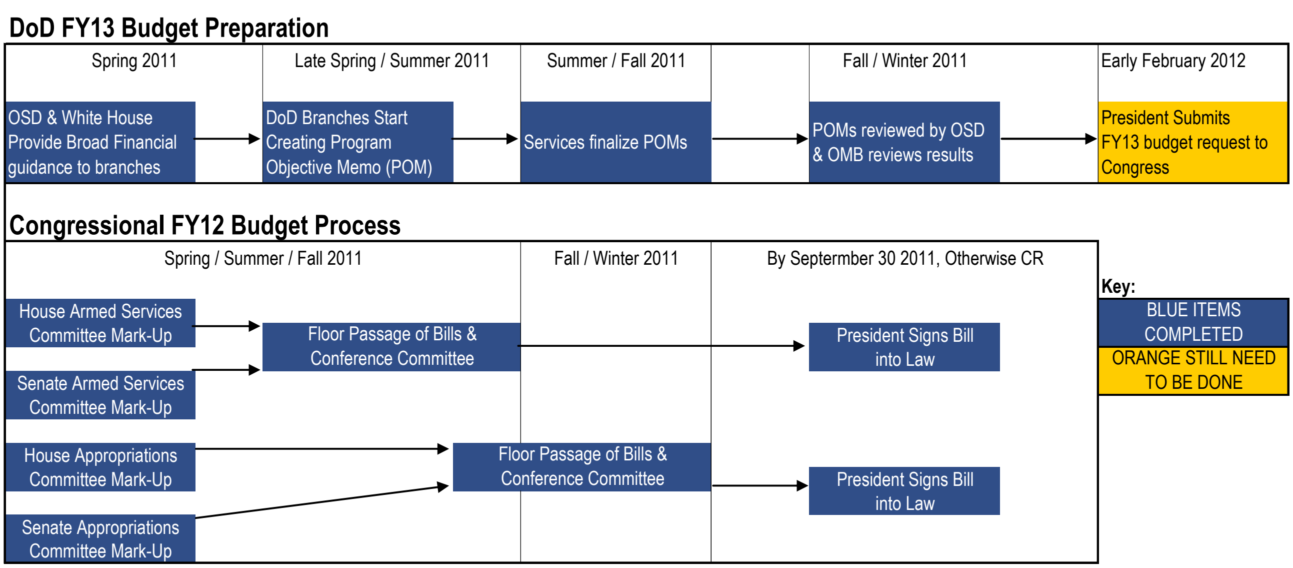
The President signed a full-year spending bill for FY12 in mid-December, ending the Continuing Resolution (CR) which had been in place since FY11 ended on September 30.

The FY12 DoD base budget finished up at $531b (+ $116b OCO) vs. $553b base request ($118b OCO request). The FY13 base request is likely to be $~523b, in line with Tranche 1 of the Budget Control Act. Even though the Super Committee failed, sequestration does not go into effect until January 2013.

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 is set to be introduced on February 6, and will likely reflect only Tranche 1 of the debt deal (i.e. it ignores sequestration). We expect a FY13 base request of $523b + supplemental request of $83b (down 6% y/y). Before the budget submission (likely Jan 26), however, we expect DoD to announce some budgetary details behind the Comprehensive Strategic Review (qualitatively rolled out January 5), including some program cancellations/reductions.

Figure 17. 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 **MTU**.

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. In our view, this outlook is misplaced 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.

We find US defense companies on the other hand are trading at a 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 note that shares appear to be pricing in perpetual declines in defense spending. Given our less draconian view, we believe shares are likely to re-rate to historic levels over time once investor concern about the future trajectory of defense spending abates. In our view, we look to the DoD's Comprehensive Strategic Review (expect public rollout in early January 2012) and the delivery of the FY13 budget (early Feb 2012) as the primary catalysts for this re-rating process.

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 with the first deliveries behind us

2. January/February: India MMRCA decision (126 aircraft for ~$10.5b)

3. January 26: DoD releases preliminary budget details behind the Comprehensive Strategic Review

4. February 6: introduction of FY13 US DoD budget. Likely to be in line with Tranche 1 of the summer's debt deal (~$523b base).

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 18. Core Global A&D Recommendations and Key Investment Points

Name	Rating	Current Price	Target Price	ETR	Current FTM P/E	Target FTM P/E	Key Investment Points
Boeing	Buy	USD 75.52	USD 87	17%	15.4x	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 4.49	CAD 7.70	74%	8.7x	13.6x	- Growing large-cabin bizjet demand - Cseries activity posied to heat up - Growth in emerging market transportation supplementing the Franco-German backbone
EADS	Buy	EUR 25.65	EUR 31	22%	14.0x	11.6x	- 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 82.78	USD 89	12%	10.6x	9.7x	- 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 177.16	USD 194	10%	17.7x	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 49.88	USD 56	16%	9.3x	9.6x	- 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 7.36	GBP 8.20	14%	13.4x	13.1x	- 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 19. Global Coverage Summary

Name	Ticker	Rating	Mkt Cap (USD $m)	Current Price	Target Price	ETR
Buy						
BAE Systems	BA-LON	1	$15,766	GBP 3.14	GBP 3.40	15%
Boeing	BA	1	$56,129	USD 75.52	USD 87	17%
Bombardier	BBDb.TO	1	$6,369	CAD 4.49	CAD 7.70	74%
Chemring Group	CHG-LON	1	$1,346	GBP 4.49	GBP 6.30	44%
Cobham	COB-LON	1	$3,256	GBP 1.94	GBP 2.00	6%
EADS	EAD-FR	1	$27,190	EUR 25.65	EUR 31.00	22%
Embraer	ERJ	1	$5,146	USD 27.80	USD 31	13%
General Dynamics	GD	1	$25,808	USD 72.47	USD 88	24%
Huntington	HII	1	$1,647	USD 33.74	USD 36	7%
Lockheed Martin	LMT	1	$26,785	USD 82.78	USD 89	12%
MTU Aero Engines	MTX-DE	1	$3,557	EUR 52.95	EUR 55	6%
Northrop Corp	NOC	1	$16,040	USD 61.39	USD 69	16%
Precision Cast	PCP	1	$25,545	USD 177.16	USD 194	10%
Raytheon	RTN	1	$17,263	USD 49.88	USD 56	16%
Rheinmetall	RHM-ETR	1	$2,100	EUR 41.05	EUR 43	9%
Rolls-Royce	RR-GB	1	$21,381	GBP 7.36	GBP 8.20	14%
Wesco Aircraft	WAIR	1H	$1,124	USD 13.13	USD 16	22%
Neutral						
DigitalGlobe	DGI	2	$778	USD 16.82	USD 22	31%
Meggitt	MGGT-LON	2	$4,481	GBP 3.71	GBP 3.70	3%
QinetiQ	QQ-LON	2	$1,384	GBP 1.35	-	-
Rockwell Collins	COL	2	$8,759	USD 59.87	USD 61	3%
Textron Inc	TXT	2	$5,981	USD 21.50	USD 21	(2%)
Thales	HO-PAR	2	$6,705	EUR 25.66	EUR 23	(8%)
Sell						
Finmeccanica	FNC-MIL	3	$2,480	EUR 3.32	EUR 2.60	(22%)

Source: Citi Investment Research and Analysis, FactSet

Figure 20. Revenue Estimates: CIRA vs. Consensus

	Citi Revenue Est. (m)			Consensus Revenue Est. (m)		
	2011	2012	2013	2011	2012	2013
BAE Systems	£20,040	£20,210	£19,990	£20,177	£20,346	£20,522
Boeing	$68,387	$80,799	$87,038	$68,425	$78,536	$85,948
Bombardier	-	$18,735	$19,404	-	$18,677	$19,479
Chemring Group	£744	£840	£877	£749	£853	£887
Cobham	£1,800	£1,767	£1,735	£1,846	£1,749	£1,802
DigitalGlobe	$332	$382	$429	$333	$382	$434
EADS	€ 49,193	€ 55,670	€ 60,050	€ 47,705	€ 51,375	€ 54,200
Embraer	$5,641	$6,049	$6,378	$5,714	$6,256	$6,832
Finmeccanica	€ 17,480	€ 17,530	€ 17,550	€ 17,338	€ 17,109	€ 17,266
General Dynamics	$32,805	$35,624	$36,278	$32,877	$34,118	$34,436
Huntington	$6,473	$6,521	$6,412	$6,470	$6,530	$6,480
Lockheed Martin	$46,571	$46,305	$46,563	$46,584	$46,228	$45,823
Meggitt	£1,460	£1,636	£1,733	£1,449	£1,623	£1,712
MTU Aero Engines	€ 2,888	€ 3,210	€ 3,447	€ 2,887	€ 3,122	€ 3,386
Northrop Corp	$26,609	$26,674	$26,819	$26,614	$26,213	$25,827
Precision Cast	-	$7,455	$8,841	-	$7,419	$8,514
QinetiQ	-	£1,461	£1,474	-	£1,500	£1,479
Raytheon	$25,129	$25,542	$25,863	$25,140	$25,122	$25,191
Rheinmetall	€ 4,400	€ 4,890	€ 5,010	€ 4,419	€ 4,920	€ 5,214
Rockwell Collins	-	$4,932	$5,082	-	$4,948	$5,186
Rolls-Royce	£11,650	£13,140	£13,930	£11,418	£12,804	£14,332
Textron Inc	$11,427	$12,020	$12,656	$11,272	$11,921	$12,594
Thales	€ 13,139	€ 12,980	€ 12,810	€ 13,252	€ 13,358	€ 13,447
Wesco Aircraft	-	$776	$835	-	$778	$883

Green = at least 2% above consensus

Source: Citi Investment Research and Analysis Estimates, Thomson

Figure 21. EPS Estimates: CIRA vs. Consensus

	Citi EPS Est.			Consensus EPS Est.		
	2011	2012	2013	2011	2012	2013
BAE Systems	40.4p	39.7p	39.1p	40.2p	40.8p	41.6p
Boeing	$4.48	$4.88	$5.82	$4.49	$4.95	$5.79
Bombardier	-	$0.46	$0.56	-	$0.46	$0.51
Chemring Group	53.9p	59.7p	62.4p	53.2p	60.2p	63.6p
Cobham	19.9p	21.1p	21.5p	19.5p	19.8p	21.2p
DigitalGlobe	$0.15	$0.68	$1.14	$0.13	$0.75	$1.21
EADS	€ 1.02	€ 1.83	€ 2.68	€ 0.92	€ 1.75	€ 2.38
Embraer	$1.43	$0.97	$1.02	$1.93	$2.42	$2.81
Finmeccanica	-€ 1.04	€ 0.64	€ 0.72	-€ 1.69	€ 0.40	€ 0.59
General Dynamics	$7.26	$7.94	$8.47	$7.24	$7.58	$7.98
Huntington	$3.74	$3.15	$4.21	$3.71	$2.95	$3.88
Lockheed Martin	$7.70	$7.98	$9.51	$7.61	$7.78	$8.53
Meggitt	30.7p	33.6p	37.1p	30.7p	34.6p	37.8p
MTU Aero Engines	€ 3.99	€ 4.44	€ 4.73	€ 3.73	€ 4.30	€ 4.89
Northrop Corp	$7.04	$7.03	$7.74	$7.00	$6.81	$6.86
Precision Cast	-	$8.68	$10.62	-	$8.60	$10.32
QinetiQ	-	16.3p	14.2p	-	15.8p	14.4p
Raytheon	$5.07	$5.35	$5.94	$5.05	$5.23	$5.78
Rheinmetall	€ 5.09	€ 5.29	€ 5.84	€ 5.31	€ 5.40	€ 5.96
Rockwell Collins	-	$4.51	$4.88	-	$4.47	$5.02
Rolls-Royce	46.1p	58.5p	62.7p	45.4p	53.4p	60.7p
Textron Inc	$1.18	$1.64	$1.96	$1.17	$1.67	$2.13
Thales	€ 2.33	€ 2.66	€ 3.11	€ 2.50	€ 2.86	€ 3.33
Wesco Aircraft	-	$1.06	$1.20	-	$1.05	$1.25

Red = at least 2% below consensus

Source: Citi Investment Research and Analysis Estimates, Thomson

Global Comp Table

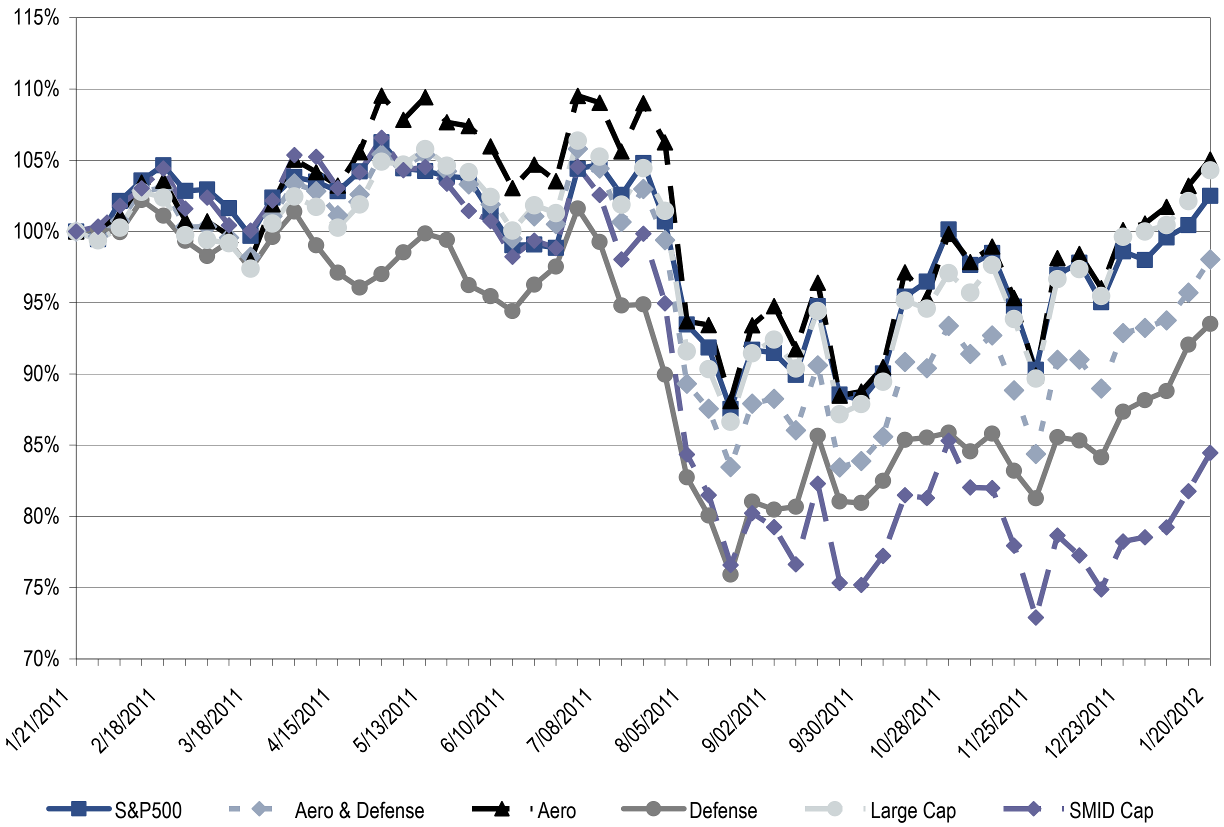
Figure 22. Global Comps

As of January 22, 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	$15,766	5.7%	7.8x	7.6x	4.9x	3.14	(10%)	2.4 - 3.6
Boeing Co. (BA)	1	USD	$56,129	2.3%	15.4x	13.1x	8.6x	75.52	5%	56.0 - 80.7
EADS (EAD-FR)	1	EUR	$27,190	0.9%	14.0x	10.6x	6.7x	25.65	26%	18.3 - 26.2
General Dynamics Corp. (GD)	1	USD	$25,808	2.6%	9.5x	9.1x	6.4x	72.47	(1%)	54.0 - 78.3
Lockheed Martin Corp. (LMT)	1	USD	$26,785	4.8%	10.6x	9.7x	6.7x	82.78	4%	66.4 - 83.7
Northrop Grumman Corp. (NOC)	1	USD	$16,040	3.3%	9.0x	9.0x	4.7x	61.39	(3%)	49.2 - 70.6
Precision Castparts Corp. (PCP)	1	USD	$25,545	0.1%	17.7x	15.0x	14.2x	177.16	26%	136.0 - 179.0
Raytheon Co. (RTN)	1	USD	$17,263	3.4%	9.3x	8.6x	5.8x	49.88	(4%)	38.4 - 53.1
Rolls-Royce Holdings PLC (RR-GB)	1	GBP	$21,381	-	13.4x	11.9x	9.3x	7.36	20%	5.1 - 7.8
Average				**2.4%**	**11.8x**	**10.4x**	**7.5x**		**5%**	
Boeing + Airbus Average				1.6%	14.7x	11.8x	7.7x		16%	
Defense Average				4.0%	9.23x	8.8x	5.7x		(3%)	
Commercial Average				0.9%	14.3x	12.0x	9.2x		13%	
Note: S&P 500 currently trading at 12.6x FTM P/E										
SMID Cap										
Alliant Techsystems Inc. (ATK)		USD	$2,036	1.3%	7.2x	7.3x	4.8x	61.78	(18%)	51.3 - 77.6
Bombardier Inc. (Cl B) (BBD.B-TSE)	1	CAD	$6,369	2.3%	8.7x	7.2x	6.3x	4.49	(21%)	3.3 - 7.3
Booz Allen & Hamilton Inc. (BAH)		USD	$2,194	-	9.9x	8.8x	7.6x	17.20	(5%)	13.3 - 20.3
BE Aerospace Inc. (BEAV)		USD	$4,338	-	15.2x	13.0x	11.4x	42.06	11%	28.8 - 43.1
CACI International Inc. Cl A (CACI)		USD	$1,524	-	9.9x	9.2x	6.7x	57.66	12%	46.4 - 66.5
Chemring Group PLC (CHG-LON)	1	GBP	$1,346	2.8%	7.3x	7.0x	6.6x	4.49	(31%)	3.6 - 7.4
Cobham PLC (COB-LON)	1	GBP	$3,256	3.2%	9.8x	9.3x	7.5x	1.94	(11%)	1.6 - 2.4
DigitalGlobe Inc. (DGI)	2	USD	$778	-	21.7x	13.9x	6.8x	16.82	(46%)	13.6 - 32.8
Embraer S/A ADS (ERJ)	1	USD	$5,146	-	11.5x	10.1x	9.6x	27.80	(14%)	21.0 - 35.4
Esterline Technologies Corp. (ESL)		USD	$1,849	-	11.0x	9.0x	10.0x	60.39	(13%)	47.5 - 82.3
Finmeccanica S.p.A. (FNC-MIL)	3	EUR	$2,480	12.3%	6.5x	5.1x	17.3x	3.32	(66%)	2.6 - 9.9
FLIR Systems Inc (FLIR)		USD	$4,182	0.9%	16.0x	14.5x	9.6x	26.81	(9%)	21.9 - 37.3
GeoEye Inc. (GEOY)		USD	$489	-	9.7x	8.4x	4.8x	22.04	(48%)	18.0 - 44.7
Harris Corp. (HRS)		USD	$4,563	2.8%	7.4x	7.0x	6.0x	39.40	(17%)	32.7 - 53.4
Huntington Ingalls Industries Inc. (HII)	1	USD	$1,647	-	10.8x	8.5x	11.7x	33.74	NA	22.6 - 42.7
Iridium Communications Inc. (IRDM)		USD	$551	-	11.3x	7.5x	4.4x	7.53	(9%)	5.5 - 10.0
L-3 Communications Holdings Inc. (LLL)		USD	$7,040	2.6%	8.3x	8.1x	5.8x	70.50	(9%)	58.3 - 88.6
Loral Space and Communications Inc. (LORL)		USD	$1,415	-	NA	NA	12.9x	66.71	(13%)	45.7 - 82.5
ManTech International Corp. Cl A (MANT)		USD	$809	2.5%	9.2x	9.8x	4.8x	34.28	(14%)	29.3 - 46.3
Meggitt PLC (MGGT-LON)	2	GBP	$4,481	2.6%	10.6x	9.8x	10.8x	3.71	4%	3.0 - 4.0
MTU Aero Engines Holding AG (MTX-DE)	1	EUR	$3,557	2.1%	12.2x	10.9x	6.7x	52.95	4%	40.0 - 55.7
Moog Inc. Cl A (MOG.A)		USD	$1,794	-	12.7x	11.0x	8.3x	43.54	2%	30.5 - 46.5
Orbital Sciences Corp. (ORB)		USD	$872	-	14.1x	12.9x	6.0x	14.85	(14%)	11.8 - 19.4
QinetiQ Group PLC (QQ-LON)	2	GBP	$1,384	1.9%	9.2x	9.5x	6.7x	1.35	(1%)	1.0 - 1.4
Rheinmetall AG (RHM-ETR)	1	EUR	$2,100	3.7%	7.4x	6.8x	5.5x	41.05	(34%)	30.0 - 65.2
Rockwell Collins Inc. (COL)	2	USD	$8,759	1.6%	12.9x	10.7x	9.4x	59.87	(6%)	43.8 - 67.3
SAIC Inc. (SAI)		USD	$4,436	-	9.6x	9.2x	6.1x	13.00	(21%)	11.1 - 17.7
Thales S.A. (HO-PAR)	2	EUR	$6,705	-	9.0x	7.8x	12.6x	25.66	(2%)	21.6 - 30.5
Triumph Group Inc. (TGI)		USD	$2,935	0.3%	11.8x	10.1x	8.2x	59.80	25%	39.8 - 62.1
Textron Inc. (TXT)	2	USD	$5,981	0.4%	12.7x	10.0x	5.3x	21.50	(19%)	14.7 - 28.9
Wesco Aircraft Holdings Inc. (WAIR)	1H	USD	$1,124	-	11.9x	9.2x	10.1x	13.13	NA	8.8 - 15.3
Average				**1.4%**	**10.8x**	**9.4x**	**8.0x**		**(13%)**	
Defense Average				1.9%	9.3x	8.5x	7.5x		(17%)	
Commercial Average				0.6%	12.1x	10.4x	8.9x		(3%)	

Source: Citi Investment research and Analysis and FactSet

Sector Performance

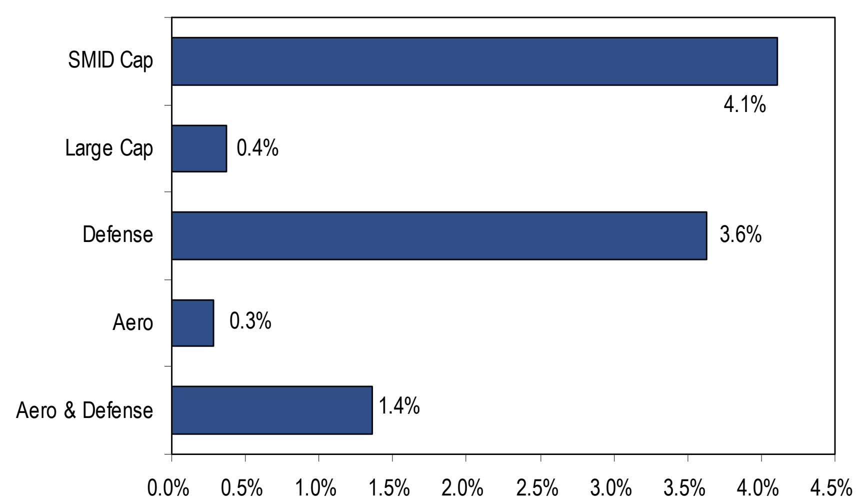
Figure 23. Global Stock Performance TTM



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 continued to outperform over the trailing month on improved sentiment and supported by strong yields. High-beta SMID cap names have also performed well, including TXT which is up 16% YTD on reports of a potential break-up (which we are not as certain about).

Figure 24. 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:

Company	Page
BAE Systems	20
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BAE Systems

(BAES.L; £3.14; 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. Eurofighter down-select in India is further good news. 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 programme 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.

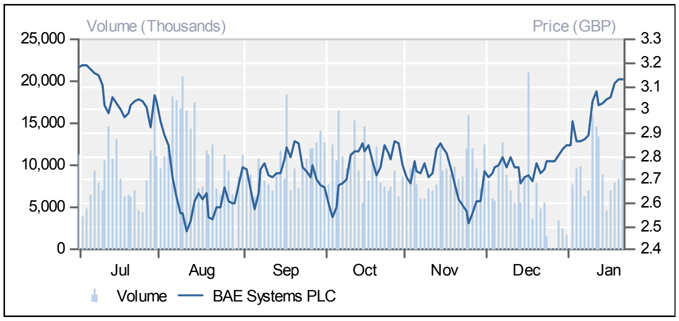
Valuation

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.).

Upcoming Catalysts

1) FY11 results (16 Feb 2012); **2)** Indian fighter jet decision (early 2012).

Figure 25. Recent Stock Performance



Source: FactSet

Figure 26. CIRA vs. Consensus Estimates

£millions	2011E	2012E	2013E
Citi			
Revenue	£20,040	£20,210	£19,990
EPS	40.4p	39.7p	39.1p
Consensus			
Revenue	£20,177	£20,346	£20,522
EPS	40.2p	40.8p	41.6p

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

Boeing

(BA.N; US$75.52; 1); PT = $87

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.

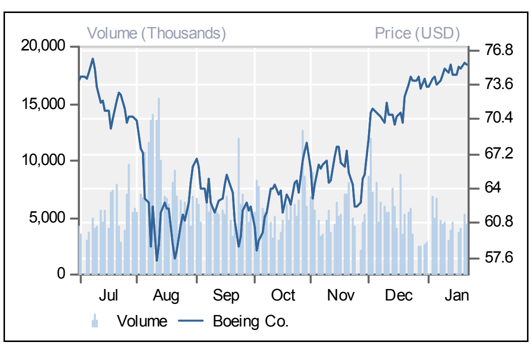
Valuation

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 27. Recent Stock Performance



Source: FactSet

Figure 28. CIRA vs. Consensus Estimates

$millions	2011E	2012E	2013E
Citi			
Revenue	$68,387	$80,799	$87,038
EPS	$4.48	$4.88	$5.82
Consensus			
Revenue	$68,425	$78,536	$85,948
EPS	$4.49	$4.95	$5.79

Source: Citi Investment Research and Analysis, Thomson

Bombardier

(BBDb.TO; C$4.49; 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.

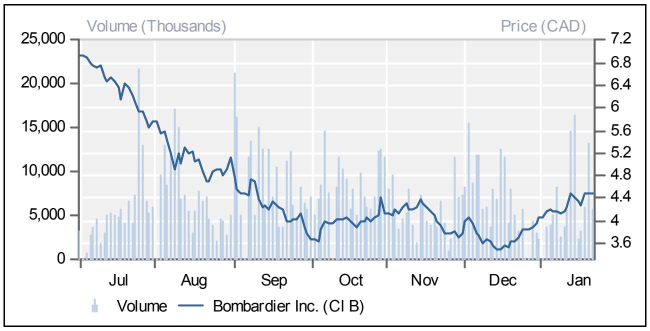
Valuation

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 29. Recent Stock Performance



Source: FactSet

Figure 30. CIRA vs. Consensus Estimates

$millions CAD	2011	2012E	2013E
Citi			
Revenue	-	$18,735	$19,404
EPS	-	$0.46	$0.56
Consensus			
Revenue	-	$18,677	$19,479
EPS	-	$0.46	$0.51

Source: Citi Investment Research and Analysis, Thomson

Chemring

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

(CHG.L; £4.49; 1); PT = £6.30

Key Investment Points

- **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

Our 630p 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).

Upcoming Catalysts

FY11 results on 24 Jan 2012. We expect some growth in order book (vs. £878m at Nov 2011) and management to comment on US defence budget outlook.

Figure 31. Recent Stock Performance

Source: FactSet

Figure 32. CIRA vs. Consensus Estimates

£millions	2011E	2012E	2013E
Citi			
Revenue	£744	£840	£877
EPS	53.9p	59.7p	62.4p
Consensus			
Revenue	£749	£853	£887
EPS	53.2p	60.2p	63.6p

Source: Citi Investment Research and Analysis, Thomson

Cobham

(COB.L; £1.94; 1); PT = £2.00

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 done 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.

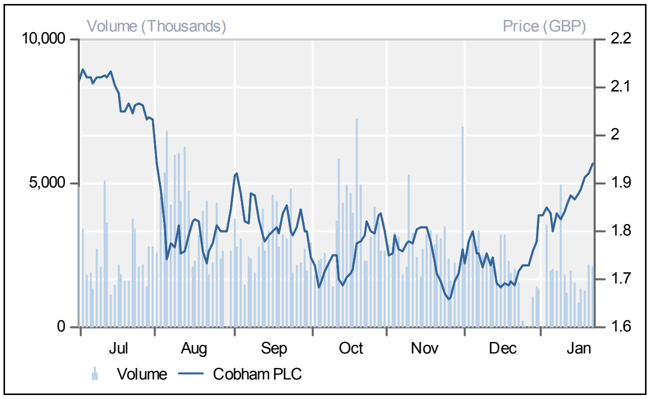
Valuation

Our 200p TP is based on 7.5x 2012E EV/EBIT, higher than BAE's target multiple to reflect Cobham's relatively superior EPS growth & cash conversion & greater chances of being acquired.

Upcoming Catalysts

FY11 results (8 March 2012)

Figure 33. Recent Stock Performance



Source: FactSet

Figure 34. CIRA vs. Consensus Estimates

£millions	2011E	2012E	2013E
Citi			
Revenue	£1,800	£1,767	£1,735
EPS	19.9p	21.1p	21.5p
Consensus			
Revenue	£1,846	£1,749	£1,802
EPS	19.5p	19.8p	21.2p

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

Digital Globe

(DGI.N; US$16.82; 2); PT = $22

Key Investment Points

- **Solid revenue visibility baked in** – The summer 2010 signing of the Enhanced View (EV) contract clarified 10 years revenues, worth $3.55b. In our view, this opportunity is already reflected in DGI shares.
- **Growth relies on fuzzier "product-based" opportunities** – DGI is looking for 20% 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. However, these markets are nascent and have been lagging expectations of late. In our view, it is not clear when and how the company will be able to sustain these types of growth rates over the longer-term from these markets, and as such view the valuation risk/reward on shares to be fairly balanced at this point.

Key Risks

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

Valuation

Shares are trading at a ~20% premium to the defense space, roughly in line with DGI's closest competitor. We believe DGI deserves to trade at a premium given its exposure to a relatively robust reconnaissance market, but we believe shares are fairly valued given potential risk/reward.

Upcoming Catalysts

1) Information services acquisition could drive confidence in new company strategy;
2) New customer announcements over the next few months (especially DAP)
3) Early February FY13 budget proposal clarifies some EV questions;
4) Results of White House study of EV program (expected April)

Figure 35. Recent Stock Performance

Source: FactSet

Figure 36. CIRA vs. Consensus Estimates

$millions	2011E	2012E	2013E
Citi			
Revenue	$332	$382	$429
EPS	$0.15	$0.68	$1.14
Consensus			
Revenue	$333	$382	$434
EPS	$0.13	$0.75	$1.21

Source: Citi Investment Research and Analysis, Thomson

EADS

(EAD.PA; €25.65; 1); PT = €31

Key Investment Points

- **Growth –** Strong earnings growth expected off a depressed base; 65% EPS CAGR 2011E-13E.
- **Excellent 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.

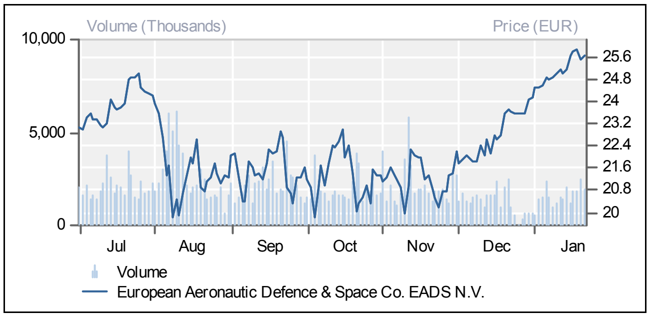
Valuation

Our €31 TP is based on DCF to reflect EPS growth prospects from 2013E onwards & FX impact on valuation. Key DCF assumptions include 10% WACC, 2.3% LT growth, 7.5% group margins (8% Airbus margins @ $1.27/€) and €1.5bn of further potential A350 cost overruns. Our TP implies a P/E of 11.6x 13E (vs. 13.7x LT avg.)

Upcoming Catalysts

1) FY11 results (8 Mar); **2)** Indian MMRCA (tbc)

Figure 37. Recent Stock Performance



Source: FactSet

Figure 38. CIRA vs. Consensus Estimates

€millions	2011E	2012E	2013E
Citi			
Revenue	€ 49,193	€ 55,670	€ 60,050
EPS	€ 1.02	€ 1.83	€ 2.68
Consensus			
Revenue	€ 47,705	€ 51,375	€ 54,200
EPS	€ 0.92	€ 1.75	€ 2.38

Source: Citi Investment Research and Analysis, Thomson

Embraer

(ERJ.N; US$27.80; 1); PT= $31

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

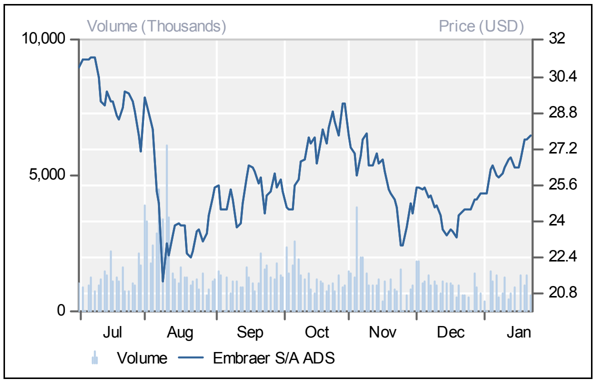
Valuation

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 39. Recent Stock Performance



Source: FactSet

Figure 40. CIRA vs. Consensus Estimates

$millions	2011E	2012E	2013E
Citi			
Revenue	$5,641	$6,049	$6,378
EPS	$1.43	$0.97	$1.02
Consensus			
Revenue	$5,714	$6,256	$6,832
EPS	$1.93	$2.42	$2.81

Source: Citi Investment Research and Analysis, Thomson

Finmeccanica

(SIFI.MI; €3.32; 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.

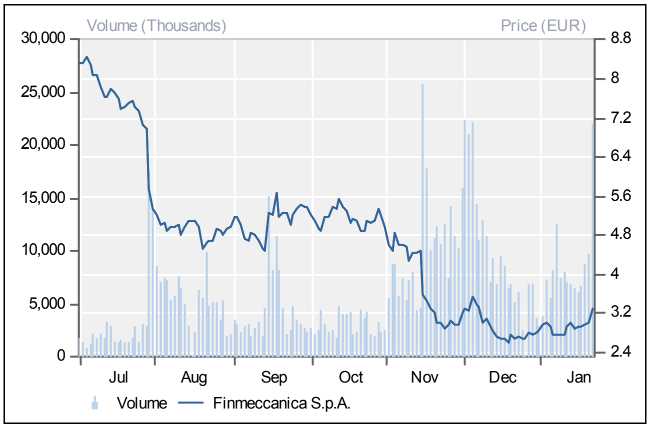
Key Risks

- **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 41. Recent Stock Performance



Source: FactSet

Figure 42. CIRA vs. Consensus Estimates

€millions	2011E	2012E	2013E
Citi			
Revenue	€ 17,480	€ 17,530	€ 17,550
EPS	-€ 1.04	€ 0.64	€ 0.72
Consensus			
Revenue	€ 17,338	€ 17,109	€ 17,266
EPS	-€ 1.69	€ 0.40	€ 0.59

Source: Citi Investment Research and Analysis, Thomson

General Dynamics

(GD.N; US$72.47; 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.

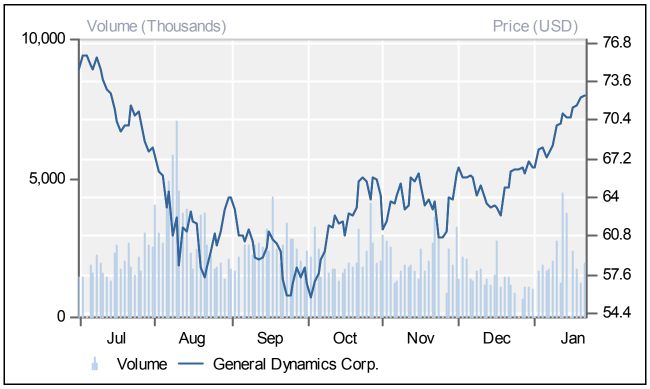
Valuation

We apply a blended defense/commercial multiple of 10.6x (vs. 10-yr avg. of 14x) to our FTM EPS to arrive at our price target

Upcoming Catalysts

1) FAA certification of G280 and G650 solidifies confidence in new bizjet platforms and their ability to deliver on time; **2)** FY13 budget submission (expected Feb 6).

Figure 43. Recent Stock Performance



Source: FactSet

Figure 44. CIRA vs. Consensus Estimates

$millions	2011E	2012E	2013E
Citi			
Revenue	$32,805	$35,624	$36,278
EPS	$7.26	$7.94	$8.47
Consensus			
Revenue	$32,877	$34,118	$34,436
EPS	$7.24	$7.58	$7.98

Source: Citi Investment Research and Analysis, Thomson

Huntington Ingalls Industries

(HII.N; US$33.74; 1); PT = $36

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 9.0x multiple to our FTM EPS est. 12 months from now. This P/E valuation is at a slight discount to the defense industry which has historically traded at a ~25% discount to the market during a comparable defense budget environment.

Upcoming Catalysts

1) FY13 budget submission (expected Feb 6); **2)** ~4Q12 follow-on competition for DDG-51s.

Figure 45. Recent Stock Performance

Source: FactSet

Figure 46. CIRA vs. Consensus Estimates

$millions	2011E	2012E	2013E
Citi			
Revenue	$6,473	$6,521	$6,412
EPS	$3.74	$3.15	$4.21
Consensus			
Revenue	$6,470	$6,530	$6,480
EPS	$3.71	$2.95	$3.88

Source: Citi Investment Research and Analysis, Thomson

Lockheed Martin

(LMT.N; US$82.78; 1); PT = $89

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.

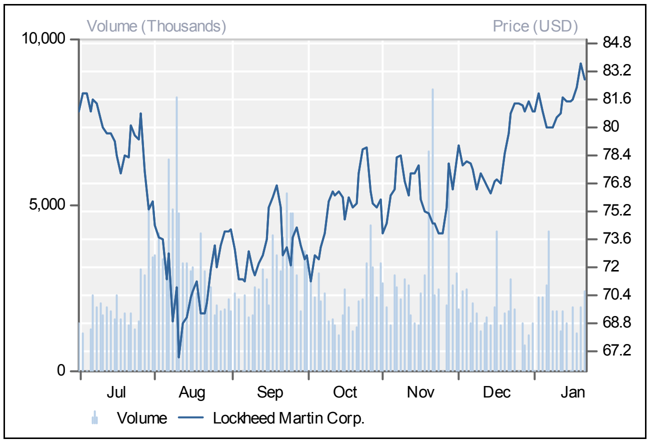
Valuation

Our target price applies a 9.7x multiple to our FTM EPS 12 months from now estimate, at 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 a slight premium based on LMT's exposure to the F-35 which represents revenue and margin expansion opportunity.

Upcoming Catalysts

1) Definitization of $4b LRIP 5 contract; **2)** FY13 budget submission (expected Feb 6); **3)** DoD re-baselines F-35 costs/quantities (expected DAB meeting in January)

Figure 47. Recent Stock Performance



Source: FactSet

Figure 48. CIRA vs. Consensus Estimates

$millions	2011E	2012E	2013E
Citi			
Revenue	$46,571	$46,305	$46,563
EPS	$7.70	$7.98	$9.51
Consensus			
Revenue	$46,584	$46,228	$45,823
EPS	$7.61	$7.78	$8.53

Source: Citi Investment Research and Analysis, Thomson

Meggitt

(MGGT.L; £3.71; 2); PT = £3.70

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

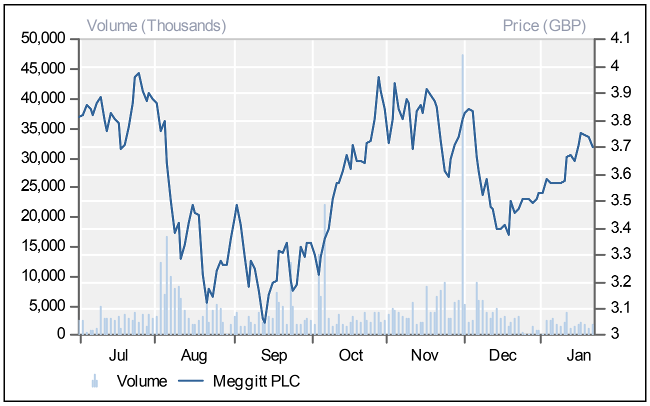
Valuation

Our 370p target is based on 9.5x 2012E EV/EBIT, a similar multiple used to value MGGT's civil aero peers. Our target implies 2012E P/E of 11.9x, broadly in-line with the company's historical average.

Upcoming Catalysts

1) FY11 results on 6 Mar, 2012 (tbc)

Figure 49. Recent Stock Performance



Source: FactSet

Figure 50. CIRA vs. Consensus Estimates

£millions	2011E	2012E	2013E
Citi			
Revenue	£1,460	£1,636	£1,733
EPS	30.7p	33.6p	37.1p
Consensus			
Revenue	£1,449	£1,623	£1,712
EPS	30.7p	34.6p	37.8p

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

MTU Aero Engines

(MTXGn.DE; €52.95; 1); PT = €55

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.
- **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.

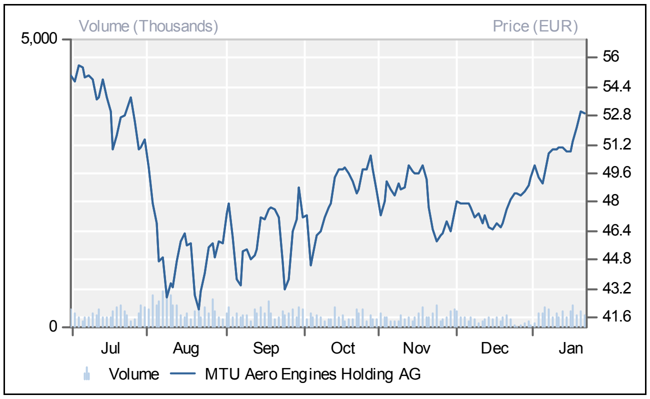
Valuation

Our €55 TP (=c12x 2012E P/E) is based on c9x 2012E EV/EBIT (vs. c8x LT avg).

Upcoming Catalysts

1) FY11 results (23 Feb 12); 2) newsflow on acquisitions (Volvo/V2500 stake increase)

Figure 51. Recent Stock Performance



Source: FactSet

Figure 52. CIRA vs. Consensus Estimates

€millions	2011E	2012E	2013E
Citi			
Revenue	€ 2,888	€ 3,210	€ 3,447
EPS	€ 3.99	€ 4.44	€ 4.73
Consensus			
Revenue	€ 2,887	€ 3,122	€ 3,386
EPS	€ 3.73	€ 4.30	€ 4.89

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

Northrop Grumman

(NOC.N; US$61.39; 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.

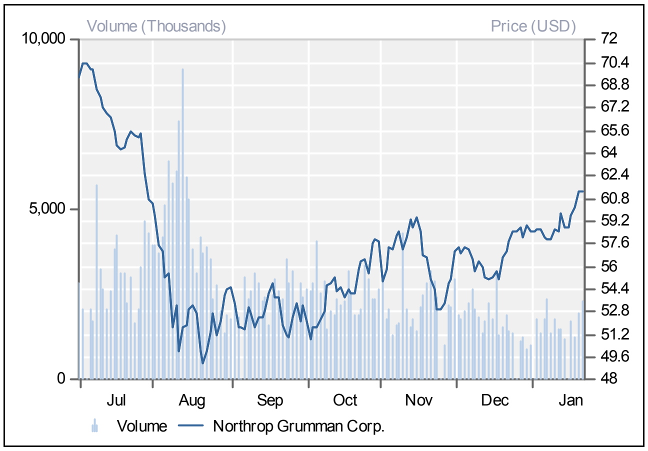
Valuation

Our target price applies a 9x multiple to our 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.

Upcoming Catalysts

1) Resolution of JSF LRIP IV and F-18 MYP negotiations
2) FY13 budget submission (expected Feb 6)
3) DoD re-baselines F-35 costs/quantities

Figure 53. Recent Stock Performance



Source: FactSet

Figure 54. CIRA vs. Consensus Estimates

$millions	2011E	2012E	2013E
Citi			
Revenue	$26,609	$26,674	$26,819
EPS	$7.04	$7.03	$7.74
Consensus			
Revenue	$26,614	$26,213	$25,827
EPS	$7.00	$6.81	$6.86

Source: Citi Investment Research and Analysis, Thomson

Precision Castparts

(PCP.N; US$177.16; 1); PT = $194

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.

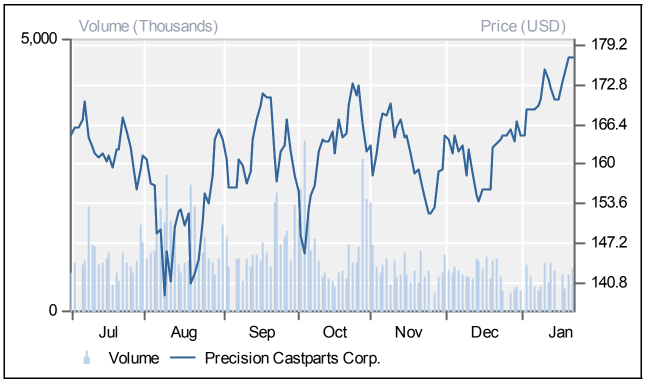
Valuation

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; **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 55. Recent Stock Performance



Source: FactSet

Figure 56. CIRA vs. Consensus Estimates

$millions	2011	2012E	2013E
Citi			
Revenue	-	$7,455	$8,841
EPS	-	$8.68	$10.62
Consensus			
Revenue	-	$7,419	$8,514
EPS	-	$8.60	$10.32

Source: Citi Investment Research and Analysis, Thomson

QinetiQ

(QQ.L; £1.35; 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.
- **Excellent 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.

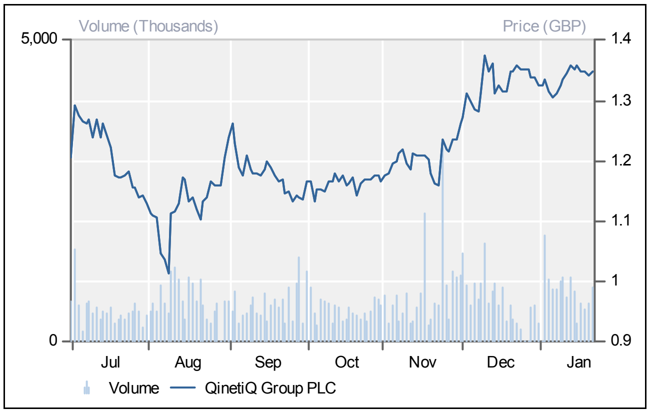
Key Risks

- **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

1) IMS (expected Feb 2012) **2)** FY Mar12 results (expected May 2012)

Figure 57. Recent Stock Performance



Source: FactSet

Figure 58. CIRA vs. Consensus Estimates

£millions	2011	2012E	2013E
Citi			
Revenue	-	£1,461	£1,474
EPS	-	16.3p	14.2p
Consensus			
Revenue	-	£1,500	£1,479
EPS	-	15.8p	14.4p

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

Raytheon

(RTN.N; US$49.88; 1); PT = $56

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 (23% vs. peers at 10%). Also, RTN is well positioned in a budget constrained environment that puts a premium on upgrading platforms.

- **Leading margins** – Last year, RTN posted margins of 12%, ~200 bps above competitors' given its mature portfolio and strong international exposure. We still expect this trend to continue due to product mix and a keen focus on program performance improvement.

- **Strong balance sheet drives s/h returns** – By our estimate, net debt to EBITDAP ratio is likely to fall to 0.1x for 2011 driven by strong FCF over 2H11. We expected this free cash to continue to be deployed back to shareholders, with the board recently boosting the dividend by 15%. From 2007-10, RTN returned 100% of operating CF to shareholders through dividends and share repos, a trend we expect to persist.

Key Risks

- International delays preclude growth and backlog targets for 2011.

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

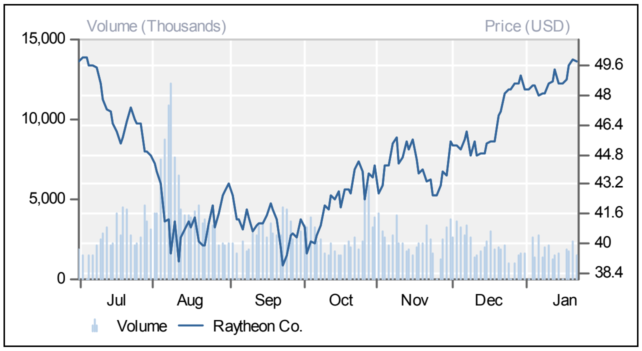
Valuation

Our target price applies a 9.7x multiple to our 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 slight premium based on RTN's industry-leading international exposure and margins.

Upcoming Catalysts

1) International contract announcements solidify confidence in 2H11's bookings ramp; **2)** FY13 budget submission (expected Feb 6)

Figure 59. Recent Stock Performance



Source: FactSet

Figure 60. CIRA vs. Consensus Estimates

$millions	2011E	2012E	2013E
Citi			
Revenue	$25,129	$25,542	$25,863
EPS	$5.07	$5.35	$5.94
Consensus			
Revenue	$25,140	$25,122	$25,191
EPS	$5.05	$5.23	$5.78

Source: Citi Investment Research and Analysis, Thomson

Rheinmetall AG

(RHMG.DE; €41.05; 1); PT = €43

Key Investment Points

- **Attractive Valuation** – At 6.2x 1yr forward P/E vs ~11.5x long-term historical average, most risks look more than reflected in the current share price.
- **Cyclical Autos** – Could potentially outperform our modest 2012E expectations (+2% sales) assuming no further macro deterioration. Management restructured Autos business significantly in the last downturn reducing both breakeven level & working capital. Long-term margin target is 7-8% (vs. 6.5% in 11E).
- **Defense prospects mixed** – With German & European defence budgets under pressure, growth in RHM's Defence business depends on export contracts. RHM recently won an A$1.9bn military truck contract in Australia (per Reuters, 12/12/11), with potential further opportunities in the Netherlands, South Africa, Singapore, Saudi Arabia, Algeria and Russia. The JV with MAN in military trucks is on track, albeit 2012E sales outlook has been cut.
- **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.

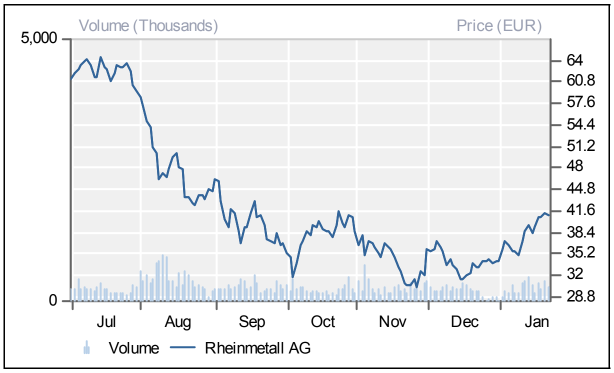
Valuation

Our SOTP derived €43 TP (=8x 12E P/E) values Automotive at 0.45x 12E EV/Sales & Defence at 7x 12E EV/EBIT and includes a 10% conglomerate discount.

Upcoming Catalysts

1) FY11 results (21 March 2012)

Figure 61. Recent Stock Performance



Source: FactSet

Figure 62. CIRA vs. Consensus Estimates

€millions	2011E	2012E	2013E
Citi			
Revenue	€ 4,400	€ 4,890	€ 5,010
EPS	€ 5.09	€ 5.29	€ 5.84
Consensus			
Revenue	€ 4,419	€ 4,920	€ 5,214
EPS	€ 5.31	€ 5.40	€ 5.96

Source: Citi Investment Research and Analysis, Thomson

Rockwell Collins

(COL.N; US$59.87; 2); PT = $57

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.

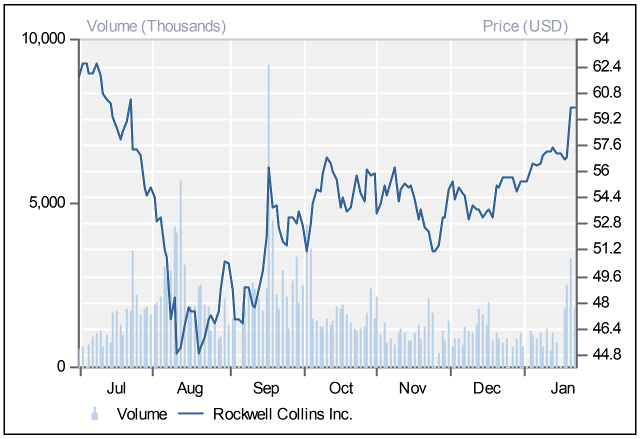
Valuation

Our SOTP analysis yields an 11.7x 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)** FY13 budget submission (expected Feb 6).

Figure 63. Recent Stock Performance



Source: FactSet

Figure 64. CIRA vs. Consensus Estimates

$millions	2011	2012E	2013E
Citi			
Revenue	-	$4,932	$5,082
EPS	-	$4.51	$4.88
Consensus			
Revenue	-	$4,948	$5,186
EPS	-	$4.47	$5.02

Source: Citi Investment Research and Analysis, Thomson

Rolls Royce

(RR.L; £7.36; 1); PT = £8.20

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.

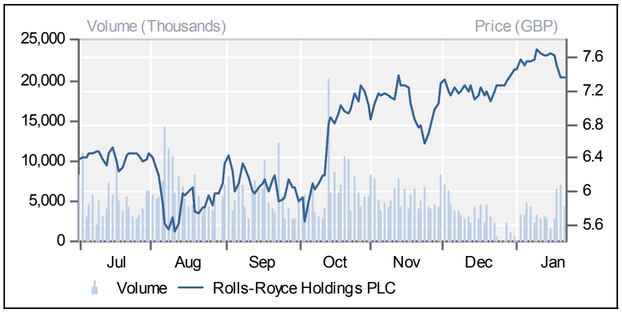
Valuation

Our 820p TP (=c14x 12E P/E) is based on a 10.5x 12E 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.

Upcoming Catalysts

1) FY11 results (9 Feb 12)

Figure 65. Recent Stock Performance



Source: FactSet

Figure 66. CIRA vs. Consensus Estimates

£millions	2011E	2012E	2013E
Citi			
Revenue	£11,650	£13,130	£13,720
EPS	46.1p	58.5p	61.1p
Consensus			
Revenue	£11,395	£12,426	£13,560
EPS	44.6p	49.8p	56.0p

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

Textron

(TXT.N; US$21.50; 2); PT = $21

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.

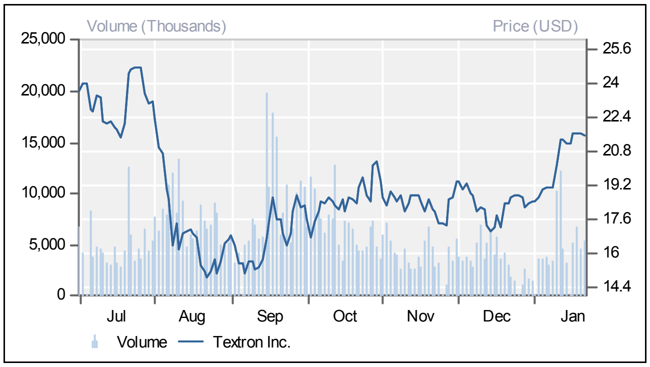
Valuation

Our blended multiple of 11.5x 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) Decisions in a variety of defense competitions including V-22 and Canada TAP-V

Figure 67. Recent Stock Performance



Source: FactSet

Figure 68. CIRA vs. Consensus Estimates

$millions	2011E	2012E	2013E
Citi			
Revenue	$11,427	$12,020	$12,656
EPS	$1.18	$1.64	$1.96
Consensus			
Revenue	$11,272	$11,921	$12,594
EPS	$1.17	$1.67	$2.13

Source: Citi Investment Research and Analysis, Thomson

Thales

(TCFP.PA; €25.66; 2); PT = €23

Key Investment Points

- **Restructuring upside** – Management aims to raise margins from 3-4% currently to those achieved by European peers (9-11%). Guidance is for 5% EBIT margin in 11E and 6% in 12E.
- **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 government 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 ship builder) 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 €23 TP is based on a P/E of 8.0x applied to 14E EPS and discounted back 2 years at 10% to reflect risks associated with restructuring.

Upcoming Catalysts

1) FY11 results (exp. Feb '12); **2)** Indian MMRCA (Rafale vs. Typhoon) (early '12).

Figure 69. Recent Stock Performance

Source: FactSet

Figure 70. CIRA vs. Consensus Estimates

€millions	2011E	2012E	2013E
Citi			
Revenue	€ 13,139	€ 12,980	€ 12,810
EPS	€ 2.33	€ 2.66	€ 3.11
Consensus			
Revenue	€ 13,252	€ 13,358	€ 13,447
EPS	€ 2.50	€ 2.86	€ 3.33

Source: Citi Investment Research and Analysis, Thomson

Wesco Aircraft

(WAIR.N; US$13.13; 1H); PT = $16

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 13.3x 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 71. Recent Stock Performance

Source: FactSet

Figure 72. CIRA vs. Consensus Estimates

$millions	2011	2012E	2013E
Citi			
Revenue	-	$776.3	$834.8
EPS	-	$1.06	$1.20
Consensus			
Revenue	-	$778.3	$883.2
EPS	-	$1.05	$1.25

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 a bit 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 73. Commercial Aero Demand Forecast

	2010	2011E	2012E	2013E	2014E	2015E
In Service Fleet b/f	15,610	16,284	16,930	17,460	18,180	19,050
Deliveries	972	1,066	970	1,170	1,340	1,500
Retirements	-298	-420	-440	-450	-470	-500
In Service Fleet c/f	16,284	16,930	17,460	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%	2.5%	3.1%	3.5%	3.8%
Multiplier	1.6x	1.7x	1.7x	1.7x	1.7x	1.7x
Traffic Growth	6.5%	5.0%	4.1%	5.1%	5.8%	6.3%
Implied Delivery Growth	-0.7%	9.7%	-9.0%	20.6%	14.5%	11.9%
Implied Demand (# aircraft)	**972**	**1,066**	**970**	**1,170**	**1,340**	**1,500**
Citi Delivery Forecasts (# aircraft)		**1,002**	**1,182**	**1,281**	**1,402**	***NA***
Over / (Under)delivery vs. demand		*(6.0%)*	*21.9%*	*9.5%*	*4.6%*	*NA*

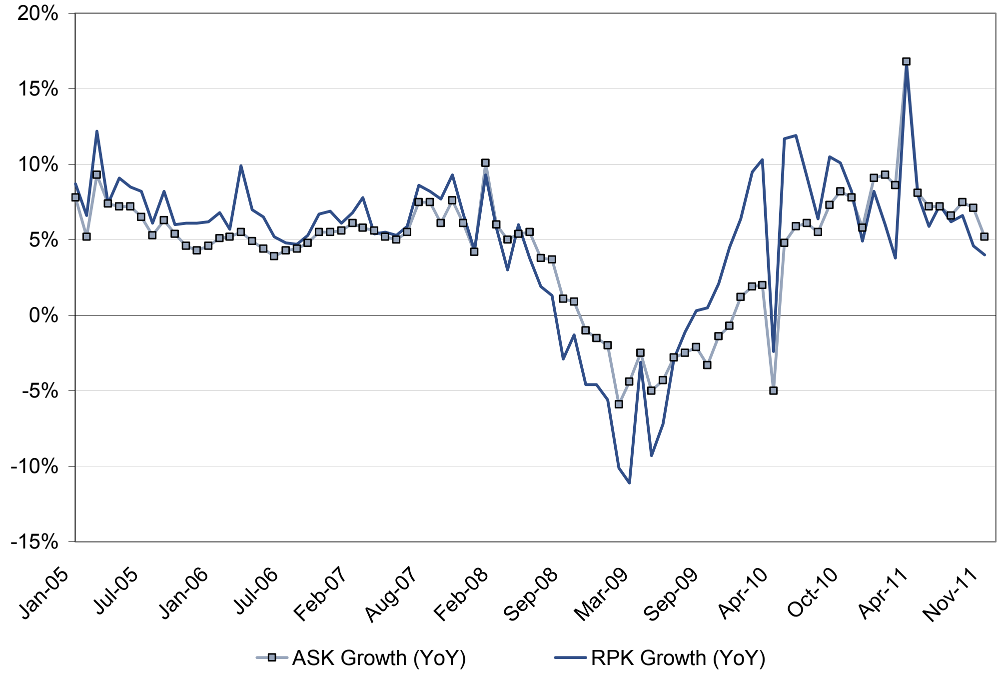
Source: Citi Investment Research and Analysis

Figure 74. 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	420	443	492
747	19	15	13	14	16	14	8	0	9	28	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	55	85	118
Boeing	**281**	**285**	**290**	**398**	**441**	**375**	**481**	**462**	**477**	**611**	**673**	**752**
% Y/Y Change	*-26%*	*1%*	*2%*	*37%*	*11%*	*-15%*	*28%*	*-4%*	*3%*	*28%*	*10%*	*12%*
A320	233	233	289	339	367	386	402	401	414	450	472	486
A330/A340	64	75	80	86	79	85	86	91	86	91	101	104
A350	0	0	0	0	0	0	0	0	0	0	0	20
A380	0	0	0	0	1	12	10	18	25	30	35	40
Airbus	**305**	**320**	**378**	**434**	**453**	**483**	**498**	**510**	**525**	**571**	**608**	**650**
% Y/Y Change	*1%*	*5%*	*18%*	*15%*	*4%*	*7%*	*3%*	*2%*	*3%*	*9%*	*6%*	*7%*
Narrow	432	458	516	646	697	676	774	777	786	870	915	978
Wide	154	147	152	186	197	182	205	195	216	312	366	424
Total	**586**	**605**	**668**	**832**	**894**	**858**	**979**	**972**	**1,002**	**1,182**	**1,281**	**1,402**
% Y/Y Change	*-14%*	*3%*	*10%*	*25%*	*7%*	*-4%*	*14%*	*-1%*	*3%*	*18%*	*8%*	*9%*
Y/Y Growth												
Narrow	-15%	6%	13%	25%	8%	-3%	14%	0%	1%	11%	5%	7%
Wide	-13%	-5%	3%	22%	6%	-8%	13%	-5%	11%	44%	17%	16%
% Y/Y Change	*-14%*	*3%*	*10%*	*25%*	*7%*	*-4%*	*14%*	*-1%*	*3%*	*18%*	*8%*	*9%*

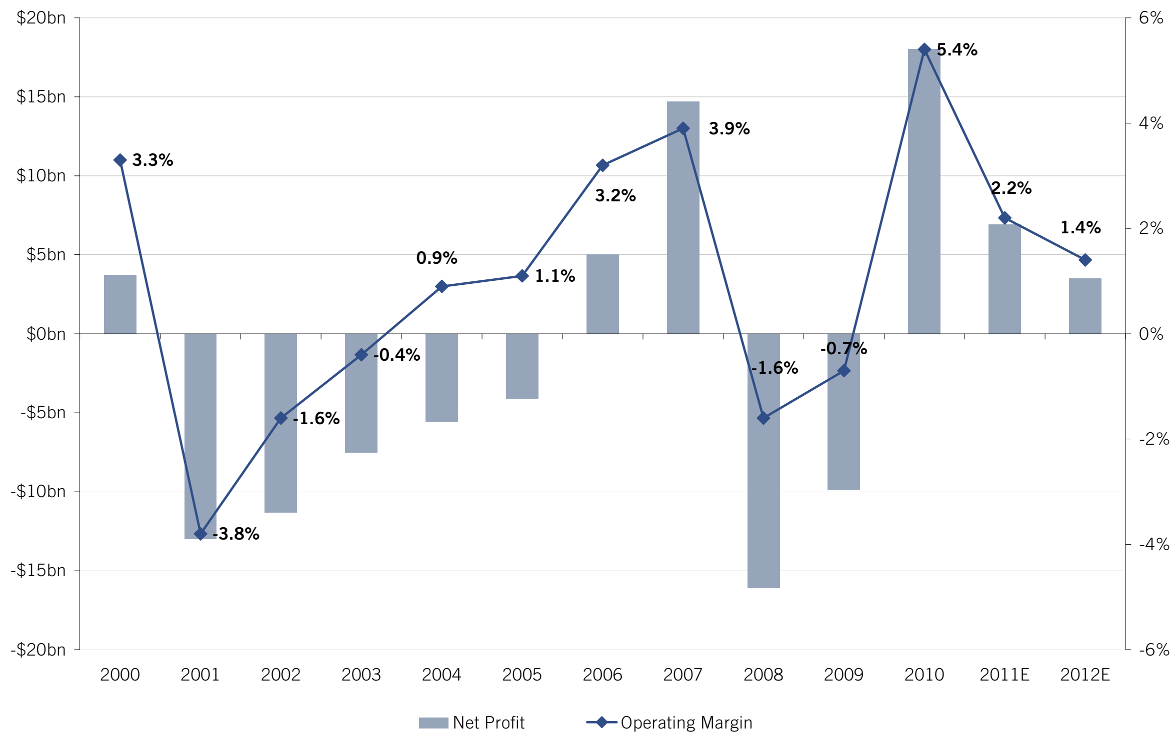
Source: Citi Investment Research and Analysis, Boeing, Airbus

Figure 75. Global Traffic and Capacity (January 2005 – August 2011)



Source: IATA

Figure 76. Airline Profitability



Source: IATA

Business Jet Data

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.

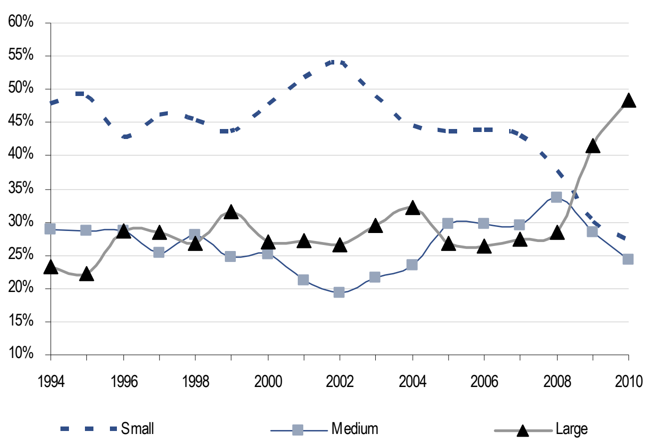
This bizjet market segmentation supports our Buy ratings on General Dynamics and Bombardier and Neutral rating on Textron.

Figure 77. 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 & 500/550 (2013)	Legacy 600 Legacy 650		
Dassault (Falcon)						SMS (delayed)	2000EX 2000DX 2000LX	900EX 900DX 900LX	7X
Gulfstream					G150	G200 G280 (2012)	G350	G450	G500 G550 G650 (2012)
Hawker		Premier I	200	400XP	750 900XP	4000			
Cessna	Mustang M2 (2015)	CJ1+ CJ2+	CJ3 CJ4 Encore+	XLS+	Sovereign Latitude (2015)	Citation X Citation Ten (Dec 2011)	Columbus (cancelled)		

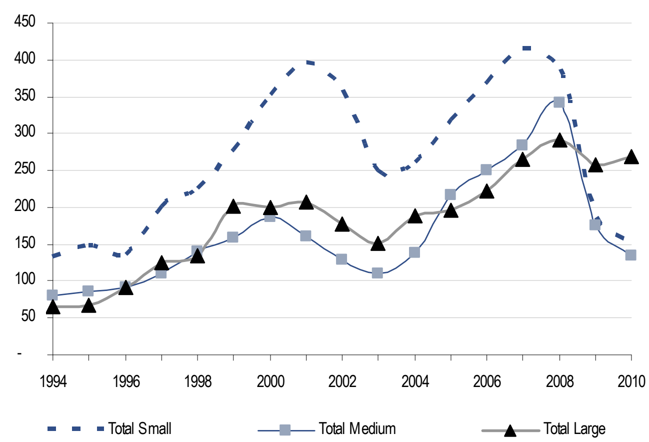
Source: Company Information, Citi Investment Research and Analysis
Note: GD still expects 12 G650 deliveries to happen in 2011. Citi estimates 1st delivery in early 2012.

Figure 78. Delivery Share (1994-2010)



Source: Citi Investment Research and Analysis, GAMA

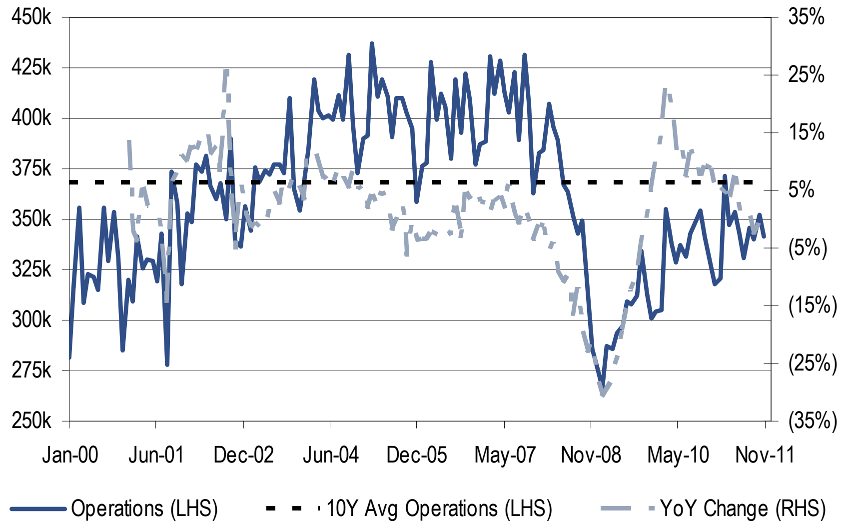
Figure 79. Delivery Quantities (1994-2010)



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.

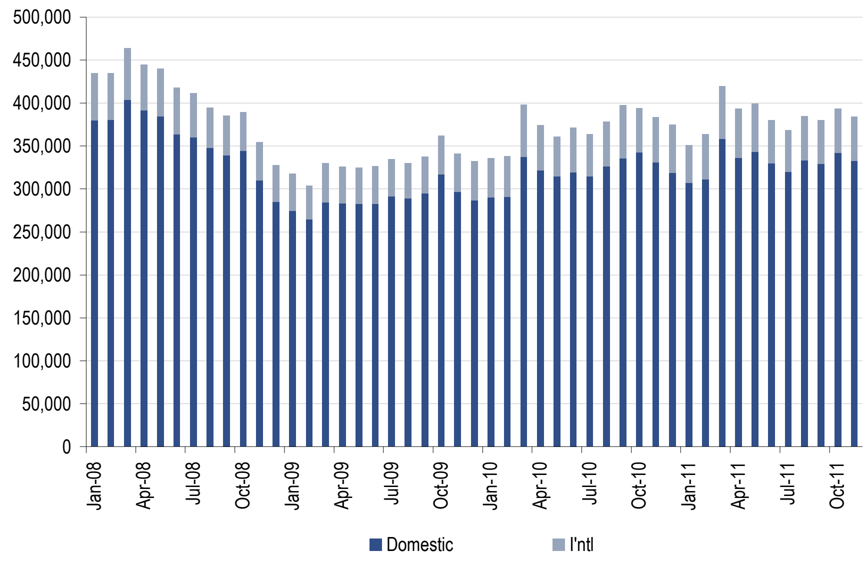
Figure 80. Business Jet Operations (2001-Present)



Source: FAA

Total bizjet operations are still below their 2008 peak.

Figure 81. Biz Jet Operations (Arrivals + Departures)



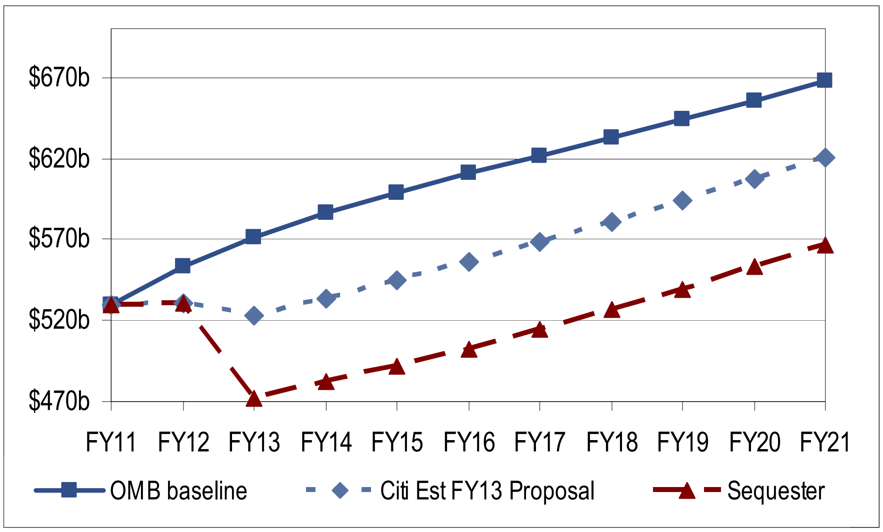
Source: Citi Investment Research and Analysis, FAA

Defense Budget Scenarios

We present a range of possible outcomes for the defense budget. As of now, it appears as if the FY13 budget proposal (February 6) will come in at ~$523b, 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. As such, we present the bounds of the likely budget trajectory beginning in FY13 (FY begins Oct 1). The range is bound at the top by Tranche 1 of the Budget Control Act (~$450b reduction over 10Y), and at the bottom by the sequestration triggers (~$1T over 10Y). It's unclear at this point what DoD will submit in early February as a FY13 budget proposal, but DoD leadership thus far suggests it will be in line with Tranche 1 of the BCA. This might be tough, however, as the President has promised to veto Congressional attempts to bypass the sequestration outside of a $1.2T deficit reduction package. In our view, this puts DoD in an awkward position where it can't presuppose it escapes the sequester caps, nor can it propose a budget based on an outcome the Administration and the SecDef view as unacceptable (sequestration). Thus in our view, the FY13 proposal is likely to reflect Tranche 1 of the BCA, but provide further detail regarding the impact sequester has on FY13 and beyond.

Figure 82. DoD Base Budget Scenarios ($current)



Source: Citi Investment Research and Analysis

Figure 83. US DoD Budget Scenarios

	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY12-21	FY11-21	FY11-16	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%*				
Citi Est FY13 Proposal	529	531	523	533	545	556	568	581	594	607	620	1.74%	1.60%	0.99%	2.08%
Nominal y/y %		*0.3%*	*(1.5%)*	*1.9%*	*2.3%*	*2.0%*	*2.2%*	*2.3%*	*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%*				
Adding: OCO	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%)*				
Total DoD															
Citi Est FY13 Proposal	687	649	606	583	584	585	587	591	599	609	620	(0.50%)	(1.02%)	(3.16%)	(0.79%)
Nominal y/y %		*(5.5%)*	*(6.6%)*	*(3.7%)*	*0.0%*	*0.2%*	*0.3%*	*0.8%*	*1.2%*	*1.7%*	*1.9%*				
Sequester	687	649	555	532	530	531	533	537	544	554	566	(1.50%)	(1.91%)	(5.02%)	(1.00%)
Nominal y/y %		*(5.5%)*	*(14.4%)*	*(4.1%)*	*(0.4%)*	*0.2%*	*0.4%*	*0.8%*	*1.3%*	*1.9%*	*2.1%*				

Source: Citi Investment Research and Analysis

Appendix A-1

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	12 Month Rating			***Relative Rating***		
Data current as of 31 Dec 2011	**Buy**	**Hold**	**Sell**	**Buy**	**Hold**	**Sell**
Citi Investment Research & Analysis Global Fundamental Coverage	57%	34%	9%	10%	79%	10%
% of companies in each rating category that are investment banking clients	45%	41%	40%	49%	43%	41%

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Investment Ratings: CIRA's investment ratings are Buy, Neutral and Sell. Our ratings are a function of analyst expectations of expected total return ("ETR")

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