

Aerospace & Defense

Defense Fights in the Trenches as Aero Soars Overhead

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

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7th November 2011



Personal Background

Jason Gursky

Mr. Gursky is a Senior Analyst at Citi covering Aerospace and Defense. Before joining Citi in 2008, he worked at JPMorgan for five years where he was an analyst covering the IT Distribution industry. Mr. Gursky has also held various management roles in the telecom services industry in the United States and in Latin America, and in the year 2000 was named one of Latin America's "Top Young CEOs." He holds an MBA from UC Berkeley, an MA in International Relations from The Johns Hopkins University, and a BA in International Relations from UC Davis. Mr. Gursky is fluent in Spanish and has spent five years of his career living in Latin America.

Jonathan Raviv

Mr. Raviv is a Senior Associate covering Aerospace and Defense. Before joining Citi in 2010, he worked at The Cohen Group, a Washington, DC-based consultancy headed by former Secretary of Defense William Cohen. Prior to that, he worked in the investment banking division at Lehman Brothers and Barclays Capital. Mr. Raviv has also worked as a Middle East business development consultant and researcher. He holds an MA in Strategic Studies and Economics, and a BA in International Relations, both from The Johns Hopkins University. Mr. Raviv has a working knowledge of both French and Arabic.

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Stock Selection & Overview

Summary of Stock Selection

Company	Rating	Current Px	Target Px	Current FTM EPS Multiple	Target FTM EPS Multiple	Key Investment Points
Boeing	Buy (1)	\$66	\$78	13.7x	15.0x	<ul style="list-style-type: none"> - New planes and production rate increases drive top-line - Robust backlog and production increases provide earnings visibility - Cash generation to improve with development projects winding down
DigitalGlobe	Neutral (2)	\$18	\$22	7.1x *	6.0x *	<ul style="list-style-type: none"> - Steady government business could receive boost from commercial which has thus far lagged expectations <p><small>* reflects EV/EBITDA valuation metric</small></p>
General Dynamics	Buy (1)	\$63	\$87	8.4x	10.7x	<ul style="list-style-type: none"> - Resilient demand for existing biz jets + G650 drives above average growth and potential re-rating - Potential weakness in IT and ground-exposed military sales, although helped by installed base - Slow but steady Naval shipbuilding business
Huntington Ingalls	Buy (1)	\$30	\$32	8.7x	8.4x	<ul style="list-style-type: none"> - Visible, but mostly flat, top-line due to long construction times (carriers take ~10 years start to finish) - Broken segment margins create room for improvement
Lockheed Martin	Buy (1)	\$77	\$89	9.8x	9.7x	<ul style="list-style-type: none"> - F-35, air transport, and missile defense drive long-term growth - Robust FCF likely continues, supporting attractive dividends & repurchase activity
Northrop Grumman	Buy (1)	\$57	\$69	8.3x	9.0x	<ul style="list-style-type: none"> - Significant F-35 and F-18 content (20% and 40% respectively) help drive top-line growth - Industry-leading unmanned portfolio aligned with current and future military needs - Robust cash deployment and management focused on core portfolio/removing unprofitable business
Precision Castparts	Buy (1)	\$168	\$194	17.5x	17.0x	<ul style="list-style-type: none"> - Strong aerospace content on old & new platforms, with attractive 787 exposure - Positioned 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 (1)	\$44	\$56	8.4x	9.6x	<ul style="list-style-type: none"> - Significant international exposure (~25%) helps offset weaker domestic demand - Strategic demand for missile defense technology (Patriot, THAAD Radar, SM-3) - Program agnostic business model reduces risk & industry-leading margins
Rockwell Collins	Neutral (2)	\$55	\$57	12.0x	11.8x	<ul style="list-style-type: none"> - Later cycle beneficiary with OE demand for new bizjet, regional & commercial platforms - Defense headwinds due to exposure to ground forces
Textron	Neutral (2)	\$19	\$21	11.6x	11.5x	<ul style="list-style-type: none"> - Cessna still facing costs and challenged pricing power with buyers and suppliers - Cessna and Bell require R&D to compete effectively and regain lost share, but both carry strong branding - Helo & UAV strength offset by slowing op tempo pressure on rest of ground-exposed defense portfolio
Wesco Aircraft	Buy / High Risk (1H)	\$11	\$15	10.6x	13.4x	<ul style="list-style-type: none"> - High organic revenue and earnings visibility driven by announced production rate increases - Core growth supplemented by move into adjacent markets including MRO and electronic products - Opportunity to benefit from market consolidation since WAIR and largest competitor control only 35% of market

Source: CIRA. Share price date is close 4 November 2011.

Key Fundamentals & Drivers

	Sales CAGR (2010-2013E)	Drivers	Margin Δ (2010 - 2013E)	Drivers	2013E FCF Yield (on Current Px)	2013E ROIC
BA	12%	→ Positive production cycle at BCA	-33 bps	→ Pension headwinds	13%	16%
Commercial	21%	→ 787/747 ramps & 737/ 777 rate increases	25 bps	→ Production rate increases		
Defense	1%	→ F-18, Helos (Apache & Chinook)	39 bps	→ Higher margin international sales		
DGI	10%	→ Increased EV revenue recognition + adjacencies	644 bps	→ Fixed cost leverage on revenue growth	2%	7%
GD	3%	→ Biz jet recovery (AMS & new model intros)	11 bps		10%	19%
Commercial	15%	→ G650, G250 introductions	50 bps	→ G650 production and AMS recovery		
Defense	1%	→ Slow demand for ground forces	-36 bps	→ IS&T competition, vehicle volumes, marine mix		
HII	(2%)	→ Some pressure on shipbuilding budget	311 bps	→ Poorly priced ships coming out of backlog	17%	6%
LMT	1%	→ F-35, F-16, Aegis, THAAD, C-130	79 bps	→ International C-130, THAAD, positive F-35 mix	12%	21%
NOC	(1%)	→ Portfolio shaping + UAV/cyber demand	188 bps	→ Portfolio shaping & performance improvement	12%	14%
PCP	16%	→ Commercial aero production rate increases	250 bps	→ Core business volumes and strong incrementals	5%	21%
RTN	1%	→ Patriot, SM-3, radars, ISR, international	143 bps	→ International sales and improved execution	15%	19%
COL	3%	→ Commercial aero + defense avionics	259 bps	→ Better commercial performance	9%	42%
Commercial	10%	→ Large transport components + new bizjets	585 bps	→ Strong incremental margins		
Defense	(3%)	→ Weak ground force demand	-47 bps	→ Pressure on leading margins due to competition		
TXT	6%	→ Commercial helos & bizjets from trough levels	558 bps	→ Improvements at Cessna	9%	6%
Commercial	9%	→ New helo models & bizjets off trough levels	239 bps	→ Recovery from Cessna losses		
Defense	(3%)	→ Weak ground force demand offset by UAVs	-102 bps	→ Constrained demand & lower margins on ASVs		
WAIR	8%	→ Commercial aero production rate increases	-49 bps	→ Operating leverage offset by contract mix-shift	8%	9%
Total	5%	Comments	108 bps	Comments		
Defense Only	0%	→ vs. CAGR of 5% from 2006 to 2009	83 bps	→ vs. avg. margin Δ of 214 bps from 2006 to 2009		
Commercial Only	17%	→ vs. CAGR of 5% from 2006 to 2009	220 bps	→ vs. avg. margin Δ of 67 bps from 2006 to 2009		
		→ vs. CAGR of 3% from 2006 to 2009		→ vs. avg. margin Δ of -498 bps from 2006 to 2009		

Source: CIRA, Factset

Note: PCP & COL data for FY11 to FY14

Textron Commercial includes Cessna, Bell & Industrial segments

Defense avg. margin excludes DGI; Commercial avg. margin excludes Cessna losses

Industry Comp Table

As of November 4, 2011

	Company Data				Valuation Multiples			Price Performance			
	Ticker	Price	Market Cap (\$m)	Dividend Yield (%)	FTM P/E	2012 P/E	EV/ EBITDA	YTD	LTM	52-Week High	52-Week Low
Large Cap											
Boeing Co.	BA	\$65.80	\$48,905	2.6%	13.7x	13.5x	7.6x	0.8%	(7.1%)	\$80.65	\$56.01
General Dynamics Corp.	GD	\$63.45	\$22,595	3.0%	8.4x	8.3x	5.6x	(10.6%)	(8.3%)	\$78.27	\$53.95
Lockheed Martin Corp.	LMT	\$76.52	\$24,760	5.2%	9.8x	9.7x	5.8x	9.5%	6.3%	\$82.43	\$66.36
Northrop Grumman Corp.	NOC	\$57.18	\$14,940	3.5%	8.3x	8.3x	4.4x	(2.7%)	(3.4%)	\$70.61	\$49.20
Precision Castparts Corp.	PCP	\$168.07	\$24,206	0.1%	17.5x	16.3x	13.5x	20.7%	17.3%	\$178.98	\$129.81
Raytheon Co.	RTN	\$44.18	\$15,291	3.9%	8.4x	8.3x	5.2x	(4.7%)	(8.1%)	\$53.12	\$38.35
Rockwell Collins Inc.	COL	\$54.50	\$8,375	1.8%	12.0x	10.8x	1.7x	(6.5%)	(10.1%)	\$67.30	\$43.82
Average				2.9%	11.1x	10.8x	6.3x	0.9%	(1.9%)		
SMID Cap											
AAR Corp.	AIR	\$19.78	\$800	1.5%	9.2x	8.4x	6.5x	(28.0%)	(16.0%)	\$31.66	\$14.96
Alliant Techsystems Inc.	ATK	\$62.60	\$2,063	1.3%	7.1x	7.0x	5.0x	(15.9%)	(21.5%)	\$79.96	\$51.26
Booz Allen & Hamilton Inc.	BAH	\$16.32	\$2,082	-	9.7x	9.3x	7.3x	(16.0%)	-	\$20.73	\$13.33
BE Aerospace Inc.	BEAV	\$39.13	\$4,036	-	15.0x	14.6x	8.1x	5.7%	5.0%	\$42.85	\$28.83
CACI International Inc. CI A	CACI	\$56.97	\$1,504	-	10.0x	9.7x	6.7x	6.7%	9.7%	\$66.49	\$46.36
DigitalGlobe Inc.	DGI	\$17.66	\$817	-	25.0x	21.9x	7.1x	(44.3%)	(42.8%)	\$32.82	\$17.51
Esterline Technologies Corp.	ESL	\$57.61	\$1,764	-	10.0x	10.0x	9.5x	(16.0%)	(9.6%)	\$82.28	\$47.48
FLIR Systems Inc	FLIR	\$27.12	\$4,332	0.9%	16.7x	16.2x	10.8x	(8.8%)	(4.7%)	\$37.29	\$21.86
GeoEye Inc.	GEOY	\$26.00	\$577	-	11.6x	11.4x	5.3x	(38.7%)	(42.6%)	\$47.50	\$25.35
Harris Corp.	HRS	\$37.99	\$4,399	2.9%	7.2x	6.9x	7.2x	(16.1%)	(19.0%)	\$53.39	\$32.68
Heico Corp.	HEI	\$58.34	\$977	0.2%	30.3x	30.4x	17.4x	42.9%	38.8%	\$59.45	\$38.39
Huntington Ingalls Industries Inc.	HII	\$29.76	\$1,452	-	8.7x	8.7x	11.6x	-	-	\$42.74	\$22.62
Iridium Communications Inc.	IRDM	\$6.46	\$473	-	8.9x	8.6x	3.8x	(21.7%)	(25.7%)	\$10.04	\$5.50
L-3 Communications Holdings Inc.	LLL	\$68.58	\$6,849	2.6%	7.7x	7.7x	5.7x	(2.7%)	(6.5%)	\$88.55	\$58.30
Loral Space and Communications Inc.	LORL	\$57.99	\$1,230	-	-	-	10.9x	(24.2%)	(3.3%)	\$85.16	\$45.65
ManTech International Corp. CI A	MANT	\$33.53	\$792	2.5%	9.0x	9.0x	3.9x	(18.9%)	(17.8%)	\$46.26	\$29.33
Moog Inc. CI A	MOG.A	\$38.29	\$1,604	-	11.5x	10.1x	8.3x	(3.8%)	(1.6%)	\$46.46	\$30.45
Orbital Sciences Corp.	ORB	\$15.56	\$914	-	14.9x	14.9x	6.4x	(9.2%)	(8.9%)	\$19.38	\$11.80
SAIC Inc.	SAI	\$12.71	\$4,334	-	9.2x	9.1x	4.7x	(19.9%)	(20.8%)	\$17.65	\$11.06
Spirit AeroSystems Holdings Inc. CI A	SPR	\$19.08	\$2,261	-	9.1x	8.6x	7.7x	(8.3%)	0.8%	\$26.49	\$14.27
TransDigm Group Inc.	TDG	\$93.88	\$4,708	-	17.1x	17.3x	15.0x	30.4%	39.3%	\$95.04	\$64.97
Triumph Group Inc.	TGI	\$57.58	\$2,824	0.3%	11.8x	11.2x	7.9x	28.8%	28.9%	\$59.49	\$39.84
Textron Inc.	TXT	\$18.61	\$5,177	0.4%	11.6x	11.1x	4.7x	(21.3%)	(16.1%)	\$28.87	\$14.66
Wesco Aircraft Holdings Inc.	WAIR	\$11.15	\$954	-	10.6x	10.8x	9.7x	-	-	\$15.25	\$8.77
Average				0.5%	12.3x	11.9x	8.0x	(9.1%)	(6.4%)		

Note: S&P 500 currently trading at 12.1x FTM P/E

Source: Factset

Citi vs. the Street

As of Nov-04-11			Target Price		2011				2012				2013			
Company	Citi Rating	Current Px	Street	Citi	Street		Citi		Street		Citi		Street		Citi	
					Sales	EPS	Sales	EPS	Sales	EPS	Sales	EPS	Sales	EPS	Sales	EPS
Boeing	10	\$65.80	\$80	\$78	\$68,729	\$4.42	\$68,734	\$4.39	\$78,478	\$4.94	\$83,439	\$4.49	\$85,345	\$5.80	\$90,764	\$5.44
Digital Globe	20	\$17.66	\$29	\$22	\$335	\$0.13	\$332	\$0.15	\$385	\$0.79	\$382	\$0.68	\$438	\$1.25	\$429	\$1.14
General Dynamics	10	\$63.45	\$78	\$87	\$32,894	\$7.23	\$32,805	\$7.26	\$34,054	\$7.56	\$34,927	\$7.84	\$34,491	\$7.97	\$35,777	\$8.37
Huntington Ingalls	10	\$29.76	\$32	\$32	\$6,550	\$3.48	\$6,498	\$3.51	\$6,644	\$3.43	\$6,507	\$3.63	\$6,529	\$4.13	\$6,400	\$4.06
Lockheed Martin	10	\$76.52	\$82	\$89	\$46,605	\$7.58	\$46,571	\$7.70	\$46,712	\$8.01	\$46,553	\$8.04	\$46,632	\$8.93	\$46,811	\$9.57
Northrop Grumman	10	\$57.18	\$62	\$69	\$26,650	\$6.98	\$26,609	\$7.04	\$26,366	\$6.90	\$26,674	\$7.03	\$26,104	\$6.94	\$26,819	\$7.74
Precision Castparts	10	\$168.07	\$185	\$194	-	-	\$6,220	\$7.01	\$7,416	\$8.61	\$7,455	\$8.69	\$8,536	\$10.34	\$8,841	\$10.63
Raytheon	10	\$44.18	\$51	\$56	\$25,137	\$5.04	\$25,129	\$5.07	\$25,233	\$5.23	\$25,542	\$5.15	\$25,222	\$5.80	\$25,863	\$6.00
Rockwell Collins	20	\$54.50	\$62	\$57			\$4,806	\$3.94	\$4,978	\$4.48	\$4,908	\$4.48	\$5,202	\$5.02	\$5,050	\$4.84
Textron	20	\$18.61	\$25	\$21	\$11,286	\$1.15	\$11,427	\$1.15	\$12,003	\$1.67	\$12,020	\$1.64	\$12,503	\$2.10	\$12,656	\$1.96
Wesco Aircraft	1H	\$11.15	\$15	\$15	\$707	\$0.92	\$707	\$0.95	\$707	\$0.92	\$779	\$1.01	\$707	\$0.92	\$828	\$1.11

P/E vs. Current Price

	2011		2012		2013	
Boeing	14.9x	15.0x	13.3x	14.6x	11.4x	12.1x
Digital Globe	132.8x	114.5x	22.4x	25.9x	14.1x	15.4x
General Dynamics	8.8x	8.7x	8.4x	8.1x	8.0x	7.6x
Huntington Ingalls	8.6x	8.5x	8.7x	8.2x	7.2x	7.3x
Lockheed Martin	10.1x	9.9x	9.6x	9.5x	8.6x	8.0x
Northrop Grumman	8.2x	8.1x	8.3x	8.1x	8.2x	7.4x
Precision Castparts	NA	24.0x	19.5x	19.3x	16.3x	15.8x
Raytheon	8.8x	8.7x	8.4x	8.6x	7.6x	7.4x
Rockwell Collins	NA	13.8x	12.2x	12.2x	10.8x	11.3x
Textron	16.1x	16.2x	11.2x	11.3x	8.9x	9.5x
Wesco Aircraft	12.1x	11.7x	12.1x	11.0x	12.1x	10.1x

Source: CIRA, Thomson Estimates, FactSet, Bloomberg (for Street PT).

Why Invest in Defense Today?

Why Invest in Defense Stocks Today?

There are several reasons to buy defense stocks today seeing as fiscal pressures are largely priced in

- **Expectations are low**
 - The bears are still too bearish on **demand** and **margin** outlook
 - Headlines and budget debates create overhang for now, but picture becomes clearer as head into 2012
- **Leverage opportunities & robust cash balances offer flexibility**
 - Low leverage creates opportunity for the leveraged buy-back
 - Likely to see more shareholder friendly cash deployment (share repos and dividends)
- **Potential multiple expansion**
 - Shares trading at a 30%+ discount to the market
 - History suggests they should trade at a 20% to 25% discount

Valuation: What's Priced In?

There's a disconnect between market fears and strategic realities

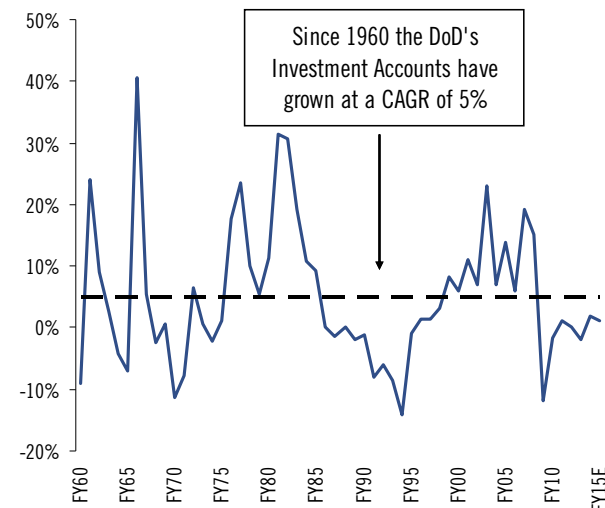
- We think investors are pricing in negative growth (indefinitely) into defense stocks
 - Measure: % of market cap tied to zero growth
 - Current market values imply perpetual declines
- We believe this is too pessimistic since DoD investment accounts grow over time:
 - Grew 5% from 1960 to 2010
 - Grew 3% from 1960 to 2000
 - Produces long-run nominal growth of 3-5%
 - Driven by need to refresh and update equipment
- DoD's Comprehensive Strategic Review (late Fall/Winter) and the FY13 budget proposal (early February) should offer more insight into how the US intends on maintaining its global presence

Current Market Value Attributable to Zero Growth

	Zero-Growth Mkt Value (\$m)	Current Mkt Value (\$m)	Mkt Value Attributable to Zero Growth	Mkt-Implied Perpetual FCF Growth Rate
GD	\$29,110	\$22,595	128.8%	(2.7%)
LMT	\$38,546	\$24,586	156.8%	(3.6%)
NOC	\$18,965	\$14,940	126.9%	(2.5%)
RTN	\$28,911	\$15,291	189.1%	(7.3%)

Source: CIRA, Bloomberg, FactSet

Annual Growth in DoD Investment Accounts (FY60-15E)



Source: DoD

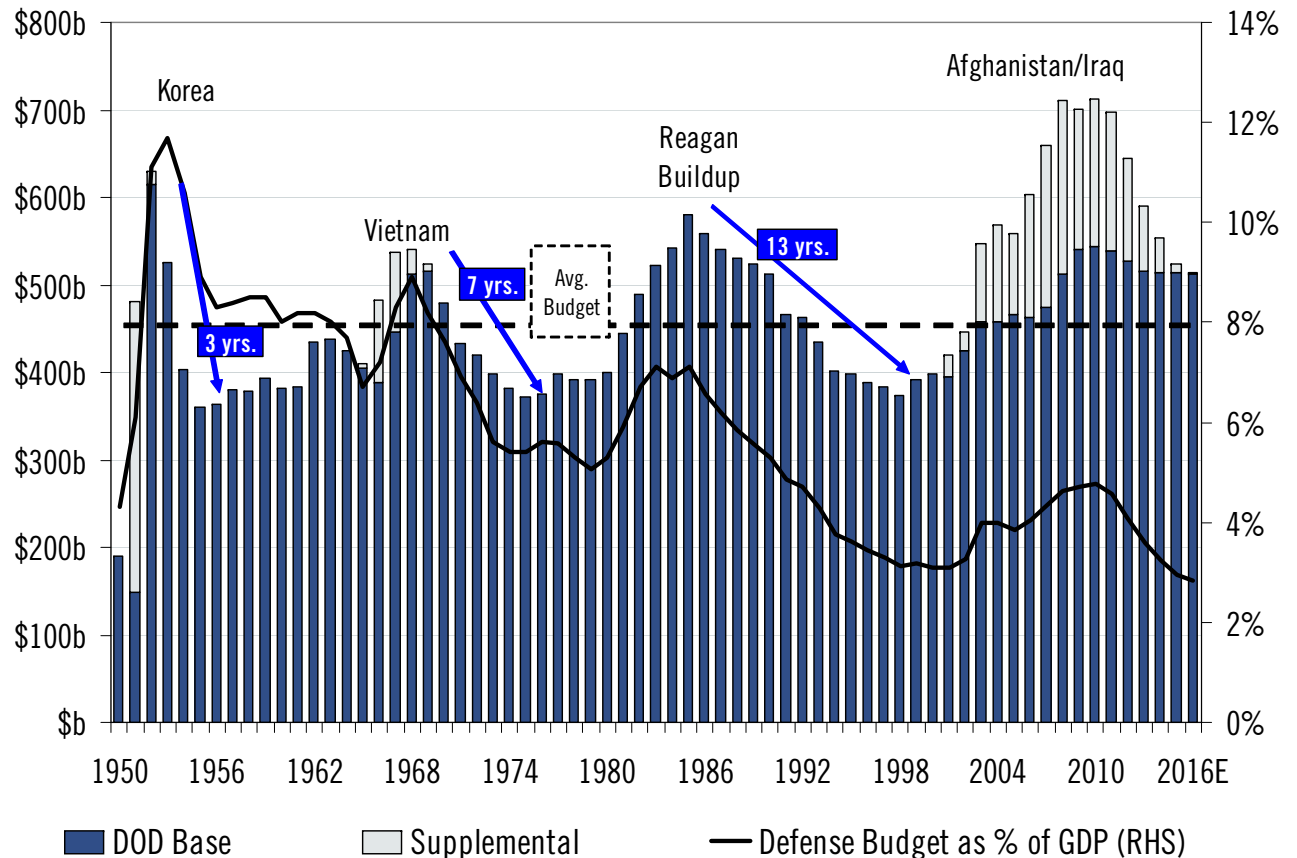
Demand Environment & Budget Scenarios

Why the Bears Are Too Bearish on Demand

While there are good reasons to fret over US defense budgets, certain realities persist propping up spending

- **Defense spending is sticky**
 - 3 years to wind down from Korea
 - 7 years to wind down from Vietnam
 - 13 years to wind down from Cold War
- **Threat environment persists**
 - Afghan & Iraqi engagements
 - “Rogue” states: Iran & North Korea
 - Rising powers: China & Russia
 - Terrorism
- **Tough to make cuts quickly**
 - Canceled programs often morph into new ones
 - Congressional interests limit big moves
 - Public still supports strong national defense

US Defense Department Budget (Constant \$)



Source: CIRA, DoD

Sources of Defense Growth

Even though domestic resources may be shrinking, international markets continue to grow

- **Flattish base budget growth**
 - Flattish base budget FY12-16E
 - Higher margin procurement up
 - Lower margin development down
- **War spending likely falls**
 - Wind down Iraq in 2011
 - Begin Afghanistan withdrawal in 2011
 - 25% annual decline in War Budget FY12-16E
- **International markets continue to grow**
 - Reliant on US industrial base for weapons systems
 - Increasing DoD and Dept. of State emphasis on bolstering allies' capabilities
- **Adjacent markets offer opportunities**
 - Homeland Security
 - NASA
 - Intelligence Agencies
 - FAA

Defense Growth Components

DoD - Base Accounts	0.0%	to	1.0%
DoD - Supplemental Accounts	(1.0%)	to	(2.0%)
International Markets	0.5%	to	1.3%
Adjacent Markets	0.5%	to	1.0%
Total	0.0%	to	1.3%

Source: CIRA

International Growth Outlook

	2010	2011E	2012E	2013E	2014E	2015E	CAGR
DoD	214.0	214.0	214.0	214.0	214.0	214.0	0.00%
Europe	5.4	5.5	5.5	5.6	5.6	5.7	1.00%
ME	26.5	27.4	28.3	29.2	30.1	31.1	3.25%
Latin America	4.0	4.3	4.5	4.8	5.1	5.5	6.50%
Africa	1.0	1.0	1.0	1.1	1.1	1.1	2.00%
Asia and Other	14.0	14.9	15.9	16.9	18.0	19.2	6.50%
Total	264.9	267.0	269.2	271.5	274.0	276.5	0.72%

Source: CIRA, SIPRI

Budget Scenarios

The summer's debt deal (the Budget Control Act, or BCA) and forthcoming Congressional budget action still allow for relatively resilient defense spending over a 10-year period across a variety of Scenarios

1. Super Committee Succeeds

- DoD subject to Tranche 1 of BCA
→ \$483b over 10Y
- DoD currently planning for this outcome

2. Success w/ More Defense Cuts

- Tranche 1 + further cut recommendations from Super Committee
→ \$483b+ over 10Y

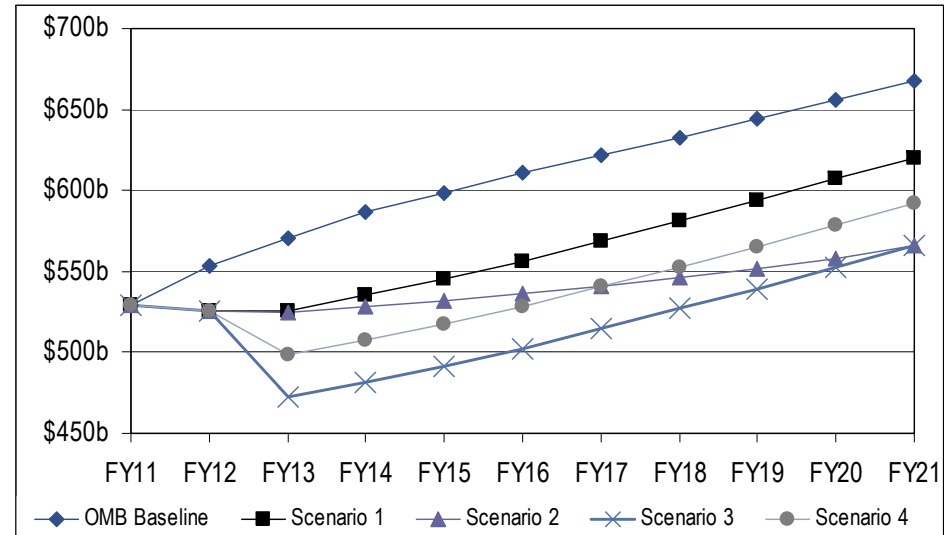
3. "Doomsday"

- Super Committee fails and triggers sequestration mechanism
→ \$968b over 10Y
- Caps not enforced until January 2013

4. "Brighter Doomsday" (unlikely)

- Committee fails but finds some deficit reduction
→ less than \$968b

DoD Budget Scenarios (Current \$)



Source: CIRA

DoD Budget Scenarios (Current \$)

	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	CAGR		
												FY12-21	FY11-21	FY11-16
OMB Baseline	529	554	571	586	598	611	622	633	644	656	668	2.10%	2.35%	2.91%
Nominal y/y %		4.6%	3.1%	2.7%	2.0%	2.1%	1.8%	1.8%	1.8%	1.8%	1.8%			
Scenario 1	529	525	525	536	546	556	568	581	594	607	620	1.86%	1.60%	1.00%
Nominal y/y %		(0.7%)	0.0%	1.9%	1.9%	1.9%	2.2%	2.2%	2.2%	2.2%	2.2%			
Scenario 2	529	525	524	528	532	536	541	546	551	558	566	0.84%	0.68%	0.27%
Nominal y/y %		(0.7%)	(0.2%)	0.8%	0.7%	0.8%	0.9%	0.9%	1.0%	1.2%	1.4%			
Scenario 3	529	525	472	482	491	502	515	527	539	553	566	0.84%	0.68%	(1.05%)
Nominal y/y %		(0.7%)	(10.1%)	2.0%	2.0%	2.1%	2.5%	2.4%	2.4%	2.5%	2.4%			
Scenario 4	529	525	498	508	517	528	540	553	565	579	592	1.34%	1.13%	(0.05%)
Nominal y/y %		(0.7%)	(5.2%)	1.9%	1.9%	2.0%	2.4%	2.3%	2.3%	2.4%	2.3%			

Source: CIRA

Illustrative 10Y Reduction Package

Investment accounts likely take a ~\$250b hit over 10Y, in line with early indications from Secretary Panetta

- Headline investment account cuts include:

Program	Option	Tickers	10Y Savings (\$b)
F-35	Replace JSF w/ F-16s and F/A-18s	LMT, NOC, BA	\$48.0
JLTV	Extend/delay	BAE, GD/AMG, or LMT	\$17.8
DDG-51	Extend/delay	HII, GD	\$16.9
VA-class subs	Extend/delay	HII, GD	\$15.0
P-8A	Extend/delay	BA	\$12.2
JTRS GMR	Termination	BA, COL, GD	\$12.0
WIN-T	Extend/delay	GD	\$8.2
PTSS	Termination	Ball, BA, LMT, NOC, ORB, RTN	\$7.5
CVN	Reduce carriers to 10, Air Wings to 9	HII	\$7.0
E-2D	Extend/delay	NOC	\$6.3
V-22	Reduce	BA, TXT	\$6.0
GCV	Extend/delay	GD or BAE	\$5.9
JLENS	Termination	RTN	\$5.8
RQ-4 Global Hawk	Extend/delay	NOC	\$3.2
JASSM ER	Extend/delay	LMT	\$2.4
SDB II	Extend/delay	RTN	\$2.1
C-130 AMP	Extend/delay	BA	\$2.0

Source: CIRA, CBO, GAO, CSBA

- The above table likely overstates actual outcomes since:
 - Limited visibility into the thousands of levers DoD can pull to generate long-term savings
 - The above decisions imply major force structure decisions we do not think DoD is likely to take in the near term, let alone simultaneously

Estimated Impact of Illustrative 10Y Reduction Package

A multi-year reduction package aimed at the investment accounts impacts industry on an NPV basis

- In the event the preceding illustrative cuts were made simultaneously”

	Avg. Annual Sales Impact (\$b)	VS. 2012E sales	Avg. Annual EPS Impact	Drivers
LMT	(\$5.56)	11.9%	(\$1.06)	JSF, JLTV
NOC	(\$1.86)	7.0%	(\$0.53)	JSF, E-2D, RQ-4
BA	(\$0.95)	1.1%	(\$0.06)	F/A-18, P-8A, JTRS, V-22
GD	(\$2.46)	7.0%	(\$0.52)	JLTV, DDG51, subs, WIN-T, GCV
HII	(\$1.77)	27.2%	(\$1.40)	DDG-51, subs, carriers
COL	(\$0.14)	2.8%	(\$0.13)	JTRS
TXT	(\$0.23)	1.9%	(\$0.04)	V-22
RTN	(\$0.70)	2.8%	(\$0.15)	PTSS, JLENS, SDB II

Source: CIRA

Note: assumes 2012 company-wide EBIT margin, tax rate, and share count

- In reality, the only certainty is that defense spending is uncertain seeing as new threats/requirements come and go
 - Example: Saving money today can open up ability to spend money later on new procurement objectives including SSBN-X (OH-class replacement) or NextGen bomber
 - And...who's to say what the threat environment looks like in 3, 4, 5, or 6 years?

Defense Margins & Valuation

Defense Margin Outlook

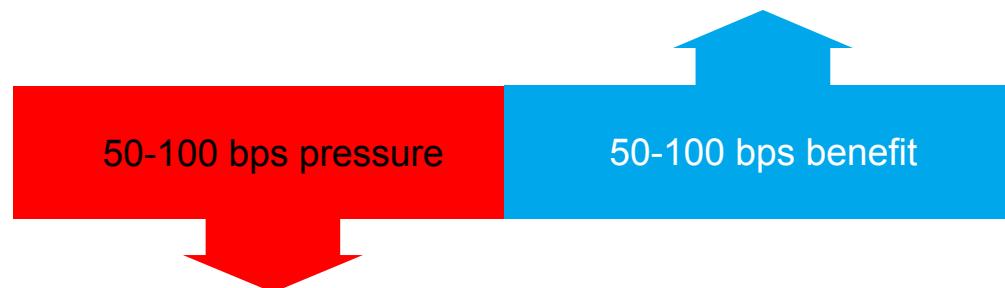
We expect margins to remain resilient as fiscal pressures are offset by a positive mix-shift in sales

Near-Term Pressure

- ▼ Contract scrutiny & low-price competitions
- ▼ Time & material contracts coming to end
- ▼ Lengthening sales cycle creates inefficiencies
- ▼ Diminished ability to spread fixed costs

Long-Term Resiliency

- ▲ Shift of DoD spending from R&D to Procurement
- ▲ Increasing international mix
- ▲ Increased use of fixed price contracts
- ▲ Company-led cost reductions



Structural Shift in DoD Buying Behavior

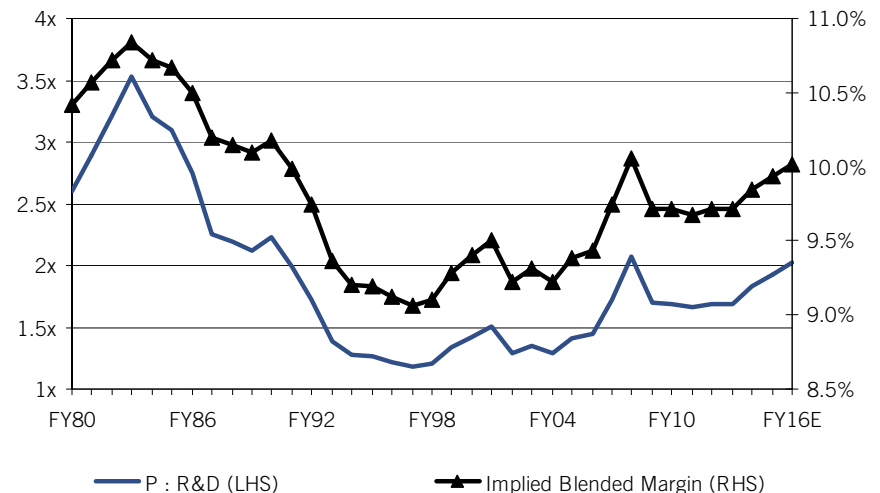
An increase in the procurement-to-R&D spending ratio likely benefits defense company margins as DoD moves toward buying more mature products instead of pursuing development activities

- DoD to buy more weapons that address today's needs
- Less focus on developing new weapons with uncertain benefits
- Driver of shift: Fiscal realities that suggest DoD spending to be flattish going forward
- Result of the shift: Higher margin revenue mix for defense companies
- "Procurement" to "RDT&E" spending ratio is currently 1.7x
- Ratio forecast to go to 2.0x by FY16E (was as high as 3.5x in the mid-1980s)
- Each turn in the ratio can create 50 – 100 bps margin expansion

Typical Defense Company Margin Stack

More Emphasis Here	International Production	15%+
	Domestic Production	10% to 15%
Less Emphasis Here	Low-Rate Initial Production	5% to 10%
	RDT&E	0% to 5%

Source: CIRA



Source: CIRA, DoD

Potential for Multiple Expansion

Defense shares are trading at depressed levels vs. comparable spending environments

- **Defense stocks currently trade at:**

- 7.5x FTM PE
- 30% discount to S&P 500

- **Historically have traded at:**

- 6x to 24x FTM PE
- 68% discount to 4% premium to the S&P

- **Should trade at:**

- Same levels as
“Post Consolidation & Stable Demand Era”
- ~25% discount to market

- **Catalysts**

- DoD’s global strategy review in late Fall/Winter
- Congressional Joint Committee proposal in late November and legislative action in December
- FY13 budget request in February 2012

- **Peace Dividend & Consolidation Era**

- 1992 to 1995
- 8x FTM PE
- Falling demand post Cold War

- **Post Consolidation & Stable Demand Era**

- 1995 to Sep 2001 (ex dotcom bubble)
- 13.5x FTM PE, 24% discount to market
- Closest comp to today’s environment

- **War on Terror**

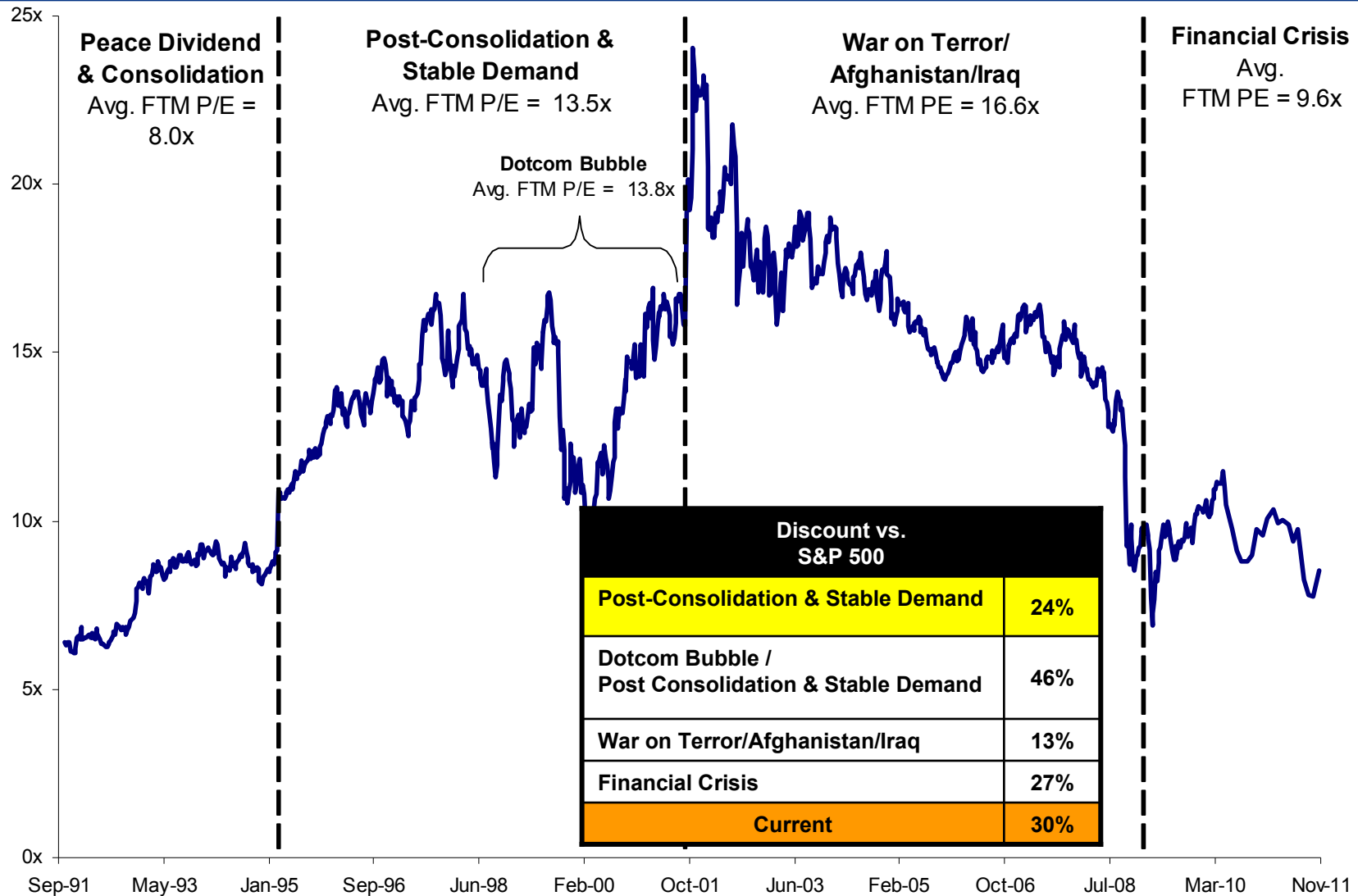
- Sep 2001 to Sep 2008
- 16.6x FTM PE
- 13% discount to market

- **VS. Now**

- 8.5x FTM PE
- 30% discount to market

Multiple Expansion Opportunity

We see a multiple expansion opportunity among defense FTM PEs which are trading at near all-time lows



The Defense “Leveraged Buyback”

Leveraged Buybacks

Cash generation and already strong balance sheets are a potentially potent combination

- **Free cash per share improving**
 - \$16.60 in aggregate in 2010 vs. \$9.40 in 2002
- **Companies increasingly returning money to shareholders**
 - 82% of cash from operations in 2010 vs. 18% in 2002
 - Dividends currently yield 4% vs. 1.6% in 2002
 - Share authorization increasing (\$9b in aggregate today vs. \$1.5b in 2002)
- **Defense companies under levered**
 - 0.4x Net Debt to EBITDA
- **Huntington Ingalls (HII) sets precedent**
 - Capital structure approved by DoD
 - 2.8x Net Debt to EBITDA
- **Lever-Up to buyback an accretive exercise**
 - 63% accretion on average
 - Precedents: GD, COL, LMT, RTN

Leveraged Buyback Simulation

Funding share repurchases with historically cheap debt can be a *highly* accretive exercise for defense companies

	GD	LMT	NOC	RTN	BA	PCP	TXT	COL	DGI
Net Debt (Cash)	2,589	2,471	1,029	1,207	6,426	(586)	3,888	316	262
LTM EBITDA	4,521	4,824	3,865	3,356	7,061	1,639	920	1,008	151
Current Net Debt/EBITDA	0.6x	0.5x	0.3x	0.4x	0.9x	(0.4x)	4.2x	0.3x	1.7x
Target Net Debt/EBITDA	2.8x	2.8x	2.8x	2.8x	2.8x	2.8x	2.8x	2.8x	2.8x
Potential Additional Debt (\$m)	10,070	11,036	9,793	8,190	13,345	5,175	NA	2,506	159
Potential Shares Repurchased (m)	159	144	171	185	203	31	NA	46	9
% of Float	43.1%	42.6%	60.4%	52.5%	26.9%	21.4%	NA	29.4%	19.4%
Share Repo Accretion	\$5.51	\$5.70	\$10.73	\$5.61	\$1.62	\$1.91	NA	\$1.64	\$0.04
Add'l Interest Expense Dilution	(\$2.16)	(\$2.69)	(\$3.77)	(\$2.27)	(\$1.05)	(\$1.99)	NA	(\$1.06)	(\$0.22)
Net Accretion (Dilution) vs. 2011E EPS	\$3.35	\$3.02	\$6.96	\$3.34	\$0.57	(\$0.08)	NA	\$0.58	(\$0.18)
% Acc (Dil) vs. 2011E EPS	46%	39%	99%	66%	13%	-1%	NA	15%	(118%)

Source: CIRA, FatSet

- **Diminishes the value trap argument:**

There probably won't be transformational M&A, but recent break-ups and spins (NOC, ITT, LLL) suggest active & vigilant management teams.

→ HII precedent demonstrates another tool these companies could use to positively impact shareholders

- **Not a call on wholesale de-equitization:**

We are not predicting widespread de-equitization of our coverage universe, but as defense industry growth slows and bolt-on acquisitions become harder to come by, cash accumulates on balance sheets. Combined with the leverage potential, we see defense companies having a lot of dry powder to return to shareholders profitably.

Defense Industry Catalysts

It will be an especially busy Fall/Winter with Congress and DoD determining budgetary and strategic direction

- **Until November 23:** Joint Committee meetings
 - Expectation: news flow sucked in by the mess that is Congressional sausage-making
- **By November 23:** Joint Committee Votes on deficit reduction package
 - Expectation: to avoid embarrassment and unintended political fall-out that was the debt ceiling debate, we expect the Committee, by hook or by crook, to avoid the appearance of failure
- **November/December:** Begin learning contours of Comprehensive Strategic Review
 - Expectation: DoD to set sights on O&M and Milpers
- **November:** F-35 negotiations with LMT and potential re-baseline
 - Expectation: Slow negotiations on LRIP 5 and early whispers of potential reduction to total program quantity (now ~2,400), with program details not expected until February
- **By Dec 23:** Congress has up/down vote on Committee's proposal
 - Expectation: a bit tougher to control a 435-member body, the vote likely comes down to the wire
- **January 2012:** Potential DoD budget "pre-announcement" similar to Gates' preview of the FY12 request in January 2011
- **Early Feb 2012:** FY13 budget submission
 - Expectation: incorporates results of Comprehensive Strategic Review and reflects long-term plans. Expect ~\$250b reduction across the FYDP period (FY13-17E) vs. previous expectation

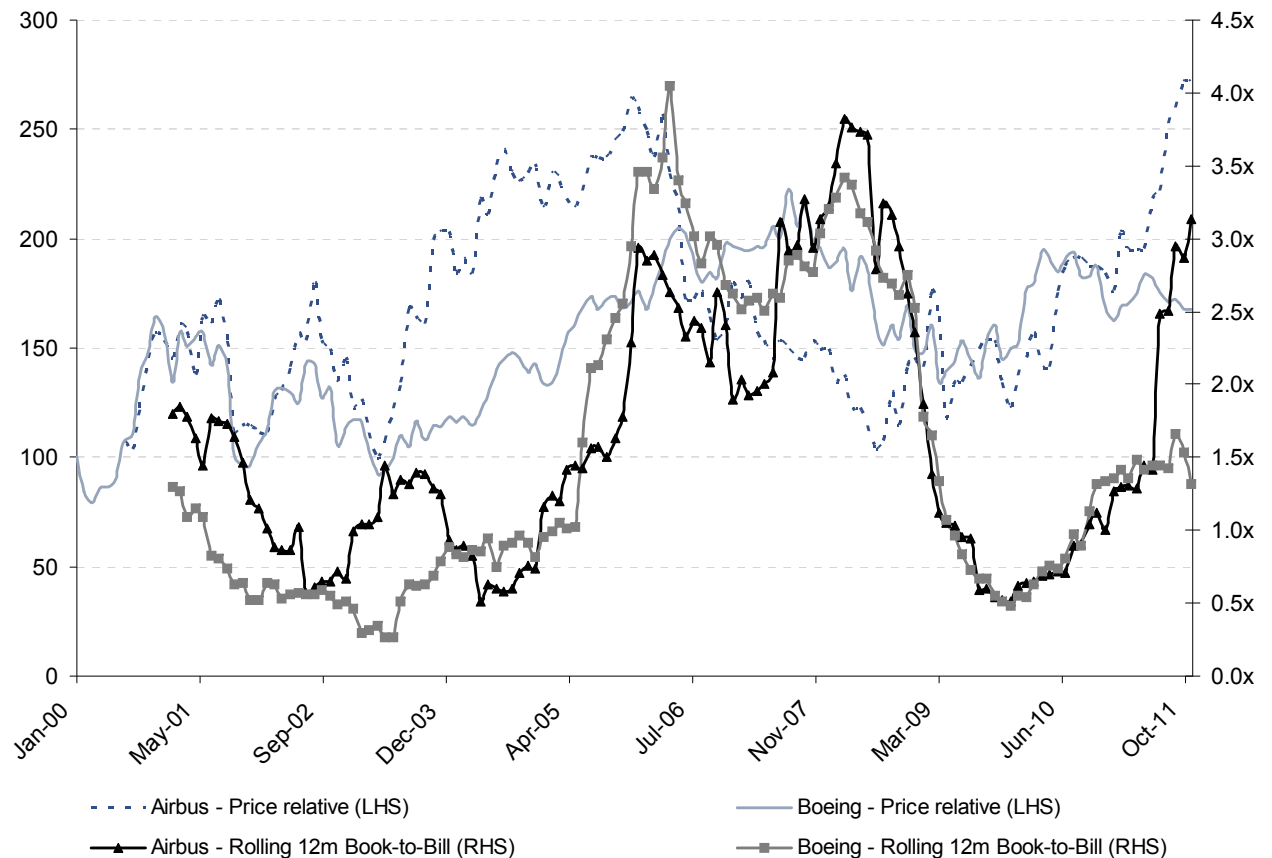
This Commercial Cycle's Got Wings

Commercial Aero Cycle Still Has Wings

We continue to see positive momentum in large commercial OE and aftermarket

- **Commercial OE:**
We don't see a cut
 - Top-down demand model still supportive of delivery forecasts
 - Production rates set to increase across narrow and wide-bodies
 - Large backlogs supportive of production rates
- **Commercial aftermarket:**
Still performing
 - Airline profits hanging in
 - Traffic demand supports capacity growth
 - Bow-wave of 2005/06 vintage aircraft need service

Rolling 12m book-to-bill vs. Relative Px (vs. S&P)



Source: CIRA, Boeing, Airbus

Phasing the Aerospace Recovery Cycle

The commercial aero recovery cycle is entering Phase 2 in which OEs increase production rates

- **Phase One**

- Commercial traffic volumes increase
- Aftermarket service (AMS) demand increases
- Commercial book-to-bill bottoms
- Beneficiaries: COL (AMS) and BA (B-to-B bottoms)

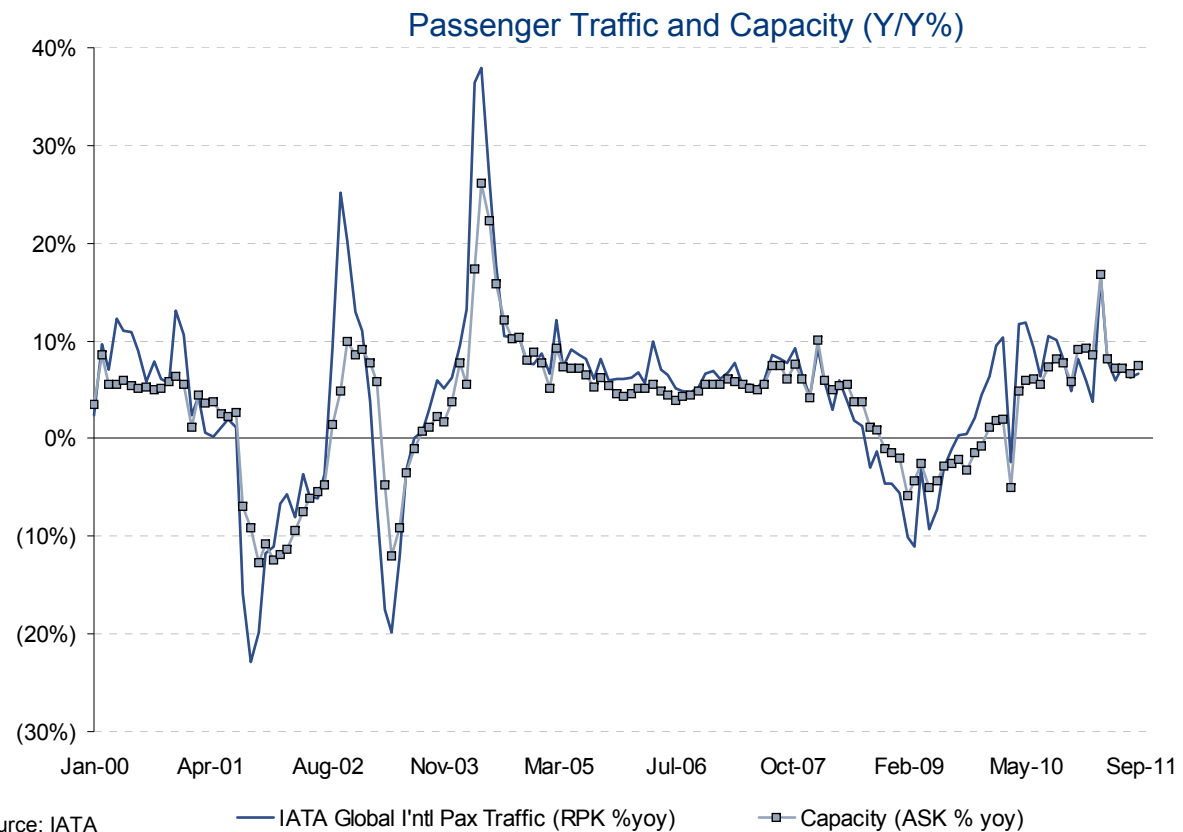
- **Phase Two**

- Commercial OE production rates increase
- Commercial orders begin to recover and book-to-bill rises (as do share prices)
- Bizjet traffic begins to recover
- Beneficiaries: BA/PCP/COL (production increases), COL (AMS)

- **Phase Three**

- Commercial orders gain momentum (as do share prices)
- Commercial and bizjet production increases
- Beneficiaries: GD, BA, COL, PCP & TXT (production increases and AMS)

Beneficiary	1. Early Cycle	2. Mid-Cycle	3. Late Cycle
Aftermarket	X		
Commercial OEM		We Are Here	
Business Jet OEM			X



Robust Commercial OE Outlook

Commercial OE: Demand Model Supports Deliveries

Despite weakened GDP growth impacting expected traffic growth, implied demand still supports delivery forecasts

- Top-down demand model:
 - Citi GDP expectations (C) have come down lately → impacts traffic growth (D)
 - But, aircraft retire (B) over time → drives new aircraft demand (E)
 - Implied new aircraft demand (E) supports Citi delivery forecasts (F, G)
- Boeing saying it will still use production increases to burn backlog in the face of weakening GDP growth

		2010	2011E	2012E	2013E	2014E	2015E
	In Service Fleet b/f	15,610	16,284	16,930	17,570	18,380	19,350
A	Deliveries	972	1,066	1,080	1,270	1,450	1,550
B	Retirements	-298	-420	-440	-460	-480	-500
	In Service Fleet c/f	16,284	16,930	17,570	18,380	19,350	20,400
	Average age (implied)	11.5yrs	11.4yrs	11.3yrs	11.2yrs	10.9yrs	10.7yrs
C	GDP Growth	4.1%	3.0%	2.9%	3.4%	3.8%	3.9%
	Multiplier	1.6x	1.7x	1.7x	1.7x	1.7x	1.7x
D	Traffic Growth	6.5%	5.0%	4.8%	5.6%	6.3%	6.4%
	Implied Delivery Growth	-0.7%	9.7%	1.3%	17.6%	14.2%	6.9%
E	Implied Demand (# aircraft)	972	1,066	1,080	1,270	1,450	1,550
F	Citi Delivery Forecasts (# aircraft)		1,020	1,202	1,288	NA	NA
G	Over / (Under) delivery vs. demand		(4.3%)	11.3%	1.4%	NA	NA

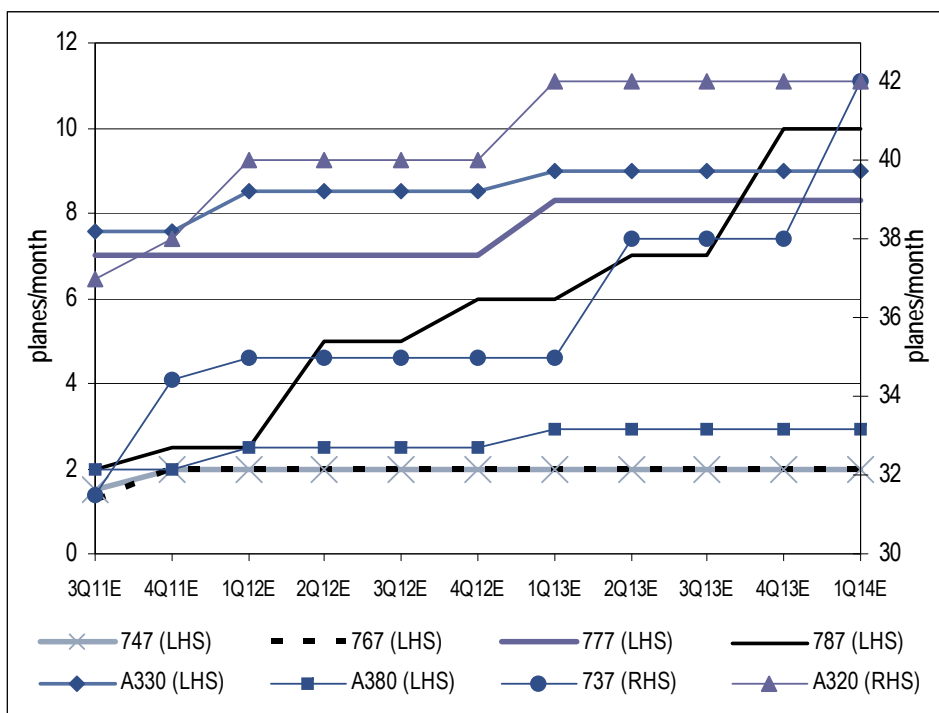
Source: CIRA

Commercial OE: Backlogs Support Production Ramps

Strong commercial aero backlogs at Boeing and Airbus (~6 years of deliveries) help anchor production rate increases

- Production rates set to increase ~40% between now and 2014
- Strong order books support these planned ramps, with current backlogs representing ~6 years of deliveries
- Backlogs expected to grow further, with Boeing seeing book-to-bill > 1x in 2011, 2012, and 2013
 - This could be derailed by weaker GDP numbers, in which case BA would use the production increases as an opportunity to burn through some of its backlog

Monthly Production Rate Forecast



32 Source: CIRA, Boeing, Airbus

Years in Backlog

Boeing		Deliveries			Yrs in current backlog	2011E-13E Delivery CAGR
	Backlog (#)	Rest of 2011E	2012E	2013E		
737	2,126	66	420	443	4.4	9%
747	114	7	28	24	4.3	55%
767	52	3	24	24	2.0	10%
777	317	14	84	100	3.2	16%
787	821	3	55	84	7.7	310%
Total	3,430	93	611	675		19%

Airbus		Deliveries			Yrs in current backlog	2011E-13E Delivery CAGR
	Backlog (#)	Rest of 2011E	2012E	2013E		
A320	3,141	107	458	472	6.2	6%
A330	360	25	102	105	3.2	8%
A350	567	0	0	0	TBD	NA
A380	183	7	30	35	5.2	18%
Total	4,251	139	591	613		7%

Source: CIRA, Ascend

Commercial OE: Catalysts

We are monitoring several on-going processes that help determine the direction of the OE market

- Firm order announcements for re-engined Boeing 737 (737 MAX)
 - The MAX has 600+ commitments thus far
- Execution of production rate ramps and potential for rate increases
 - Boeing distributing schedules to supply chain to help gauge the impending ramps
- Dubai Air Show (November 13, 2011)
- Singapore Air Show (February 14, 2012)
- Berlin Air Show (June 19, 2012)
- Farnborough 2012 (July 9, 2012)

Commercial Aftermarket Has Room to Grow

Commercial Aftermarket: Ingredients for Growth

While we believe that the aftermarket growth story has been largely priced in, we still see growth potential

~3% Capacity Growth
(assumes 1.5x GDP growth)

+

Aging aircraft require typical checks (~6 years post-delivery)

+

Airlines re-scoping work (engaging in preventive maintenance)

+

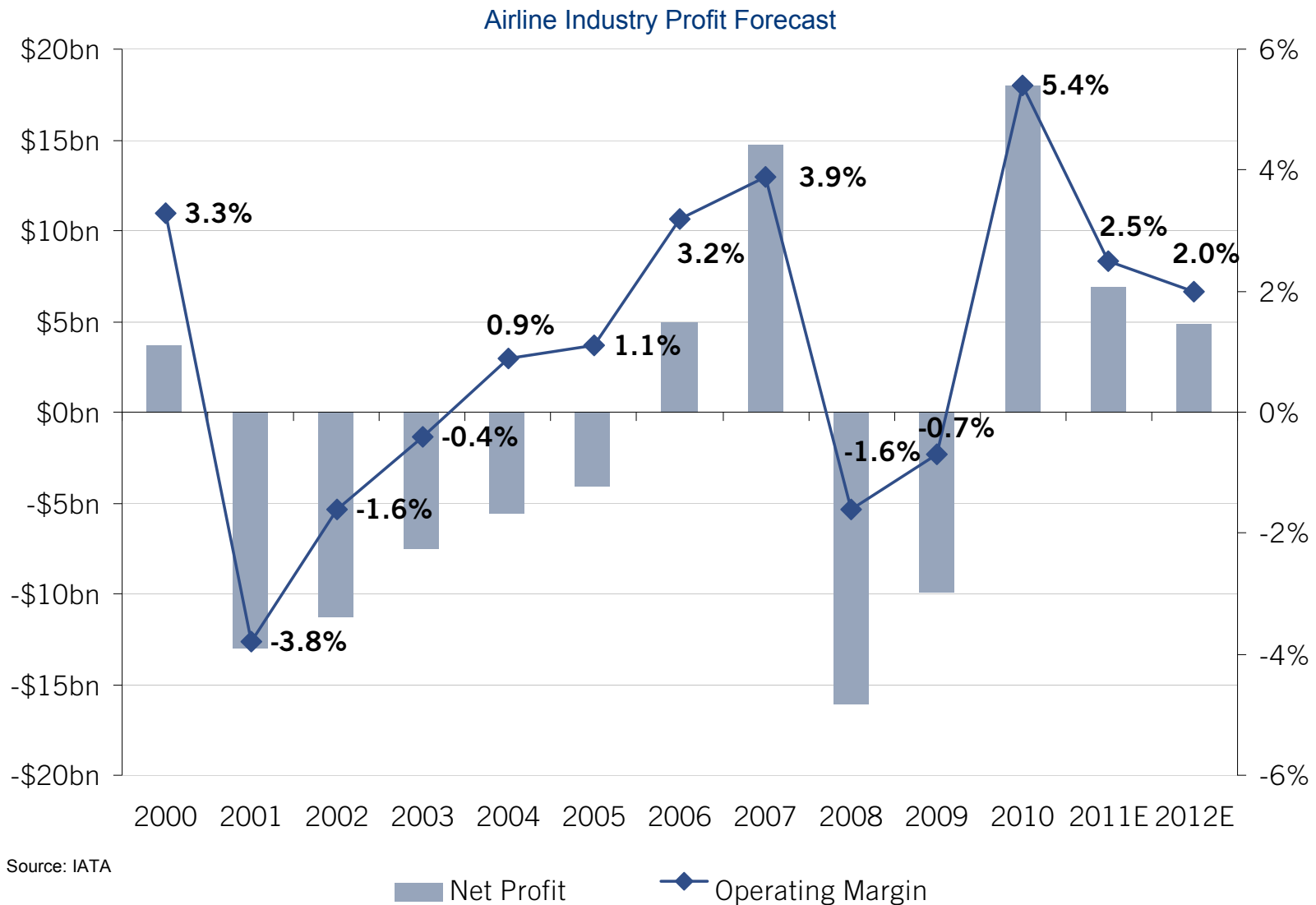
Price escalation

=

High Single Digit / Low Teens Growth

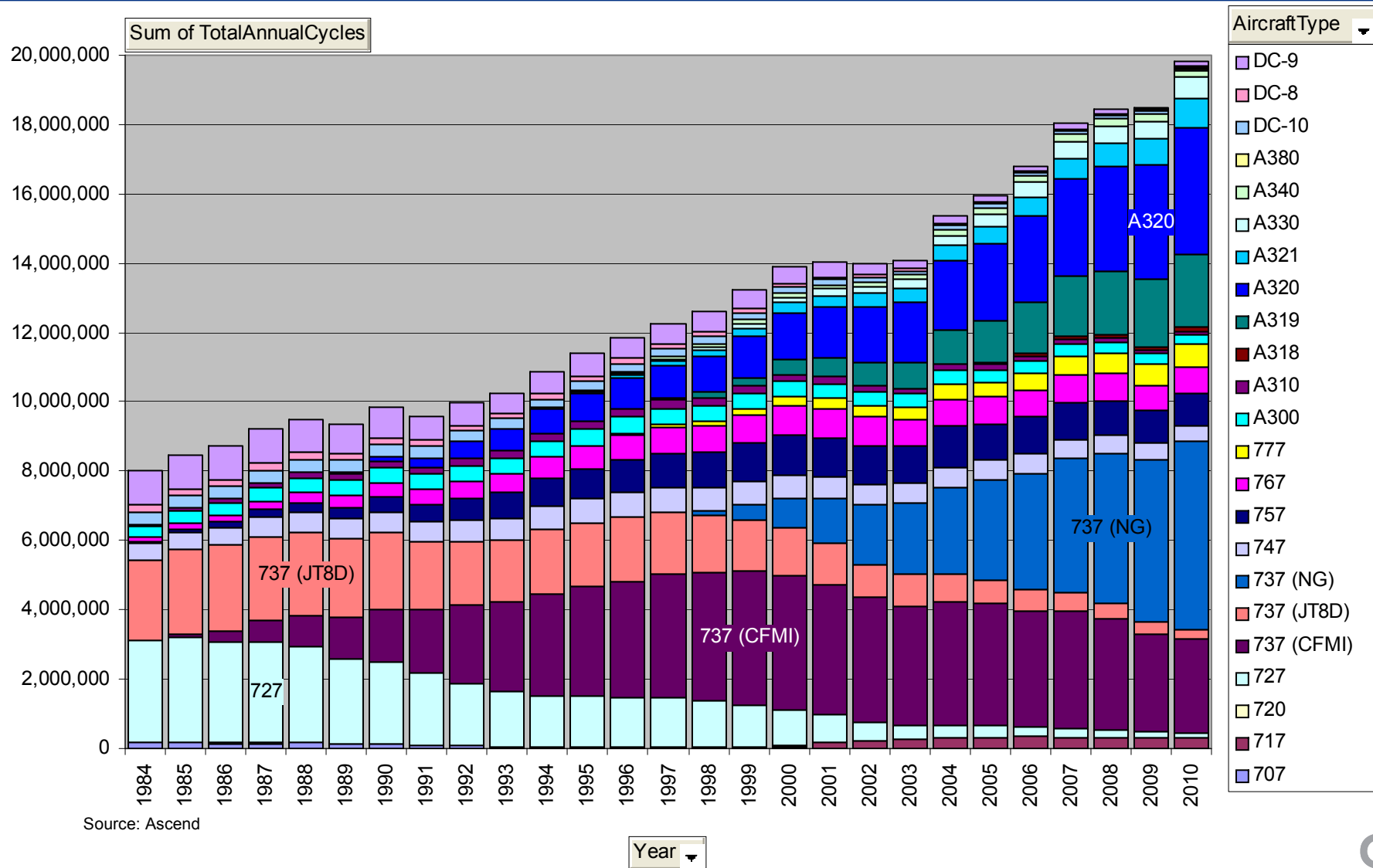
Commercial Aftermarket: Airlines Still Profitable

As the primary buyer of aftermarket services, it's important that airlines stay profitable



Commercial Aftermarket: Capacity Increasing

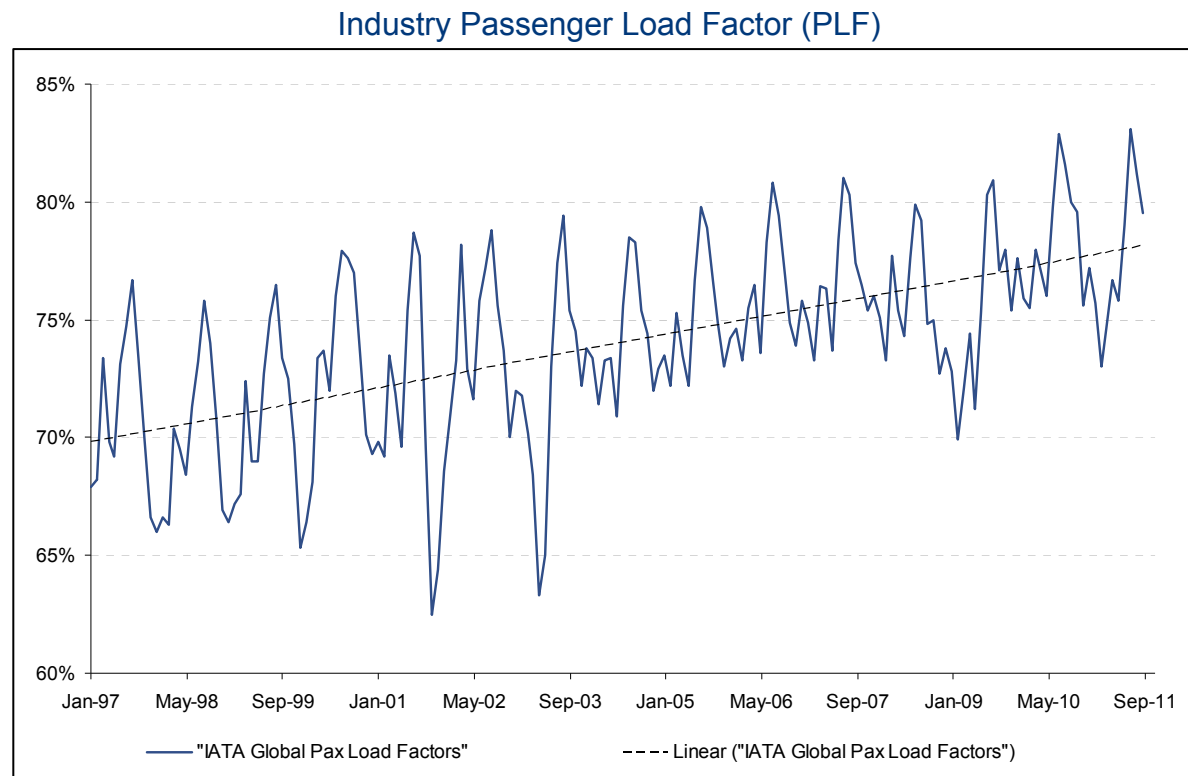
Total cycles are increasing after relatively weak growth in 2007-10, generating maintenance demand



Commercial Aftermarket: Capacity vs. Traffic

Aftermarket demand is tempered by airlines flying fuller planes, but historically high PLFs are difficult to maintain

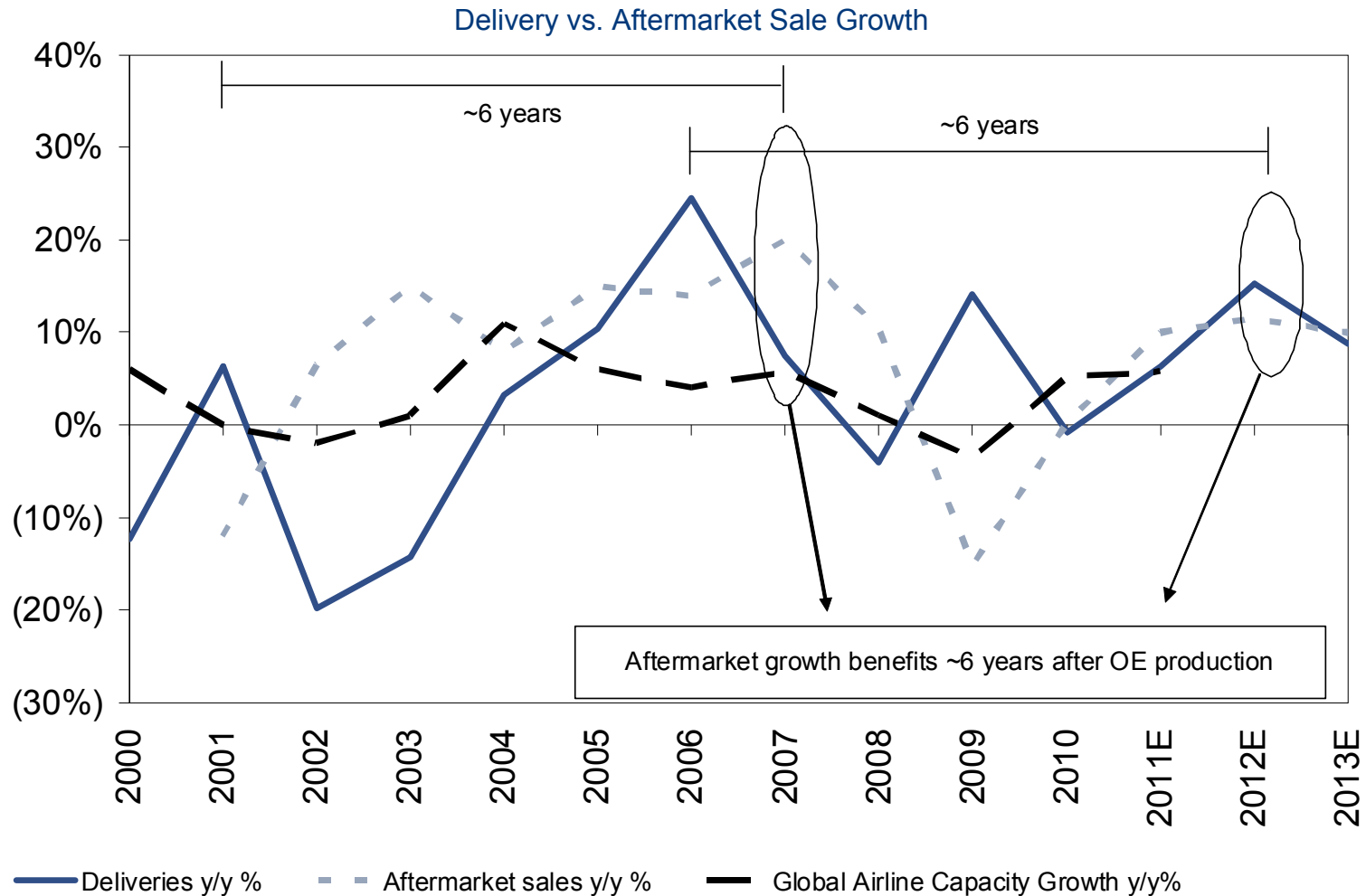
- As capacity outpaces traffic, passenger load factors (PLFs) fall (emptier planes)
- 2010's expected aftermarket recovery was weaker than expected as airlines flew aircraft fuller than ever before (almost 85%)
- While recent readings indicate a return to 3Q10's highs and as airlines carefully manage their capacity, we do not view current all-time highs as sustainable



Source: IATA

Commercial Aftermarket: Bow Wave Coming Due

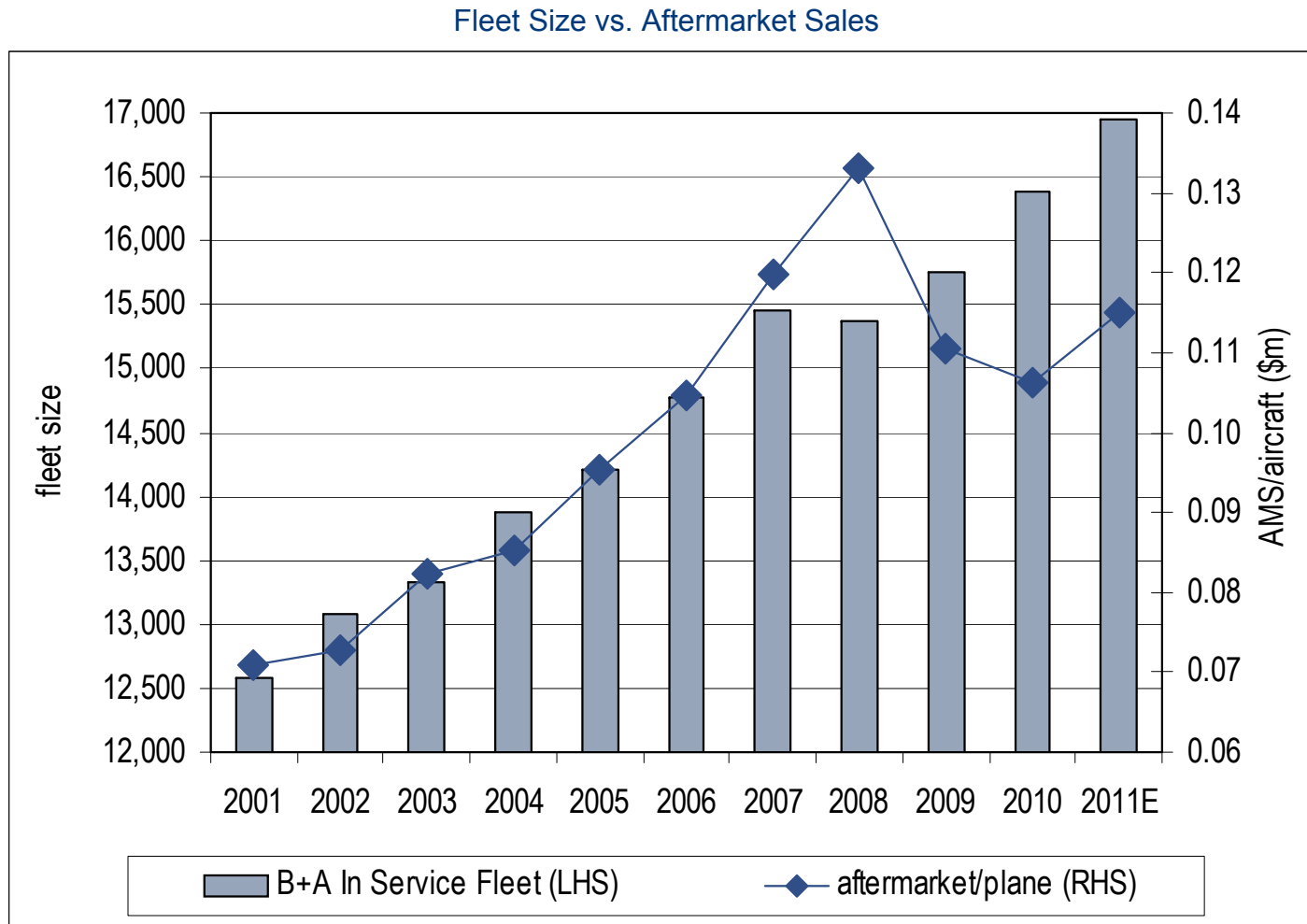
A delivery spike in 2005-06 is likely to drive aftermarket demand in 2011-13 (~6-7 years after delivery)



Source: Ascend, IATA

Commercial Aftermarket: Re-scoping

There may be room for airlines to re-scope aftermarket work given relatively low spending on a per plane basis



Source: Ascend, Leading aftermarket provider

Commercial Aftermarket: Catalysts

We are monitoring several trends driving aftermarket demand

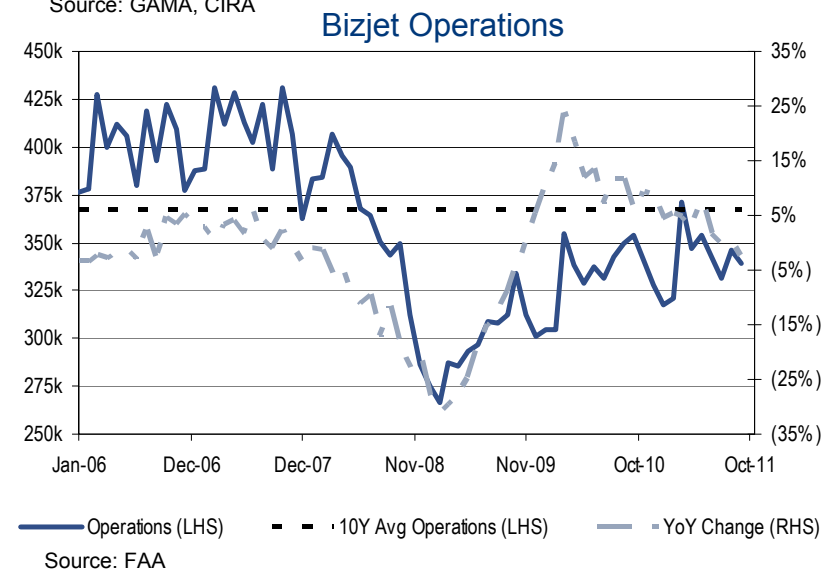
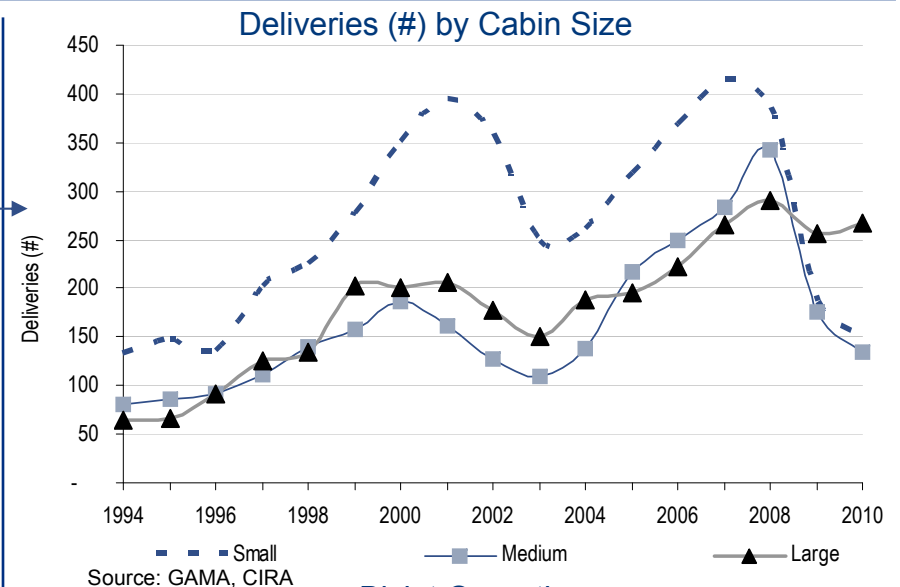
- Oil price fluctuations:
 - Lower oil prices → reduces pressure on airline profits
 - Higher oil prices → newer, efficient aircraft are more attractive
- Economic data dictates traffic expectations
- Announced airline capacity plans
- PLF data indicates how airlines are coping with demand increases
 - Are airlines flying more planes or just fuller planes?

Mixed Bag on Bizjets

Mixed Bag on Bizjets

The bizjet market is differentiated by cabin size, with the larger cabins enjoying a healthier outlook

- **BizJet recovery cycle dynamics**
 - Aftermarket recovery still leading OE production increases
- **They don't fly in formation**
 - Large cabin demand is less elastic than smaller cabins due to a wealthier customer base, and fared better during the financial crisis
 - We expect large cabins to see some modest recovery in 2011, while the majority of the market isn't expected to come back until 2012 at the earliest
- **Trends**
 - Bizjet operations slowing as comps get tougher and economic uncertainty heightens, although orders still hanging in
 - Used inventory (priced at ~50%) still high on a historical basis creating pricing overhang on new jets
 - International demand recently led by Europe is expected to turn to Latin America and Middle East
 - New entrants (eg Embraer and Bombardier) offering new models competing in market segments in which GD and TXT traditionally found strength
 - Cessna, Bombardier, Embraer, and Rockwell Collins (supplier) all reporting on limited visibility beyond 2011 regarding production rate increases



BizJet Product map

We are more constructive on the higher-end bizjets given the relative price inelasticity of the core customer

- Neutral-rated Textron (Cessna) is focused on the lower end of the bizjet product spectrum,
- Buy-rated General Dynamics (Gulfstream) builds larger cabin models

Cabin Size	Small				Medium		Large			Converted
Range	Very Short		Short	Short Medium	Medium	Long		Very Long	Ultra Long	Airliners
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)	Challenger 850, 870, 890
Embraer	Phenom 100		Phenom 300			Legacy 450 & 500/550 (2013)	Legacy 600 Legacy 650			Lineage 1000
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: CIRA

Bizjet Catalysts

We are monitoring several factors driving the bizjet market

- Used inventory levels
 - Levels are slowly coming down (better for large cabins), but they are still at historical highs which dampens demand for new bizjets from the OEs (especially for small cabins)
- Bizjet operations
 - Activity has been slowing down of late due to macro weakness and tougher y/y comparables, likely eating into some aftermarket demand
- May 14: EBACE Bizjet Show (Geneva)
 - Europe-focused bizjet show will help clarify demand from a region that has seen its share of bizjet purchases erode in the face of growing demand from Asia and the Middle East

Company Snapshots

Boeing – Buy (BA-1)

PT: \$78

Boeing is split ~50/50 between commercial airliners and military (including fighters, helicopters, and communications)

- **Key Investment Points**

- New commercial models and robust backlog offer revenue visibility
- Production increases and end of development cycle improves cash flow and earnings outlook
- Military helos and F/A-18s still in demand
- NB market share remains ~50/50 with introduction of 737 MAX

- **Potential Catalysts**

- 737MAX orders
- 787 ramp
- Execution of FCF story

- **Where We Are Differentiated**

- Commercial story well-loved and we are confident about the MAX' ability to maintain split market share
- More positive outlook on defense given portfolio comprised of helicopters & F/A-18s, plus long-term growth from tanker win

- **Potential Push Back**

- Defense outlook too high. **Retort:** Budgets are sticky, threats persist & BA's portfolio (especially helos) is still in demand.
- Commercial outlook too high. **Retort:** Large backlog & persistent demand for fuel-efficient aircraft.

Citi vs. Consensus Opinion

	Street	CIRA
Buy	67.7%	Buy
Holds	32.3%	
Sells	0.0%	
Target Price:	\$80.37	\$78.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2011E	2012E	2013E
Citi			
Revenue	\$68,734	\$83,439	\$90,764
EPS	\$4.39	\$4.49	\$5.44
Consensus			
Revenue	\$68,729	\$78,478	\$85,345
EPS	\$4.42	\$4.94	\$5.80

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	17.0x	13.7x	15.0x
EV/EBITDA	12.2x	7.6x	9.1x
Dividend Yield (%)	1.7%	2.6%	2.2%
Share Price		\$65.80	\$78.00
Expected Return			21.1%

Source: CIRA, FactSet

Commercial Aero Delivery Forecast

Boeing and Airbus are set to deliver 33% more aircraft in 2013E vs. 2010

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011E	2012E	2013E
737NG	223	173	202	212	302	330	290	372	376	371	420	443
747	27	19	15	13	14	16	14	8	0	10	28	24
767	35	24	9	10	12	12	10	13	12	20	24	24
777	47	39	36	40	65	83	61	88	74	74	84	100
787	0	0	0	0	0	0	0	0	0	5	55	84
Other	49	26	23	15	5	0	0	0	0	0	0	0
Boeing	381	281	285	290	398	441	375	481	462	480	611	675
% Y/Y Change	-28%	-26%	1%	2%	37%	11%	-15%	28%	-4%	4%	27%	10%
A320	236	233	233	289	339	367	386	402	401	424	458	472
A330/A340	58	64	75	80	86	79	85	86	91	91	102	105
A350	0	0	0	0	0	0	0	0	0	0	0	0
A380	0	0	0	0	0	1	12	10	18	25	30	35
Other	9	8	12	9	9	6	0	0	0	0	0	0
Airbus	303	305	320	378	434	453	483	498	510	540	591	613
% Y/Y Change	-7%	1%	5%	18%	15%	4%	7%	3%	2%	6%	9%	4%
Narrow	508	432	458	516	646	697	676	774	777	795	878	915
Wide	176	154	147	152	186	197	182	205	195	225	323	372
Total	684	586	605	668	832	894	858	979	972	1,020	1,202	1,288
Y/Y Growth												
Narrow	-22%	-15%	6%	13%	25%	8%	-3%	14%	0%	2%	10%	4%
Wide	-13%	-13%	-5%	3%	22%	6%	-8%	13%	-5%	15%	44%	15%
% Y/Y Change	-20%	-14%	3%	10%	25%	7%	-4%	14%	-1%	5%	18%	7%

Source: CIRA, Boeing, Airbus

DigitalGlobe is a leading satellite imagery provider serving primarily the US Government

• Key Investment Points

- Solid revenue visibility given contract with National Geospatial-Intelligence Agency (NGA)
- Commercial markets are nascent and lagging behind expectations, but could boost growth
- Recent hires, including new CEO Jeff Tarr, bring commercial expertise and should help with product development

• Potential Catalysts

- Seamless provisioning of Enhanced View contract
- Product announcements and contract signings in commercial market

• How We Could Get More Positive

- Commercial business finds new markets or products that allow for better secular growth
- Further traction with international commercial and civil customers

• How We Could Get More Negative

- NGA contract fails to be as profitable as expected due to fiscal pressures
- Commercial development costs more and takes longer than expected

Citi vs. Consensus Opinion

	Street	CIRA
Buys	71.4%	Neutral
Holds	14.3%	
Sells	14.3%	
Target Price:	\$29.33	\$22.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2011E	2012E	2013E
Citi			
Revenue	\$332	\$382	\$429
EPS	\$0.15	\$0.68	\$1.14
Consensus			
Revenue	\$335	\$385	\$438
EPS	\$0.13	\$0.79	\$1.25

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	43.1x	25.0x	21.5x
EV/EBITDA	8.7x	7.1x	6.0x
Dividend Yield (%)	-	-	-
Share Price		\$17.66	\$22.00
Expected Return			24.6%

Source: CIRA, FactSet

General Dynamics – Buy (GD-1)

PT: \$87

GD is a US defense prime specializing in IT, land vehicles, ships, and commercial large-cabin bizjets

- **Key Investment Points**

- Can outperform broader bizjet market with new large-cabin G650 and flat deliveries of existing models
- Shares to re-rate higher as aero grows as a portion of earnings (from 22% in 2010 to ~30% in 2013E)
- Flattish defense outlook given incumbency on marquee vehicle platforms and steady shipbuilding
- Somewhat opaque Information Systems business could see budget/competition pressure

- **Potential Catalysts**

- G650 & G280 certification
- Defense budget deliberations & FY13 request (Feb)

- **Where We Are Differentiated**

- Believe in flattish defense business despite fiscal pressures due to GD's installed base and DoD's desire for proven platforms in pressured fiscal environments
- Estimate 6-month delay in G650 program & deliveries

- **Potential Push Back**

- Int'l customers cut vehicle and bizjet orders due to fiscal constraints. **Retort:** Backlog hanging in.
- Defense budget pressures. **Retort:** Our estimates already assume flattish defense outlook in line w/ resilient backlog.

Citi vs. Consensus Opinion

	Street	CIRA
Buy	72.0%	Buy
Holds	28.0%	
Sells	0.0%	
Target Price:	\$77.82	\$87.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2011E	2012E	2013E
Citi			
Revenue	\$32,805	\$34,927	\$35,777
EPS	\$7.26	\$7.84	\$8.37
Consensus			
Revenue	\$32,894	\$34,054	\$34,491
EPS	\$7.23	\$7.56	\$7.97

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	14.3x	8.4x	10.7x
EV/EBITDA	9.7x	5.7x	6.6x
Dividend Yield (%)	1.7%	3.0%	2.1%
Share Price		\$63.45	\$87.00
Expected Return			40.1%

Source: CIRA, FactSet

Huntington Ingalls – Buy (HII-1)

PT: \$32

HII builds ships for the US Navy and Coast Guard and is the US' sole source of nuclear-powered aircraft carriers

- **Key Investment Points**

- Long-term revenue visibility, albeit at zero growth
- Broken margins offer room for improvement
- High barriers to entry in a “protected” industry
- Cash generation likely allows for improved debt position and sets up for eventual dividend

- **Potential Catalysts**

- Contours of DoD strategic review (Fall/Winter) clarifies US Navy priorities and addresses force structure issues

- **Where We Are Differentiated**

- HII is one of the few pure-play defense names with strong segment margin improvement potential (~260 bps through 2013E)

- **Potential Push-Back**

- US Navy shipbuilding is grossly over-budget and can not possibly withstand another round of defense cuts.
Retort: There will be changes in US Naval force structure, but HII's backlog covers several years and in our view DoD can not afford to let HII atrophy given the company's unique nuclear capabilities.

Citi vs. Consensus Opinion

	Street	CIRA
Buys	30.8%	Buy
Holds	53.9%	
Sells	15.4%	
Target Price:	\$31.67	\$32.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2011E	2012E	2013E
Citi			
Revenue	\$6,498	\$6,507	\$6,400
EPS	\$3.51	\$3.63	\$4.06
Consensus			
Revenue	\$6,550	\$6,644	\$6,529
EPS	\$3.48	\$3.43	\$4.13

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	7.8x	8.7x	8.4x
EV/EBITDA	11.0x	11.5x	4.9x
Dividend Yield	-	-	-
Share Price		\$29.76	\$32.00
Expected Return			7.5%

Source: CIRA, FactSet

Lockheed Martin – Buy (LMT-1)

PT: \$89

LMT is a US defense prime specializing in aeronautics, missiles, and electronics

- **Key Investment Points**
 - Joint Strike Fighter (JSF) a strategic necessity and drives above-average growth (over the long-term)
 - Missile defense platforms aligned with demand & satellite business positioned for long-term growth
 - Robust cash generation fuels dividends and buybacks
- **Potential Catalysts**
 - Clarification of new JSF schedule and quantities in late 2011/early 2012
 - Conclusion of LRIP 5 negotiations
 - Contours of DoD strategic review (Fall/Winter)
- **Where We Are Differentiated**
 - Believe in persistent JSF demand despite headlines
- **Potential Push-Back & Other Risks**
 - JSF (especially F-35B) is grossly over budget and likely to get materially rolled back. **Retort:** Budgets create headline risk, but the plane is considered strategically important, enjoys international demand, and the 'B' is a relatively small part of the entire program.
 - Broad pressure on defense budgets limits growth. **Retort:** This is mostly priced in, while international demand, performance improvements, and s/h friendly cash deployment can still drive earnings.
- **Other risks include:**
 - Material share of revenues tied to a customer which is subject to fiscal pressures
 - Acquisition reform/budget cuts could erode profitability although we judge current threats less severe than feared
 - Significant exposure to marquee platforms including JSF which faces negative headlines and Congressional scrutiny due to its high cost

Citi vs. Consensus Opinion

	Street	CIRA
Buy	26.9%	Buy
Holds	73.1%	
Sells	0.0%	
Target Price:	\$82.00	\$89.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2011E	2012E	2013E
Citi			
Revenue	\$46,571	\$46,553	\$46,811
EPS	\$7.70	\$8.04	\$9.57
Consensus			
Revenue	\$46,605	\$46,712	\$46,632
EPS	\$7.58	\$8.01	\$8.93

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	16.3x	9.8x	9.7x
EV/EBITDA	9.0x	5.5x	6.2x
Dividend Yield (%)	1.9%	5.2%	3.4%
Share Price		\$76.52	\$89.00
Expected Return			21.5%

Source: CIRA, FactSet

JSF Update – Fasten Your Seatbelt

JSF is the largest program in Lockheed's portfolio and DoD's largest acquisition program (~\$350-400b)

- **Largest program in LMT's portfolio, and largest DoD program (\$350-400b)**
- **Strategic need persists given U.S. need to replace aging platforms**
- **Recent developments:**
 - LMT and DoD locked in negotiations over LRIP 5 contract structure
 - SDD extension & flat LRIPs make for slower growth
 - Foreign partners (Australia, Netherlands, Canada) evaluating pricing and timeline
 - DoD reportedly considering pushing 100 planes out of FYDP period (FY13-17E), and/or reducing total intended buy (now at ~2,400) (should get details w/ FY13 budget proposal)
- **January 2011 TBR outcomes:**
 - \$5b increase in development funding
 - Delayed 124 purchases in FY12-16
 - F-35B on probation for 2 years
 - Max production rates (~200/yr) pushed back
 - 2011-12 likely sees more lower-margin development revenue than previously expected

JSF Earnings Outlook

	2010	2011E	2012E	2013E	2010-13 CAGR
Development Revenue	1,830	1,925	1,775	1,475	(6.9%)
Production Revenue	3,542	4,600	4,875	5,475	15.6%
F-35 Revenue	5,372	6,525	6,650	6,950	9.0%
% of LMT Revenue	11.7%	14.0%	14.3%	14.8%	
Development Margin	4.1%	4.1%	4.1%	4.1%	
Production Margin	5.9%	6.7%	7.1%	7.5%	
F-35 Weighted Margin	5.3%	5.9%	6.3%	6.8%	+ 149 bps
Development Profit	75	79	73	60	
Production Profit	209	308	346	411	
F35 Profit	284	387	419	471	18.4%
% of LMT Segment Profit	5.7%	7.5%	8.2%	9.3%	
Average Diluted Shares	368	339	313	301	
F35 EPS Impact	0.53	0.83	0.94	1.10	27.1%
% of LMT EPS	7.6%	10.8%	11.6%	11.4%	

Source: CIRA

JSF Demand

Partner Nation	Intended Buy (Units)	Outlook
United States	2,443	→ Program Supported w/in Administration; likely downside to intended buy
United Kingdom	TBD (~40-60)	→ Reduced from 138, w/ option to upsize; will buy 'C' instead of 'B'
Italy	131	→ Constructing domestic manufacturing facility; only other 'B' buyer (+USMC)
Turkey	100-116	→ Looking to place order for 1st batch (6) this year
Australia	100	→ Committed to 14; will decide in 2012 on entire buy (~\$16.8b)
Netherlands	TBD (85)	→ Delayed 3-4 years; first contract in 2017
Canada	65	→ Govt. supported but continued consternation in Parliament
Denmark	48	→ Delayed decision 2 years; reportedly considering F/A-18 Super Hornet
Norway	48	→ Parliament decision March/April; 1st delivery 2019 relies on missile deal
Other Intended Buy (Units)		
Israel	20	→ 20 w/in LRIP 7 & 8, with potential upside (up to 75 through 2030)
Potentials Potential Buy (Units)		
Singapore	< 100	→ Security cooperation participant; no decision yet
Japan	40-50	→ F-35 in competition against other platforms
South Korea	40-60	→ F-35 in competition against other platforms
Other Euro	TBD	→ Put off by economic pressures

Source: CIRA

Fighter Jet Scenario Analysis

An F-35 reduction likely creates sales opportunities for the other defense primes

- There have been proposals to swap out JSFs for F-16s and F/A-18s
- This helps mitigate losses across the industry, although there are clear winners and losers across 3 scenarios:
 1. Status quo
 2. Halve the F-35As & Cs, cancel F-35B, and replace with F-16s & F/A-18s
 3. Replace all JSFs with F16s/F18s (we view this worst-case as unlikely)
- Company impacts
 - In our view, LMT has the most to lose and BA has the most to gain
 - NOC JSF downside mitigated by F/A-18 upside, and potential F-16 exposure.
 - RTN lacks JSF exposure, but its diversified portfolio limits upside/downside regardless of outcome

Assumptions		
	Price	Margin
F-35	70	10%
F-16	45	10%
F-18	45	10%
NOC F-35 content	20%	10%
NOC F-18 content	40%	10%
NOC F-16 content	1	12%
RTN F-16 content	1	12%
RTN F-18 content	2	12%

Source: CIRA

U.S. JSF Scenarios - Full Rate Production

Units/yr (#)	1. Status Quo	2. Half JSF	3. Cancel JSF
F-35A	109	63	0
F-35B	19	0	0
F-35C	21	12	0
F-35	150	75	0
F-16	0	63	126
F-18	0	12	24
Total	150	150	150

Revenues			
LMT	10,500	8,078	5,656
BA	0	547	1,094
NOC	2,100	1,332	563
RTN	0	87	174

EPS (assuming 2012E share count)			
LMT	\$2.35	\$1.80	\$1.26
BA	\$0.00	\$0.05	\$0.09
NOC	\$0.53	\$0.34	\$0.15
RTN	\$0.00	\$0.02	\$0.04
EPS Impact from Status Quo			
LMT		(23.1%)	(46.1%)
BA		NA	NA
NOC		(36.0%)	(72.0%)
RTN		NA	NA

Source: CIRA

Northrop Grumman – Buy (NOC-1)

PT: \$69

NOC is a US defense prime specializing in aeronautics and unmanned technology

- **Key Investment Points**

- Content on Joint Strike Fighter (JSF) and F/A-18
- Unmanned portfolio aligned with demand
- Renewed management focus on core portfolio post-shipbuilding spin
- Strong commitment to share repurchases

- **Potential Catalysts**

- Resolution of JSF LRIP IV and F-18 MYP negotiations
- Contours of DoD strategic review (Fall/Winter 2011)

- **Where We Are Differentiated**

- Firmly believe JSF program survives
- Portfolio shaping drives margins

- **Potential Push-Back**

- JSF (especially F-35B) is grossly over budget and likely to get materially rolled back. **Retort:** Budgets create headline risk, but the plane is considered strategically important, enjoys international buy-in, and the 'B' is a relatively small part of the entire program.
- NOC historically has mis-executed and chased bad revenue. **Retort:** True, but management is re-focused after the shipbuilding spin and actively shaping the portfolio to jettison poorly priced projects and de-emphasize weaker markets.

Citi vs. Consensus Opinion

	Street	CIRA
Buys	16.7%	Buy
Holds	79.2%	
Sells	4.2%	
Target Price:	\$61.50	\$69.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2011E	2012E	2013E
Citi			
Revenue	\$26,609	\$26,674	\$26,819
EPS	\$7.04	\$7.03	\$7.74
Consensus			
Revenue	\$26,650	\$26,366	\$26,104
EPS	\$6.98	\$6.90	\$6.94

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	11.6x	8.3x	9.0x
EV/EBITDA	7.8x	4.3x	5.3x
Dividend Yield (%)	2.1%	3.5%	2.8%
Share Price		\$57.18	\$69.00
Expected Return			24.2%

Source: CIRA, FactSet

Precision Castparts – Buy (PCP-1)

PT: \$194

PCP produces highly engineered metal parts for the aerospace, energy, and general industrial end markets

- **Key Investment Points**

- Strong position on existing aero platforms set to see production rate increases, and on new platforms expected to see production ramps
- Exposure to domestic and emerging market energy demand, especially increased natural gas plant use due to coal and gas price dynamics
- Exposure to macro recovery in industrial markets

- **Potential Catalysts**

- Order uptick in fasteners and seamless pipe
- Further growth in IGT aftermarket demand given price dynamics, and OE orders

- **Where We Are Differentiated**

- Give greater credit for exposure to energy market dynamics, including coal-to-gas switching
- Room to expand margins given excess capacity

- **Potential Push-Back**

- Stock has already priced in positive ramps associated with aerospace ramps. **Retort:** PCP is not just an aerospace story; energy markets (especially emerging markets) and acquisitions offer further upside.
- Company is overly reliant on 787, whose ramp is uncertain. **Retort:** Company has positive exposure to a variety of aerospace platforms, and 787 ramp (while gradual) will drive demand.

Citi vs. Consensus Opinion

	Street	CIRA
Buys	75.0%	Buy
Holds	25.0%	
Sells	0.0%	
Target Price:	\$184.97	\$194.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2012E	2013E	2014E
Citi			
Revenue	\$7,455	\$8,841	\$9,751
EPS	\$8.69	\$10.63	\$12.03
Consensus			
Revenue	\$7,416	\$8,536	\$9,571
EPS	\$8.61	\$10.34	\$11.83

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	14.4x	17.5x	17.0x
EV/EBITDA	9.8x	12.8x	11.8x
Dividend Yield (%)	0.3%	0.1%	0.1%
Share Price		\$168.07	\$194.00
Expected Return			15.5%

Source: CIRA, FactSet

Raytheon – Buy (RTN-1)

PT: \$56

RTN is a US defense prime specializing in electronics, with material exposure to international customers (~25%)

- **Key Investment Points**

- Significant exposure to faster growing int'l markets
- Platform agnostic business model reduces risk
- Positive long-term drivers for missile defense
- Well-regarded mgmt team and solid execution

- **Potential Catalysts**

- International contract announcements solidify confidence in 2011 sales goals
- Contours of DoD strategic review (Fall/Winter '11)
- FY13 DoD budget submission (Feb 2012)

- **Where We Are Differentiated**

- Outlook for flattish DoD budgets and outgrowth to come from international exposure
- Give credit that solid past execution will continue

- **Potential Push-Back**

- Defense outlook too high. **Retort:** Budgets are sticky, threats persist, and RTN is well aligned.
- Some in Congress are suggesting cuts to missile defense. **Retort:** Recent mark-ups suggest increased missile defense funding and Administration committed to Phased Adaptive Approach (PAA).

Citi vs. Consensus Opinion

	Street	CIRA
Buys	47.8%	Buy
Holds	52.2%	
Sells	0.0%	
Target Price:	\$50.92	\$56.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2011E	2012E	2013E
Citi			
Revenue	\$25,129	\$25,542	\$25,863
EPS	\$5.07	\$5.15	\$6.00
Consensus			
Revenue	\$25,137	\$25,233	\$25,222
EPS	\$5.04	\$5.23	\$5.80

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	15.3x	8.4x	9.6x
EV/EBITDA	9.7x	5.1x	6.1x
Dividend Yield	2.2%	3.9%	3.0%
Share Price		\$44.18	\$56.00
Expected Return			30.6%

Source: CIRA, FactSet

Rockwell Collins – Neutral (COL-2)

PT: \$57

COL produces components for military (~60%, half of which are avionics) and commercial customers

- **Key Investment Points**

- Later cycle play on aerospace cycle given outsized exposure to bizjet OE
- Bizjet recovery timing uncertain, especially among SMID cabin bizjets
- Robust exposure to new regional jet platforms that should help drive revenue mid-decade and beyond
- Facing new competition in bizjet avionics
- Half of defense business exposed to ground demand, offset by military avionics demand

- **Potential Catalysts**

- Improvements in bizjet orders & production rates
- JTRS decisions opening field to more commercial providers

- **How We Could Get More Positive**

- Avionics wins on new platform announcement
- Sooner-than-expected up-tick in biz jet orders and production
- SMID cabin bizjet production rate increases

- **How We Could Get More Negative**

- Bizjet recovery delayed beyond 2012
- Defense program cancellations – particularly JTRS

Citi vs. Consensus Opinion

	Street	CIRA
Buys	52.4%	Neutral
Holds	42.9%	
Sells	4.8%	
Target Price:	\$61.85	\$57.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2012E	2013E	2014E
Citi			
Revenue	\$4,908	\$5,050	\$5,243
EPS	\$4.48	\$4.84	\$5.40
Consensus			
Revenue	\$4,978	\$5,202	\$5,501
EPS	\$4.48	\$5.02	\$5.50

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	16.0x	12.0x	11.8x
EV/EBITDA	10.9x	1.8x	7.6x
Dividend Yield	1.4%	1.8%	1.7%
Share Price		\$54.50	\$57.00
Expected Return			6.3%

Source: CIRA, FactSet

Textron – Neutral (TXT-2)

PT: \$21

TXT supplies military wheeled vehicles, commercial bizjets, helicopters, small UAVs, and fuel systems

• Key Investment Points

- Uncertain recovery in small-cabin bizjet segment and general aviation market, drive R&D requirements through 2013E
- Weakened commercial helo market share drives elevated R&D levels
- Cessna lacks pricing power with buyers & sellers
- Potential volatility from finance segment
- Potential weakness from industrial segment exposure to European auto
- Robust exposure to military helos and UAVs
- Strong brand recognition and established reputation

• Potential Catalysts

- Small bizjet and general aviation market recoveries (falling used inventory levels & improved pricing)

• How We Could Get More Positive

- Cessna costs come down and segment ceases surprising to the downside
- Recovery in commercial helo market share

• How We Could Get More Negative

- Broader bizjet recovery delayed beyond 2012 and Cessna continues to lag
- V-22 Osprey falls victim to budget cuts

Citi vs. Consensus Opinion

	Street	CIRA
Buys	64.7%	Neutral
Holds	29.4%	
Sells	5.9%	
Target Price:	\$25.17	\$21.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2011E	2012E	2013E
Citi			
Revenue	\$11,427	\$12,020	\$12,656
EPS	\$1.15	\$1.64	\$1.96
Consensus			
Revenue	\$11,286	\$12,003	\$12,503
EPS	\$1.15	\$1.67	\$2.10

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	15.8x	11.6x	11.5x
EV/EBITDA	10.1x	6.0x	7.0x
Dividend Yield (%)	2.3%	0.4%	0.4%
Share Price		\$18.61	\$21.00
Expected Return			13.3%

Source: CIRA, FactSet

WAIR distributes fasteners and other components to commercial and military aero OEs

Key Investment Points

- High organic revenue and earnings visibility due to announced production rate increases
- Core growth supplemented by expansion into adjacent markets including MRO and electronic products
- Expect to benefit from market consolidation trends

Potential Catalysts

- 787 and 747-8 production ramps
- Budget clarity on F-35 (4Q11-1Q12)
- Lengthening lead times for C-Class parts

Where We Are Differentiated

- Believe in JSF demand and program's persistence
- Less concern over disintermediation dynamics given WAIR's value proposition

Potential Push Back

- Risky 50% defense exposure. **Retort:** Cutting likely focuses on ground forces whereas fighters, helos, and UAVs are still in-demand/need replacing.
- OEM dis-intermediation. **Retort:** Previous attempts rebuffed by a supply chain that doesn't want to hold additional inventory.
- Commercial outlook too high. **Retort:** Large backlog & persistent demand for fuel-efficient aircraft.

Citi vs. Consensus Opinion

	Street	CIRA
Buys	80.0%	Buy(H)
Holds	20.0%	
Sells	0.0%	
Target Price:	\$14.57	\$15.00

Source: CIRA, Bloomberg

Citi vs. Consensus Estimates

\$millions	2011E	2012E	2013E
Citi			
Revenue	\$707	\$779	\$828
EPS	\$0.95	\$1.01	\$1.11
Consensus			
Revenue	\$707	\$784	\$889
EPS	\$0.92	\$1.02	\$1.21

Source: CIRA, Thomson One

Valuation and Key Metrics

	Historic	11/4/2011	Target
Price-to-FTM EPS	NA	10.6x	13.4x
EV/EBITDA	NA	9.2x	10.2x
Dividend Yield (%)	NA	-	-
Share Price		\$11.15	\$15.00
Expected Return			34.5%

Source: CIRA, FactSet

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Appendix A-1

Analyst Certification

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