

"It's Raining Cash. Hallelujah!"

Beyond Budget Battles: Higher rates lift defense cash & valuation

- What's New** — In this 3rd installment of "Beyond Budget Battles," we're detailing the increases in our EPS & cash flow outlook for the defense primes given the recent rise in interest rates and commentary by company management that discretionary pension contributions are likely to move lower in 2014. This supports further shareholder-friendly cash deployment which in our view prompts richer industry valuation. We've raised our target industry multiple to ~12x, reflecting a 15% discount to the market vs. our previous target of a 25% discount reflecting today's reality that budgets are weak, but that shareholders should expect 10-12% annual cash returns (vs. previous eras of budget pressure when companies were less s/h friendly). As a result, we've boosted our defense prime estimates & price targets in our 2Q preview (also published today).
- Pension contribution details** — Discount rates are up ~75 bps since the end of 2012, likely giving companies some breathing room on cash contributions in 2014E (should higher rates stick). Indeed, several defense company management teams have recently been in front of investors highlighting that discretionary contributions likely slow materially next year given the risk of overfunding in an environment of higher interest rates. This in turn should lead to FCF *growth* over the next few years given the relatively high levels of discretionary contributions in 2013: LMT plans \$1.5B in discretionary contributions (vs. \$3B of FCF) and NOC \$500m (vs. \$1.6b of FCF). We estimate GD's voluntary contribution to be ~\$100m vs. \$2.2b of FCF. Meanwhile, RTN says they're not planning any discretionary contributions in 2013 vs. \$500m in 2012.
- Fresh look at valuation** — We previously pegged defense valuation at a 25% discount to the market FTM P/E based on our view that companies should trade at multiples last realized during similar budget environments (the post-consolidation & stable demand era of ~1995-1998). We now peg defense valuation at a 15% discount, appreciating *three* significant differences between the mid/late 90s & today: (1) Industry FCF fell an average of 3% from 1995-2001 vs. our expectation for FCF to grow an average of 6% 2009-15E. (2) Companies are far more shareholder-friendly these days (94% of FCF returned to s/h in 2010-15E vs. 58% in 1995-2001); (3) Today's threat environment is more palpable than in the past.
- Market mispricing defense stocks** — The market continues to price in perpetual declines in defense prime FCF which in our view is overly negative given our expectations of rising FCF through 2015 (modest EBIT declines offset by FAS/CAS harmonization & declining pension contributions).

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Related Reports

[FAS/CAS – Why You Should Care](#) - First Report in our "Beyond Budget Battles" Series

[Leveraged Buybacks – Why You Should Care](#) - Second Report in our "Beyond Budget Battles" Series

[Jetting into the Quarter: 2Q13 A&D Preview](#) - Buy civil OE over civil aftermarket & focus on defense cash

Company	Ticker	Rating		Target Price		Current Year Earnings Estimates	
		Old	New	Old	New	Old	New
General Dynamics	GD	1	1	US\$86.00	US\$92.00	US\$6.81	US\$6.81
Huntington	HII	1	1	US\$62.00	US\$67.00	US\$4.07	US\$4.07
Lockheed Martin	LMT	1	1	US\$110.00	US\$122.00	US\$9.00	US\$9.08
Northrop Corp	NOC	1	1	US\$92.00	US\$96.00	US\$7.39	US\$7.40
Raytheon	RTN	1	1	US\$70.00	US\$77.00	US\$5.46	US\$5.46

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

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Higher Interest Rates Boost Defense Outlook

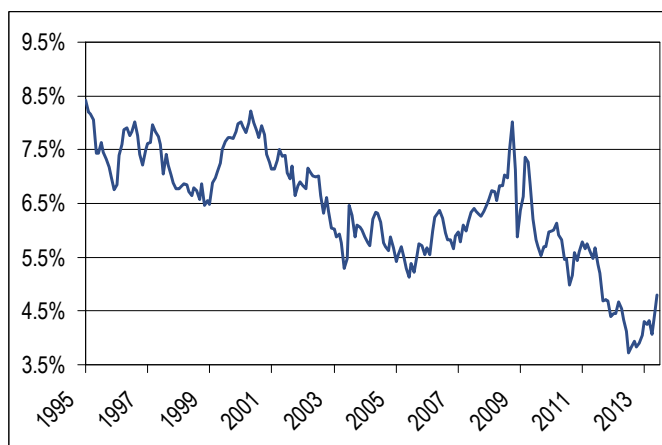
In our view, a rising rate environment lends a positive bias to defense industry cash flows & GAAP earnings due to positive pension dynamics.

This is the 3rd report in our "Beyond Budget Battles" series covering non-budget issues impacting the defense industry. Our previous reports focused on [FAS/CAS Harmonization](#) and [Leveraged Buybacks](#). In this note, we highlight our view that a rising interest rate environment is constructive for the defense group, lending a positive bias to GAAP earnings and cash flows.

Better Cash Generation

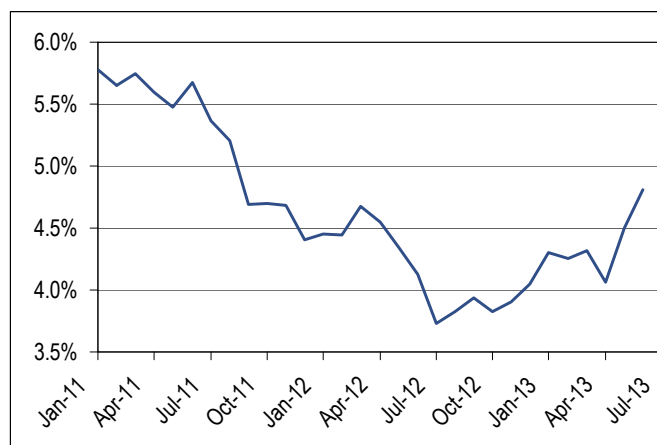
With discount rates up 75 bps since the end of 2012 (see Figure 1 & Figure 2), defense companies are becoming wary of over-contributing to their pension plans since the higher interest rate shrinks the pension liability.

Figure 1. Discount rates are near historical lows...



Source: Citi Pension Liability Index

Figure 2. ...but they've reversed course since bottoming in late 2012



Source: Citi Pension Liability Index

Figure 3. Pension funded status

	GAAP	New GAAP
LMT	67%	74%
NOC	83%	92%
RTN	71%	77%
HII	74%	83%
GD	60%	NA

Source: Citi Research
Note: GD funded status sensitivity unavailable

Defense prime contributions to their pension plans are set to decelerate over the next few years due to the rising rate environment which helps pension funded status.

For instance, LMT is making a \$1.5b discretionary pension contribution in 2013E that's unlikely to repeat in 2014E.

The smaller obligation gives a positive bias to cash flows as companies will be less likely to make discretionary pension contributions, allowing cash to accrue to operating cash flow and shareholders via dividends or repurchases. In Figure 3 we see how the rate movement to-date impacts 2012 funded status if the year ended today. Figure 4 shows the pension contribution ramp-down. RTN provided this guidance for mandatory, but it's probably conservative since interest rates are rising.

Figure 4. We expect defense prime cash flows to benefit from lower pension contributions

		2011	2012	2013E	2014E	2015E
LMT	Discretionary	1,000	2,500	1,500	1,000	800
	Mandatory	1,300	1,100	0	0	0
	Total	2,300	3,600	1,500	1,000	800
RTN	Discretionary	750	500	0	0	0
	Mandatory	1,096	740	794	1,141	1,278
	Total	1,846	1,240	794	1,141	1,278
NOC	Discretionary	1,000	300	500	0	0
	Mandatory	100	67	75	75	75
	Total	1,100	367	575	75	75
GD	Discretionary	300	100	100	0	0
	Mandatory	51	432	500	500	400
	Total	351	532	600	500	400
HII	Discretionary	3	172	200	100	0
	Mandatory	0	64	0	0	0
	Total	3	236	200	100	0

Source: Citi Research

NOC's and LMT's relatively large fixed income exposure could increase their CAS recovery due to higher interest rates hurting fixed income performance.

Another potentially cash-positive outcome of a rising rate environment is its impact on CAS recovery due to fixed income assets in the pension portfolio underperforming. We note that higher discount rates don't have much impact on current CAS recoveries due to the long-term smoothing offered by recent legislation. In our view, companies with relatively high fixed income asset allocations could incidentally benefit in the near-term from their portfolio's underperformance. From this perspective, NOC could see higher CAS recoveries in the near-term due to underperformance in their relatively large fixed income portfolio.

Figure 5. Pension Portfolio Allocation (2012)

	Cash	Equity	Fixed Income	Other	Total
LMT	11%	34%	41%	14%	100%
RTN	5%	46%	30%	19%	100%
NOC	0%	33%	46%	21%	100%
GD	1%	61%	29%	10%	100%
HII	5%	51%	38%	6%	100%

Source: Citi Research

In our view, reduced contributions combined with ramping CAS recovery due to harmonization¹ help explain our confident outlook for defense prime cash generation. This relative visibility also helps explain why NOC is so confident about repurchasing 25% of its outstanding stock through 2015E and why we wouldn't be surprised if LMT boosted its dividend by 15% at its September board meeting.

Supports GAAP EPS Growth

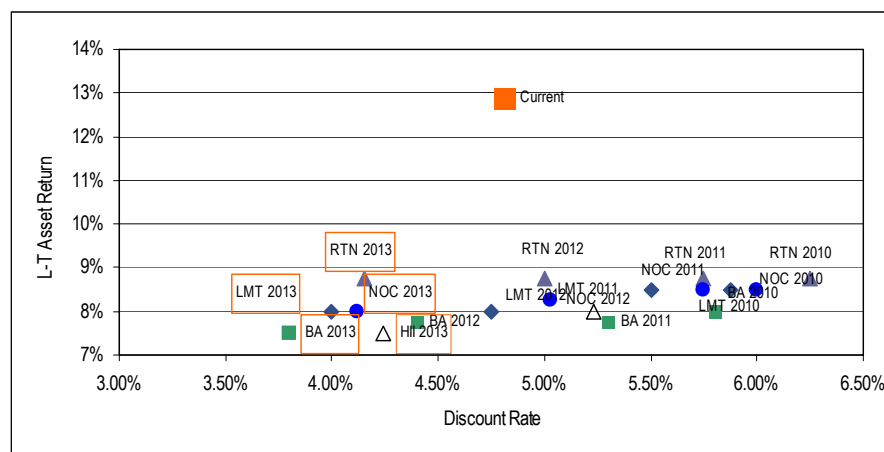
Higher rates also support GAAP EPS in 2014 given pension expense/income sensitivities to moves in the discount rate. See Figure 6 for potential upsides to our FY14E EPS estimates. While this would provide positive optics, we note that our P/E valuation methodology is based on pension-adjusted EPS which in our view is a better reflection of core earnings.²

Figure 6. Pension Expense Sensitivity

LMT	2013 assumption	Sensitivity (\$m)	Potential FY14 Boost
DR	4.00%	145	10.1%
Return	8.00%	80	
NOC	2013 assumption	Sensitivity (\$m)	Potential FY14 Boost
DR	4.12%	78	9.0%
Return	8.00%	52	
RTN	2013 assumption	Sensitivity (\$m)	Potential FY14 Boost
DR	4.15%	60	6.8%
Return	8.75%	40	
HII	2013 assumption	Sensitivity (\$m)	Potential FY14 Boost
DR	4.24%	20	15.1%
Return	7.50%	10	
GD	2013 assumption	Sensitivity (\$m)	Potential FY14 Boost
DR	5.22%	31	2.5%
Return	8.24%	16	

Source: Citi Research

Figure 7. Company pension assumptions



Source: Citi Research

Note: "Current" reflects the Citi Pension Liability Index discount rate & YTD S&P500 returns

¹ For more on CAS Harmonization, see: [FAS/CAS – Why You Should Care](#)

² For more on our valuation approach, see: [A New Look at Defense Valuation](#)

Better Cash Outlook Boosts Valuation

We've boosted our defense valuation to reflect differences between the current environment and similar budget eras of the past.

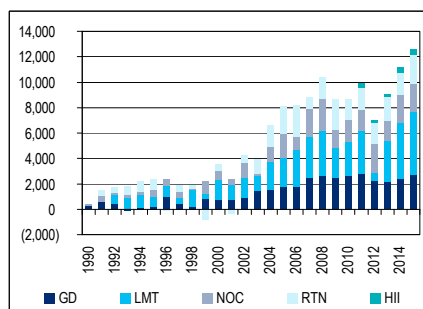
In our view, the defense industry deserves to be valued at a premium to the multiples realized in previous eras of similar budget pressure. As a result, we've boosted our target defense multiple to 12x FTM P/E from ~10.5x (on average). We base our target multiple on a discount to the S&P 500.

We previously used a 25% discount when thinking about defense companies given parallels between today's budget environment and the post-consolidation/stable demand environment witnessed in 1995-2001 (see Appendix Figure 14). However, we believe a 15% discount is the right way to think about defense companies today given 3 differences between the 1995 and 2013:

1. Industry FCF fell an average of 3% from 1995-2001 vs. our expectation for FCF to grow an average of 6% 2009-15E. See Figure 8 for defense prime FCF generation 1990-2015E.
2. Companies are far more shareholder-friendly these days with 94% of FCF returned to shareholders in 2010-15E vs. only 58% in 1995-2001. Figure 9 and Figure 10 show how defense primes have been focusing more on shareholder-friendly cash deployment of late from a relative and absolute perspective.
3. In our view, today's threat environment is far more palpable and critical than that felt in 1995.

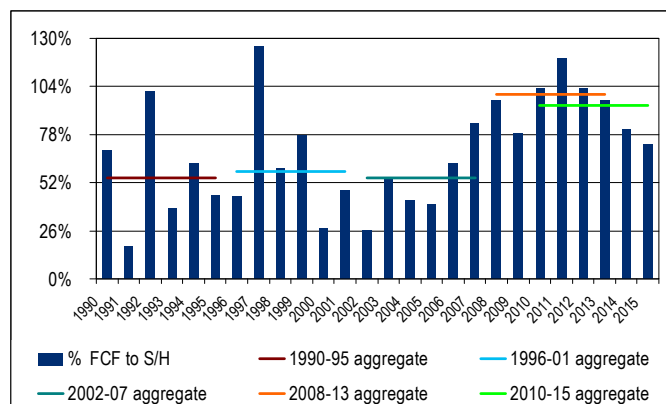
In our view, companies should be rewarded with premium valuation in this environment due to their better cash outlook and more shareholder-friendly cash deployment priorities.

Figure 8. Defense Prime FCF (\$m) (1990-15E)



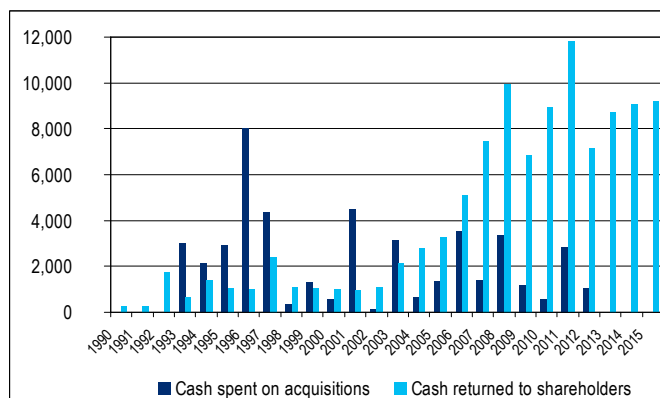
Source: Citi Research

Figure 9. FCF deployment is more pro-shareholder these days...



Source: Citi Research
Note: 1997 includes LMT's \$1.5b repurchase of GE's stake

Figure 10. ...with dividends & repos eclipsing acquisition spending



Source: Citi Research
Note: We don't publish acquisition estimates, but we expect minimal through 2015E

Defense Still Mispriced

Defense stocks seem to be pricing in perpetual declines in free cash flow. We believe this is overly negative even in the event of sequester.

It's admittedly difficult to pinpoint what effect sequester would have on fundamental business operations given the various ways that DoD can roll out the cuts. Our base case of a flat 10Y budget, as laid out in our Feb 8 global weekly (see: [It's right in front of your nose, if you'd only just open your eyes](#)), is reflected in our current estimates for our defense companies under coverage. Assuming this base case of flat budgets pans out, the market appears too negative on defense, pricing in a perpetual reduction in free cash flow up to 2% (see Figure 11).

The picture changes in Figure 12 as we haircut our 2013E UFCF estimate by 5-30% to simulate the impact of sequester. In this simulation, a 5% haircut implies perpetual growth of 0-1% for GD, LMT, NOC, and RTN. And in the event of sequester, we remind investors that the budget is actually allowed to grow thereafter and that attractive pension dynamics support cash growth beginning in 2014.

Figure 11. Mkt. implies perpetual FCF reductions based on 2013E UFCF

	Zero-Growth Mkt Value (\$m)	Current Mkt Value (\$m)	Mkt Value Attributable to Zero Growth	Mkt-Implied Perpetual FCF Growth Rate
GD	\$29,434	\$28,400	103.6%	(0.3%)
LMT	\$36,478	\$35,254	103.5%	(0.2%)
NOC	\$18,167	\$20,208	89.9%	0.8%
RTN	\$22,241	\$22,012	101.0%	(0.1%)
HII	\$3,808	\$2,935	129.8%	(1.7%)

Source: Citi Research, Bloomberg

Figure 12. FCF growth implied by "sequester-adjusted" UFCF

	5% haircut	10% haircut	15% haircut	20% haircut	25% haircut	30% haircut
GD	0.1%	0.6%	1.1%	1.6%	2.0%	2.5%
LMT	0.2%	0.5%	0.9%	1.3%	1.7%	2.1%
NOC	1.2%	1.6%	2.0%	2.4%	2.8%	3.2%
RTN	0.3%	0.7%	1.1%	1.5%	1.9%	2.3%
HII	(1.3%)	(0.8%)	(0.4%)	0.0%	0.5%	0.9%

Source: Citi Research, Bloomberg

Compare what the market's pricing in to what's reflected in our estimates of FCF growth through FY15 in Figure 13. Our FCF expectations imply average annual FCF growth of 6% through 2015E vs. the market's expectation of flattish to down FCF in perpetuity.

We see average annual FCF growth of 6% among the defense primes, far above market expectations as reflected in current valuation.

Figure 13. We expect defense prime FCF to grow an average of 6% annually through 2015E

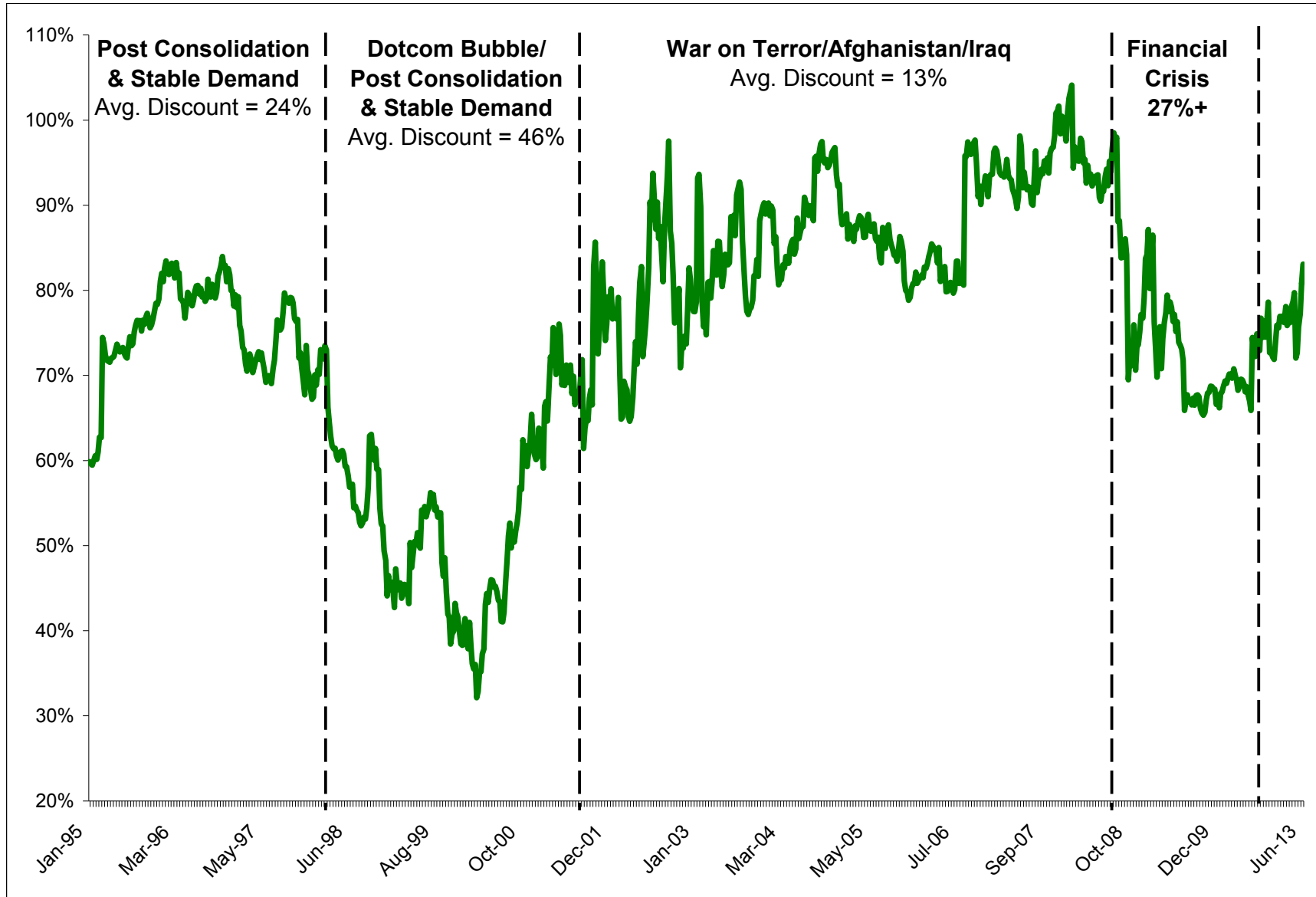
	2011	2012	2013E	2014E	2015E	FY11-15 CAGR
GD	2,753	2,237	2,189	2,420	2,708	(0.4%)
LMT	3,439	619	3,189	4,432	4,978	9.7%
NOC	1,627	2,309	1,570	2,152	2,230	8.2%
RTN	1,767	1,618	1,946	1,762	2,265	6.4%
HII	331	170	152	455	455	8.3%
Total	9,917	6,953	9,044	11,221	12,636	6.2%

Source: Citi Research

Thus, we consider any market valuation that implies perpetual reductions at this point to be overly negative. In our view, this overly negative implied valuation supports our Buy ratings on these stocks.

Companies mentioned: General Dynamics Corp. (GD.N; US\$79.86; 1); Huntington Ingalls Industries (HII.N; US\$58.27; 1); Lockheed Martin Corp. (LMT.N; US\$109.57; 1); Northrop Grumman Corp. (NOC.N; US\$85.53; 1); Raytheon Co. (RTN.N; US\$67.44; 1)

Figure 14. Appendix: Relative Valuation (Defense vs. S&P 500) (see valuation discussion on page 5)



Source: Citi Research, FactSet

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Northrop Grumman Corp. (NOC)

Ratings and Target Price History Fundamental Research

Analyst: Jason Gursky

Covered since July 15 2010



	Date	Rating	Target Price	Closing Price
1	15-Jul-10	*1H	62.60	51.36
2	27-Oct-10	1H	*66.22	55.68
3	10-Feb-11	1H	*77.11	64.55
4	31-Mar-11	1H	*76.00	62.71
5	28-Apr-11	1H	*79.00	63.09

* Indicates change

	Date	Rating	Target Price	Closing Price
6	15-Jul-11	1H	*83.00	64.62
7	27-Jul-11	1H	*80.00	62.68
8	8-Oct-11	Stock rating system changed		
9	8-Oct-11	*1	80.00	52.81
10	18-Oct-11	1	*71.00	54.40

	Date	Rating	Target Price	Closing Price
11	27-Oct-11	1	*69.00	57.64
12	16-Oct-12	1	*78.00	70.36
13	31-Jan-13	1	*79.00	65.04
14	24-Apr-13	1	*83.00	73.77
15	28-May-13	1	*92.00	82.10

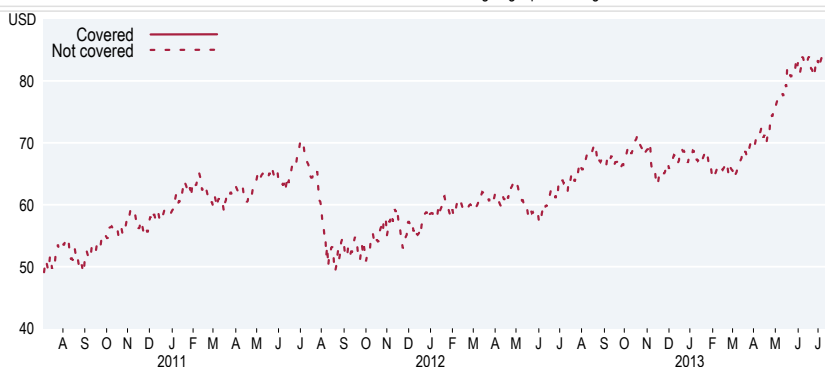
Rating/target price changes above reflect Eastern Standard Time

Northrop Grumman Corp. (NOC)

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

Analyst: Jason Gursky

Covered since July 15 2010



* Indicates change

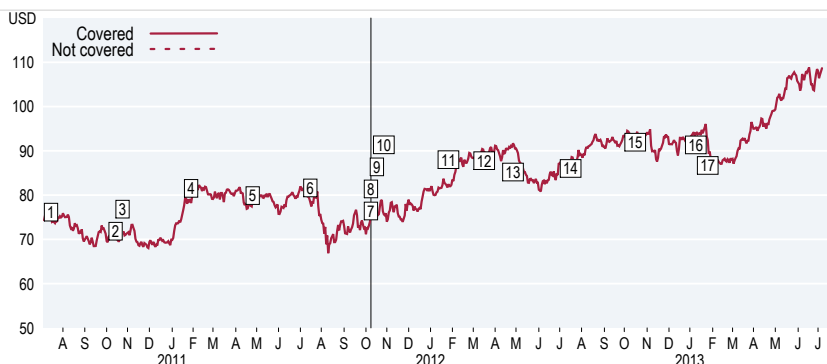
Rating/target price changes above reflect Eastern Standard Time

Lockheed Martin Corp. (LMT)

Ratings and Target Price History Fundamental Research

Analyst: Jason Gursky

Covered since July 15 2010



	Date	Rating	Target Price	Closing Price
1	15-Jul-10	*1H	*97.00	75.95
2	14-Oct-10	1H	*91.00	70.20
3	24-Oct-10	1H	*88.00	71.78
4	28-Jan-11	1H	*100.00	78.20
5	26-Apr-11	1H	*104.00	79.04
6	15-Jul-11	1H	*102.00	78.37

* Indicates change

	Date	Rating	Target Price	Closing Price
7	8-Oct-11	Stock rating system changed		
8	8-Oct-11	*1	102.00	74.00
9	18-Oct-11	1	*92.00	75.98
10	27-Oct-11	1	*89.00	75.65
11	26-Jan-12	1	*92.00	82.47
12	16-Mar-12	1	*108.00	89.32

	Date	Rating	Target Price	Closing Price
13	26-Apr-12	1	*105.00	91.70
14	17-Jul-12	1	*103.00	87.43
15	16-Oct-12	1	*108.00	93.37
16	9-Jan-13	1	*106.00	93.99
17	25-Jan-13	1	*110.00	92.39

Rating/target price changes above reflect Eastern Standard Time

Lockheed Martin Corp. (LMT)

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

Analyst: Jason Gursky

Covered since July 15 2010



	Date	Rating	Target Price	Closing Price
1	20-Jan-11	*ADD MP	-	79.32

* Indicates change

	Date	Rating	Target Price	Closing Price
2	15-Jul-11	*REM MP	-	78.37

Rating/target price changes above reflect Eastern Standard Time

Raytheon Co. (RTN)

Ratings and Target Price History Fundamental Research

Analyst: Jason Gursky

Covered since July 15 2010



	Date	Rating	Target Price	Closing Price
1	15-Jul-10	*1H	*60.00	49.02
2	14-Oct-10	1H	*58.00	45.52
3	28-Oct-10	1H	*56.00	45.64
4	8-Nov-10	1H	*58.00	48.33
5	28-Jan-11	1H	*62.00	49.48
6	28-Apr-11	1H	*64.00	49.25

* Indicates change

	Date	Rating	Target Price	Closing Price
7	28-Jul-11	1H	*62.00	45.02
8	8-Oct-11	Stock rating system changed		
9	8-Oct-11	*1	62.00	41.00
10	18-Oct-11	1	*59.00	42.88
11	27-Oct-11	1	*56.00	43.79
12	26-Jan-12	1	*59.00	49.89

	Date	Rating	Target Price	Closing Price
13	16-Mar-12	1	*64.00	52.12
14	16-Oct-12	1	*68.00	56.23
15	3-Dec-12	1	*69.00	56.41
16	25-Apr-13	1	*70.00	59.30

Rating/target price changes above reflect Eastern Standard Time

Raytheon Co. (RTN)

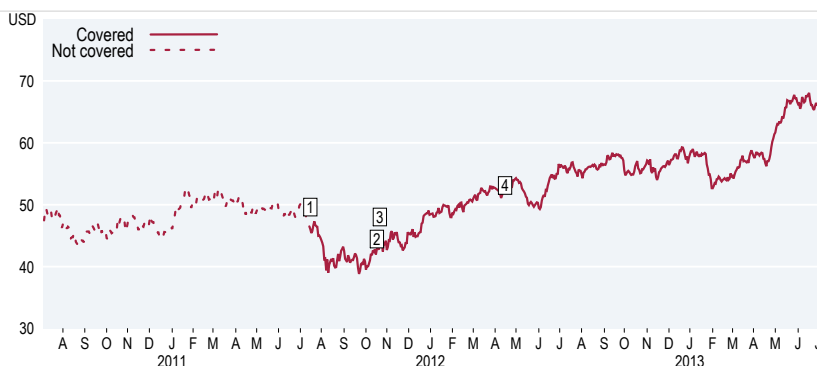
Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Jason Gursky

Covered since July 15 2010



	Date	Rating	Target Price	Closing Price
1	15-Jul-11	*ADD MP	-	46.05
2	18-Oct-11	*REM MP	-	42.88

* Indicates change

	Date	Rating	Target Price	Closing Price
3	21-Oct-11	*ADD MP	-	43.97
4	16-Apr-12	*REM MP	-	52.60

Rating/target price changes above reflect Eastern Standard Time

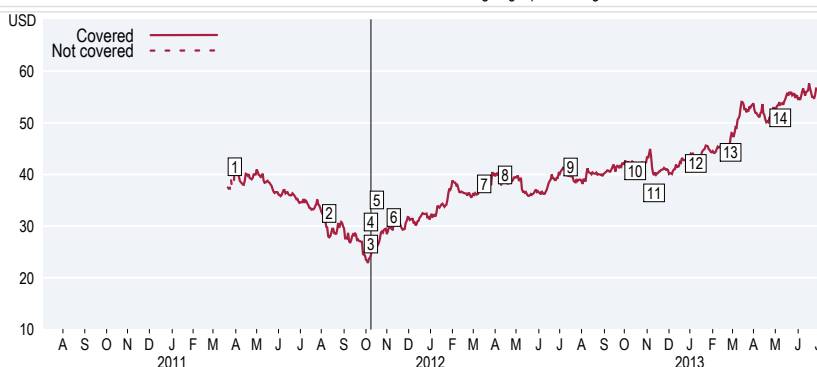
Huntington Ingalls Industries (HII)

Ratings and Target Price History

Fundamental Research

Analyst: Jason Gursky

Covered since March 31 2011



	Date	Rating	Target Price	Closing Price
1	31-Mar-11	*1M	*44.00	41.50
2	11-Aug-11	1M	*35.00	27.83
3	8-Oct-11	Stock rating system changed		
4	8-Oct-11	*1	35.00	23.85
5	18-Oct-11	1	*32.00	26.47

* Indicates change

	Date	Rating	Target Price	Closing Price
6	10-Nov-11	1	*36.00	31.00
7	16-Mar-12	1	*45.00	37.75
8	16-Apr-12	1	*46.00	38.47
9	17-Jul-12	1	*47.00	39.71
10	16-Oct-12	1	*52.00	40.99

	Date	Rating	Target Price	Closing Price
11	12-Nov-12	1	*50.00	39.87
12	9-Jan-13	1	*54.00	43.20
13	27-Feb-13	1	*58.00	47.12
14	8-May-13	1	*62.00	53.52

Rating/target price changes above reflect Eastern Standard Time

Huntington Ingalls Industries (HII)

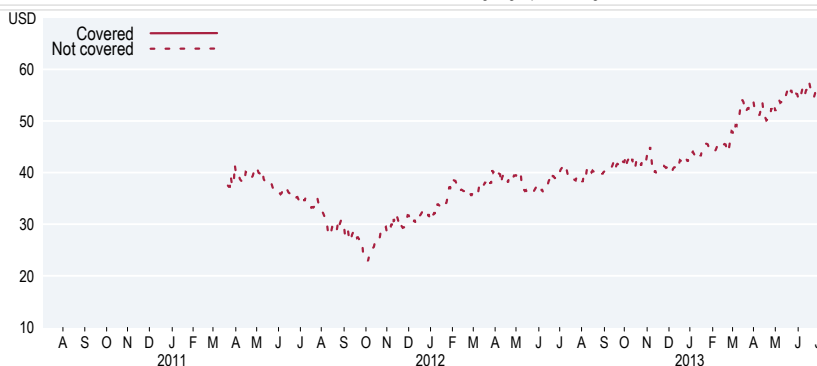
Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Jason Gursky

Covered since March 31 2011



* Indicates change

Rating/target price changes above reflect Eastern Standard Time

General Dynamics Corp. (GD)

Ratings and Target Price History Fundamental Research

Analyst: Jason Gursky

Covered since July 15 2010



	Date	Rating	Target Price	Closing Price
1	15-Jul-10	*2H	*69.00	61.47
2	14-Oct-10	2H	*71.00	63.17
3	27-Oct-10	2H	*75.00	65.42
4	13-Jan-11	*1H	*87.00	71.78
5	27-Jan-11	1H	*88.00	76.20

* Indicates change

	Date	Rating	Target Price	Closing Price
6	27-Apr-11	1H	*91.00	72.72
7	28-Jul-11	1H	*90.00	67.75
8	8-Oct-11	Stock rating system changed		
9	8-Oct-11	*1	90.00	59.55
10	18-Oct-11	1	*86.00	62.64

	Date	Rating	Target Price	Closing Price
11	27-Oct-11	1	*87.00	65.61
12	6-Jan-12	1	*88.00	67.62
13	25-Jan-12	1	*85.00	71.57
14	16-Mar-12	1	*88.00	72.90
15	23-Jan-13	1	*86.00	71.45

Rating/target price changes above reflect Eastern Standard Time

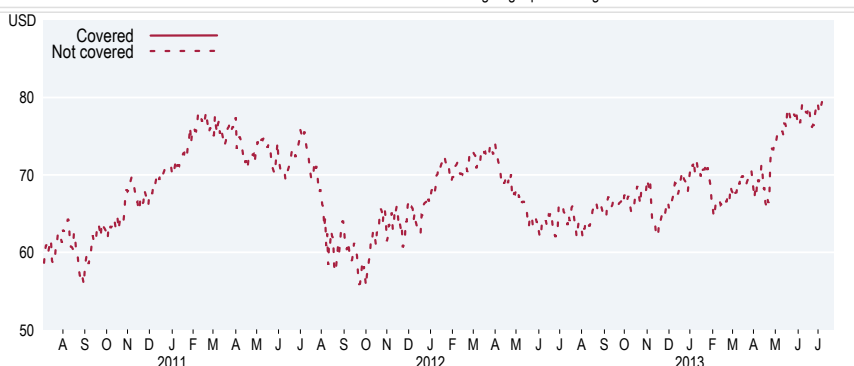
General Dynamics Corp. (GD)

Ratings and Target Price History Best Ideas Research

Relative Call (3 Month)

Analyst: Jason Gursky

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Citigroup Global Markets Inc. owns a position of 1 million USD or more in the debt securities of Northrop Grumman Corp

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