

A Wall St Perspective on the Defense Industry



Myles Walton, Ph.D., CFA
617.556.3707
myles.walton@opco.com

Defense Industry Investment Summary

2009 Defense Investing Themes

It's Still Cyclical

“Defensive” Qualities/Underperforms in Market Rally

New Admin/Iraq Overhang

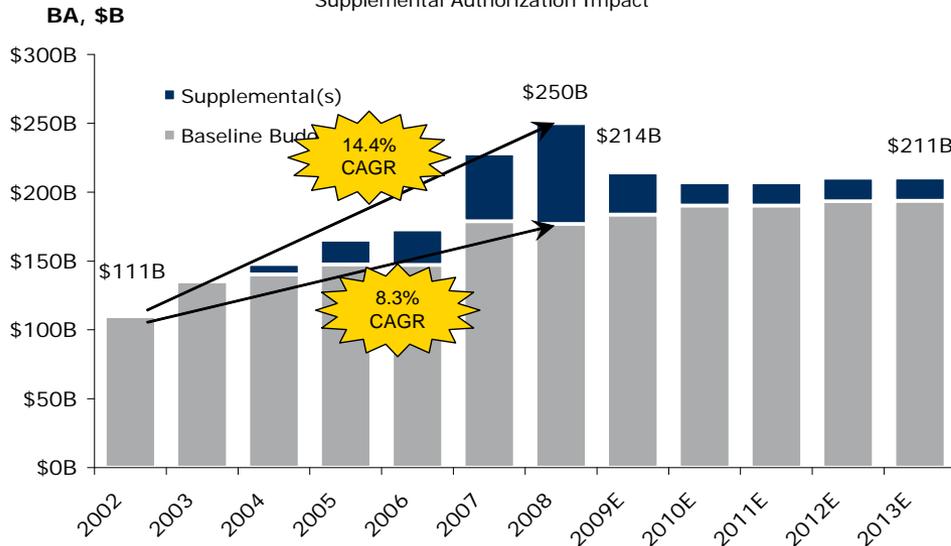
Budget Pressure

Valuation on Defense Stocks Reflects:

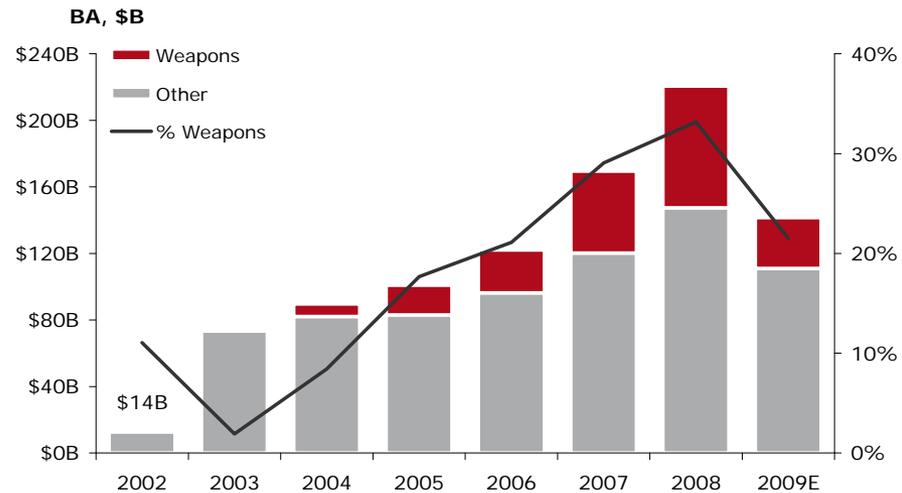
- Decelerating/declining growth environment
- Better than market EPS growth through 2009/10
- Long-term visibility from backlogs/budgets
- Free cash flow after dividends of ~\$15B over 2009/10 leaves plenty to deploy in acquisitions, dividend increases and share repurchase
- Growth opportunities (acquisitions and organic) beyond typical weapons spending include homeland security, federal IT, and MRO

Defense Budget Dynamics

Weapons Spending Budget Authority (BA)
Supplemental Authorization Impact



Supplemental Appropriations (BA)
Weapons Spending Allocation



Source: Department of Defense and Oppenheimer & Co. Inc.

Supplemental Appropriations have protected baseline budgets, providing a boost to budget authority above and beyond those seen during past conflicts...

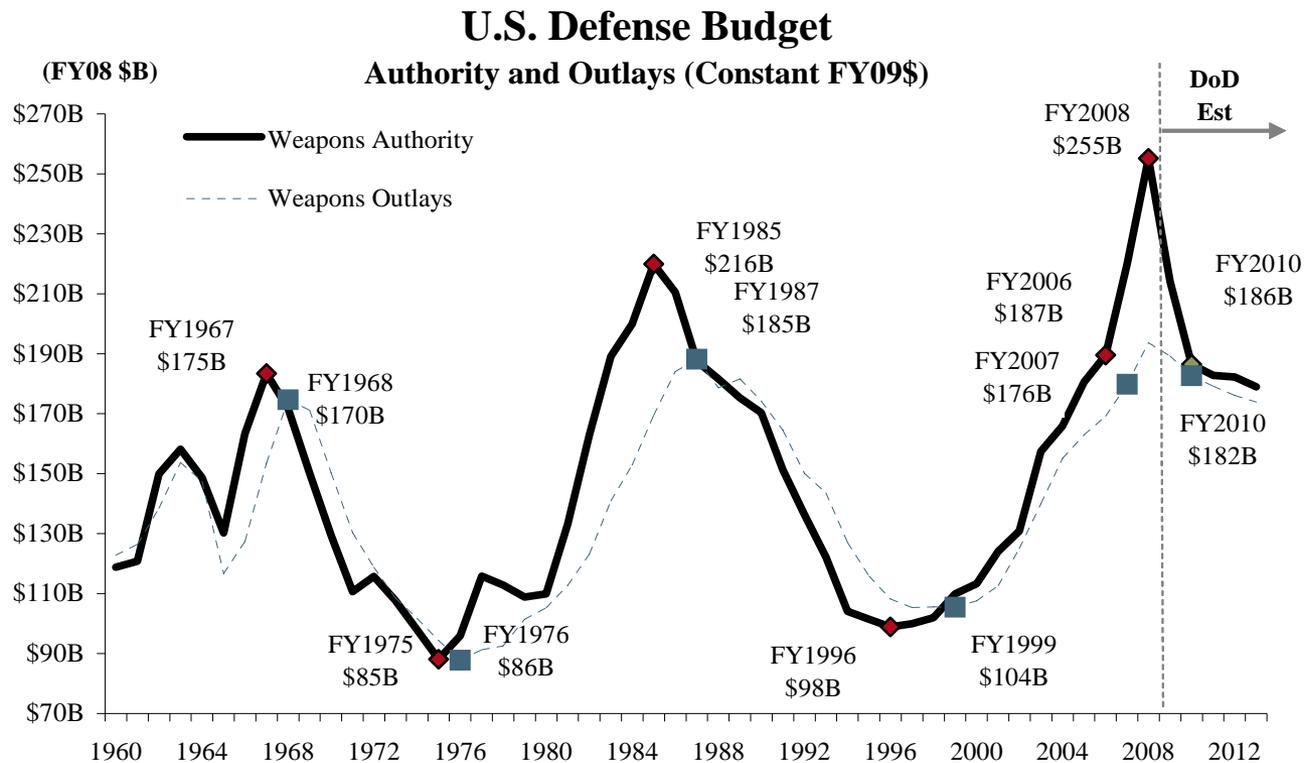
...while weapons Spending has garnered an increasing share of them, in stark contrast with past history, when the focus was on Operations & Maintenance

Supplementals protect baseline programs and bolster budgets of war-torn equipment

Our Thinking on Defense Spending Cycles

Drivers to Defense Spending

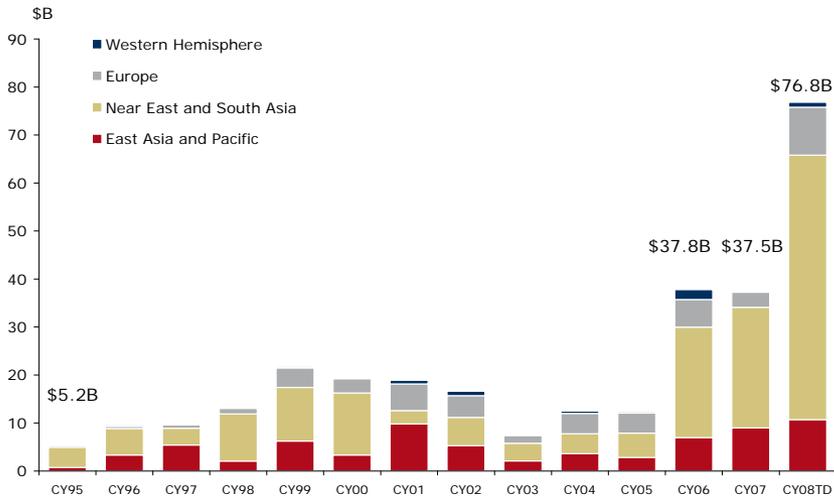
1. Threat: Domestic Fears Take Center Stage
2. Available Funds: Scarcity Builds
3. Washington World View: Unknown



Cycle Drivers Have Turned Negative

Diplomacy Through Arms

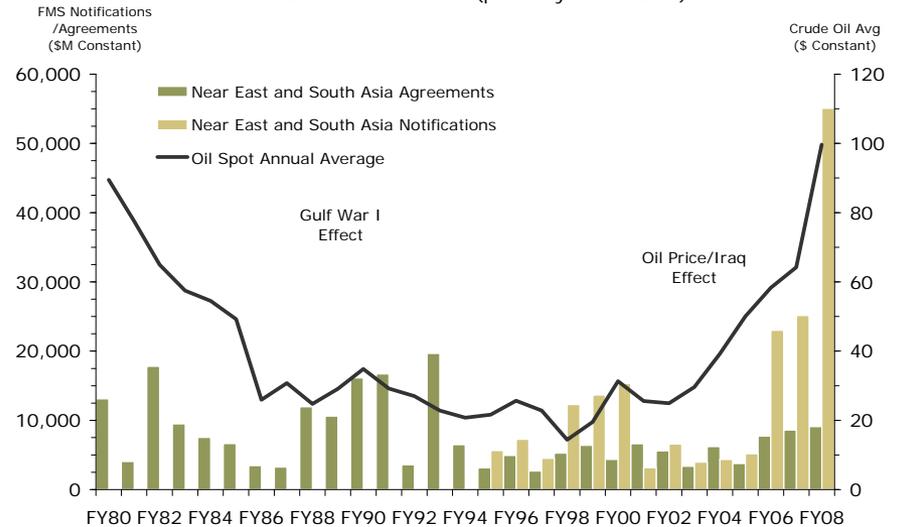
Foreign Military Sales (FMS) Notifications
by Region 1995-2008YTD



Source: Department of State and Oppenheimer & Co. Inc.

FY06 & FY07 FMS notifications exceeded the previous three years combined, doubled again in 2008.

Oil Prices vs. FMS Notifications/Agreements
Near East and South Asia (primarily Middle East)

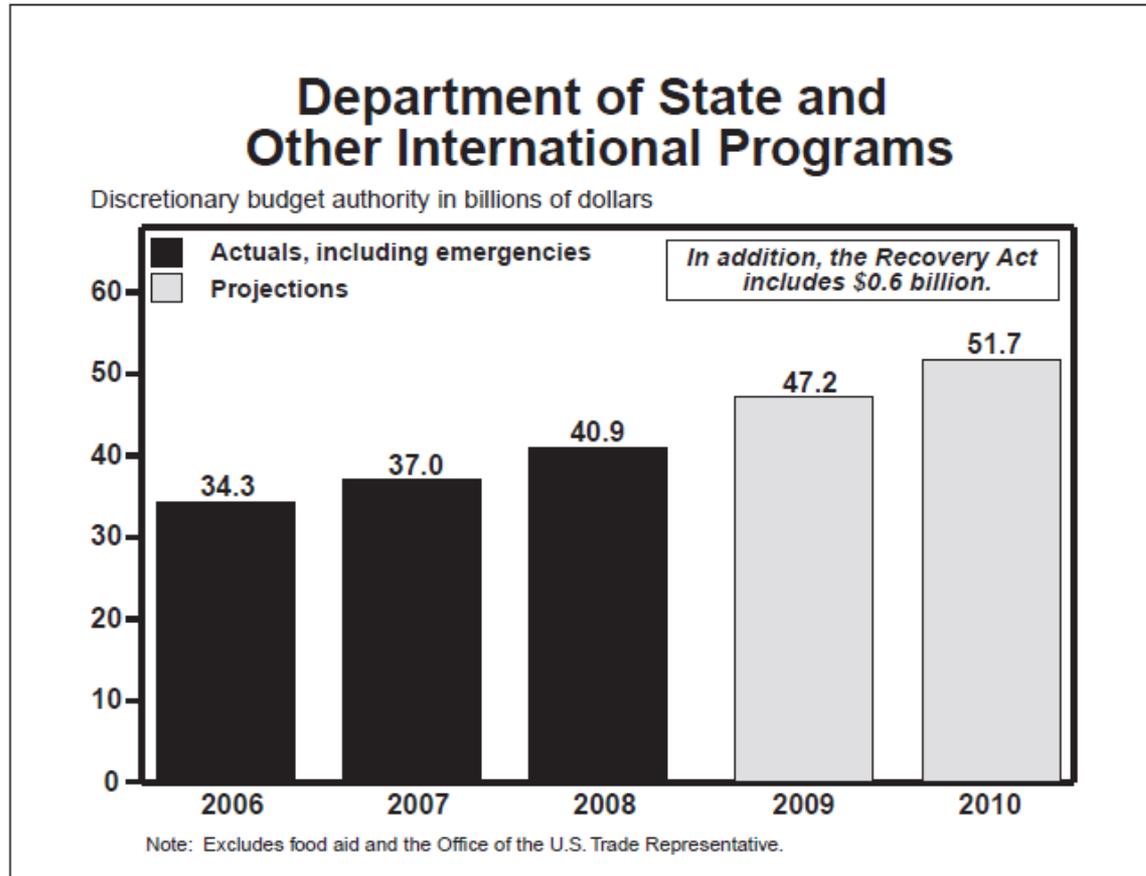


Source: DoD DSCA FY89-05 Fact Books, Congressional Notifications (FY06 estimate), and Oppenheimer & Co. Inc.

Buoyed by surging oil revenue, Middle Eastern countries are leading the pack.

International acceleration should dampen downturn

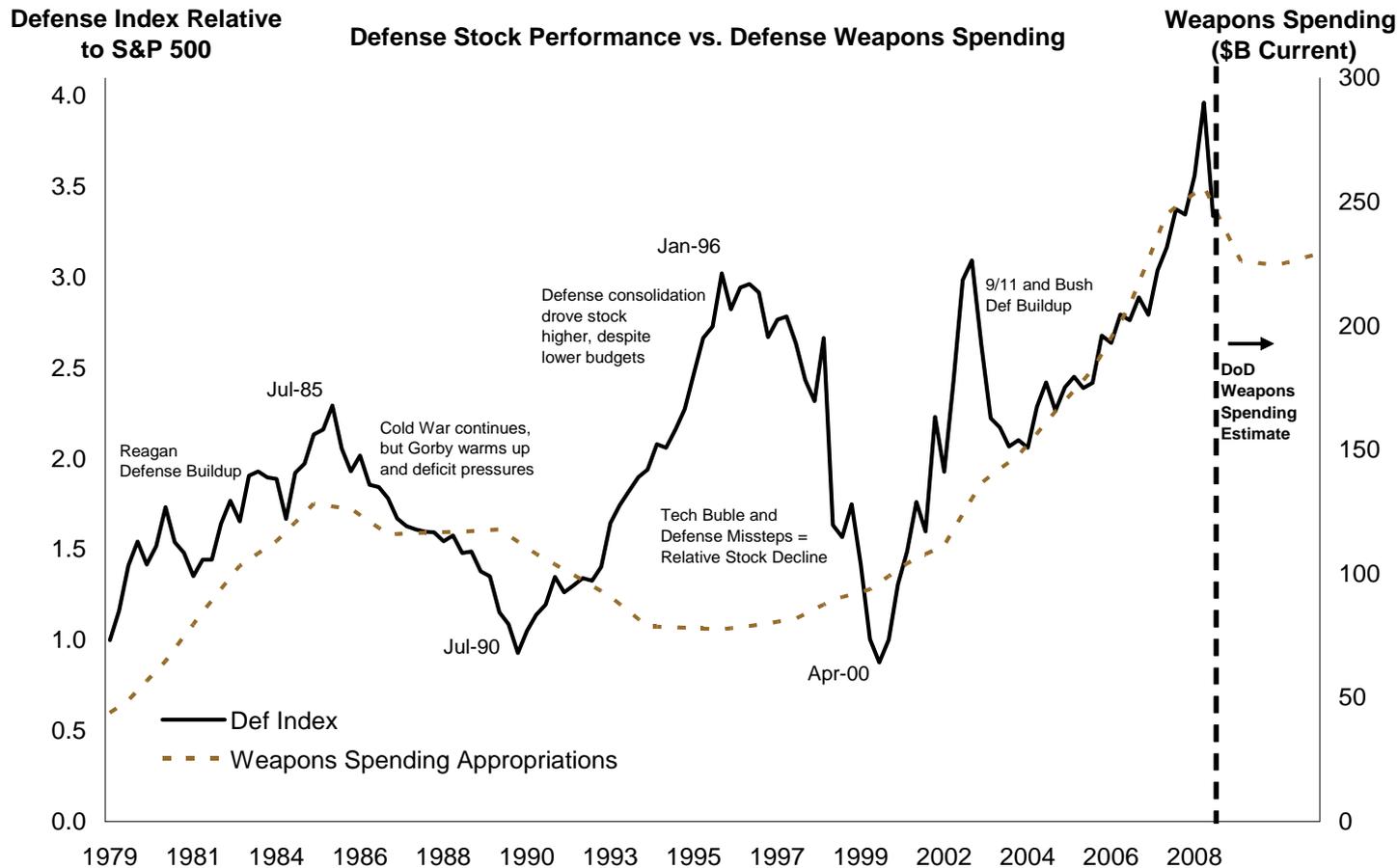
Soft Power Flowing to State's Empowerment



Source: FY09 President's Budget

*Increasing Role of The State Department
In Both Policy and Budget*

Budgets and Stocks



Stocks include: NOC, GD, LMT, RTN, LLL, ATK, McDonnell Douglas, E-Systems, Martin Marietta, Grumman
 Source: Department of Defense and Oppenheimer & Co. Inc.

Defense Stocks Poised to Be Source of Funds On Any Economic/Market Rebound

Investment Positives: Multi-year Visibility

Backlog Analysis

<i>(\$MM)</i>	2003A	2004A	2005A	2006A	2007A	2008A
General Dynamics Total*	34,332	34,905	34,136	35,974	34,576	51,648
Lockheed Martin Total	76,899	73,986	84,188	75,900	76,700	80,900
Northrop Grumman Total	58,154	58,080	55,983	61,021	63,665	78,052
Raytheon Total*	25,087	29,611	31,248	33,595	36,614	38,884
<i>(% Growth)</i>	2003A	2004A	2005A	2006A	2007A	2008A
General Dynamics Total*	57%	2%	(2%)	5%	(4%)	49%
Lockheed Martin Total	9%	(4%)	14%	(10%)	1%	5%
Northrop Grumman Total	NA	(0%)	(4%)	9%	4%	23%
Raytheon Total*	19%	18%	6%	8%	9%	6%
<i>Yrs B/L on Next Year's Sale</i>	2003A	2004A	2005A	2006A	2007A	2008A
General Dynamics Total*	2.2	2.0	1.7	1.6	1.5	1.9
Lockheed Martin Total	2.2	2.0	2.1	1.8	1.8	1.8
Northrop Grumman Total	1.9	1.9	1.9	1.9	1.9	2.3
Raytheon Total	1.5	1.6	1.6	1.6	1.6	1.6

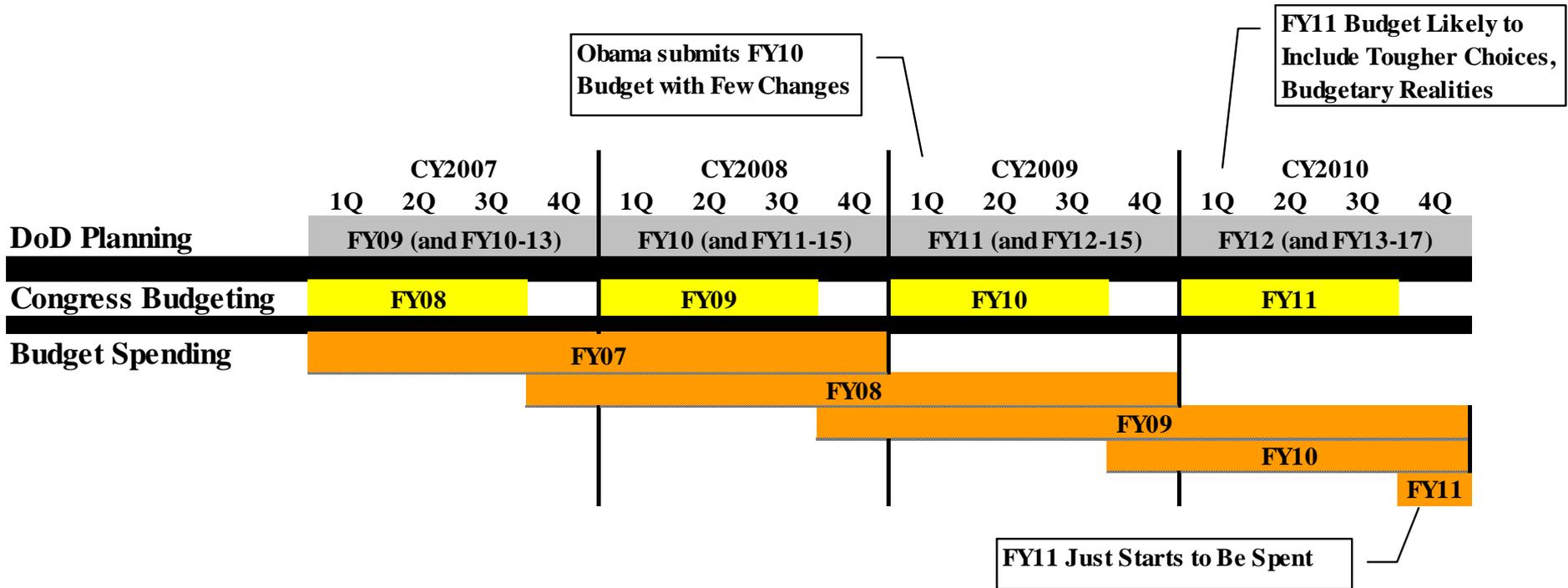
* Defense Business Only

Source: Oppenheimer & Co. Inc. estimates and company reports.

Solid and rising backlogs add to out-year visibility
Cash generation remains strong and deployment comes into focus

Long Tails Extend into Next Admin

Long Tails of Defense Budget



Stretch of Backlogs Provides Some Relief From Near-Term Uncertainty

The Benefit Of Stable/Growing Budgets

Large-Cap Defense Margin Picture

Segment Margins	1999A	2000A	2001A	2002A	2003A	2004A	2005A	2006A	2007A	2008E	Change 1999-2008
General Dynamics	13.4%	12.9%	12.3%	11.4%	8.8%	10.1%	10.3%	10.9%	11.4%	12.2%	(121) bps
Lockheed Martin	6.9%	7.0%	7.1%	7.6%	7.8%	8.4%	9.2%	10.2%	11.2%	11.5%	458 bps
Northrop Grumman	8.7%	8.9%	7.7%	6.0%	7.3%	7.7%	8.0%	9.3%	9.8%	8.6%	(10) bps
Raytheon	10.0%	10.6%	7.8%	9.6%	8.5%	11.3%	11.4%	12.9%	13.2%	12.9%	288 bps

Large-Cap Defense ROIC Picture

ROIC*	1999A	2000A	2001A	2002A	2003A	2004A	2005A	2006A	2007A	2008E	Change 1999-2008
General Dynamics	18.2%	19.9%	18.2%	16.1%	11.8%	12.7%	13.5%	14.8%	15.5%	16.6%	(162) bps
Lockheed Martin	11.5%	6.4%	7.5%	10.2%	12.8%	15.7%	19.3%	22.9%	25.1%	22.8%	1,131 bps
Northrop Grumman	6.9%	7.4%	6.2%	2.7%	5.3%	6.4%	6.7%	8.3%	9.4%	8.1%	117 bps
Raytheon	4.4%	4.3%	3.1%	5.9%	5.9%	8.0%	8.3%	10.1%	11.5%	12.3%	787 bps

The key to success by defense contractors this cycle has not been a operating margin story as much as it has been a return on invested capital

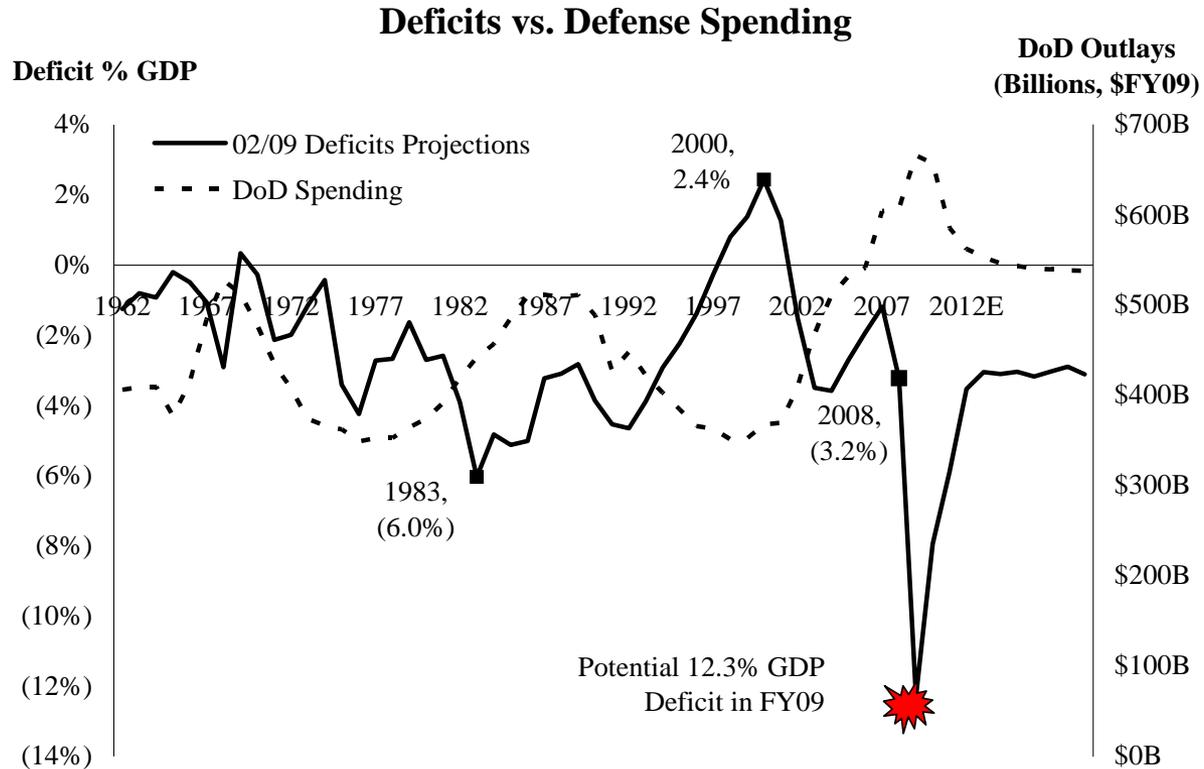
*ROIC corrected for pension and unusual items

Doth Protest?

	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Cases filed	1204	1352	1485	1356	1327	1411
Cases closed	1133	1244	1405	1341	1274	1393
Merit	256	290	365	306	249	335
<i>% Cases Closed</i>	23%	23%	26%	23%	20%	24%
Sustains	41	50	75	71	72	91
<i>% of Merit</i>	16%	17%	21%	23%	29%	27%
<i>% of Case Closed</i>	4%	4%	5%	5%	6%	7%

- Protests are up 25%, but sustain decisions are up 120% since '02
- When there's no downside to protest, why not?
- \$1,000/hr lawyers likely have the upper hand poking holes
- If we can't have it, no one can is sometimes the best strategy

How the Credit Crisis Will Affect Defense



Source: OMB, Department of Defense and Oppenheimer & Co. Inc. estimates.

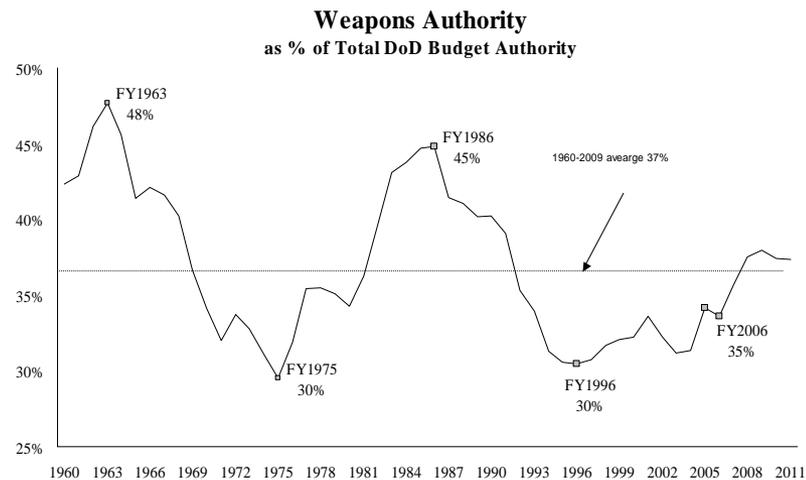
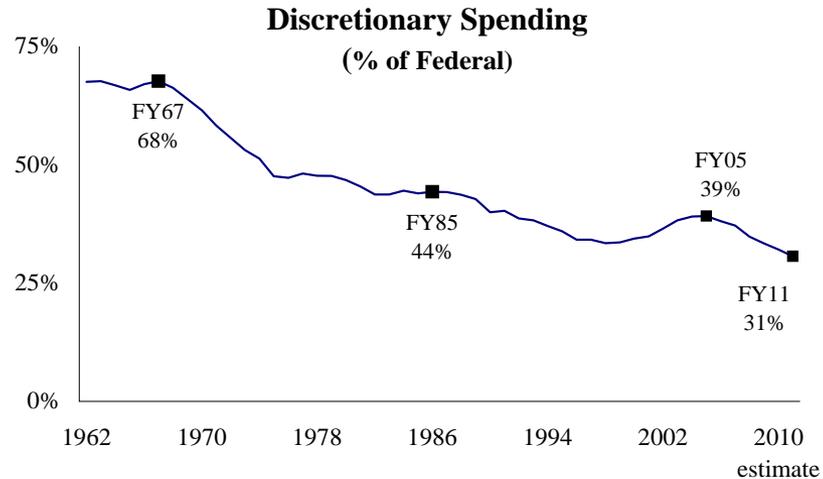
*Deficits were the last defense upcycle killer –
History looks like it could repeat itself*

Case Against Higher Defense Spending

■ *Social Security effect is cutting into overall discretionary spending*

■ *Deficits are rising and could potentially go higher*

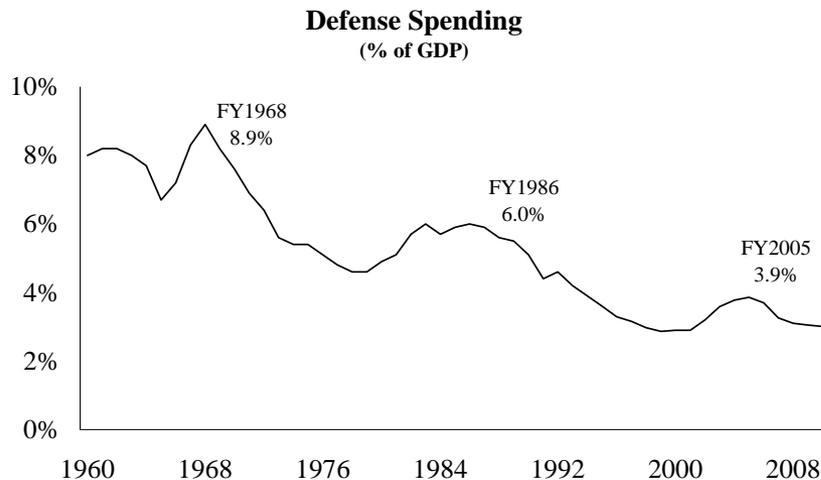
■ *O&M costs from ongoing operations and aging equipment could funnel money away from weapons, ex-supplementals*



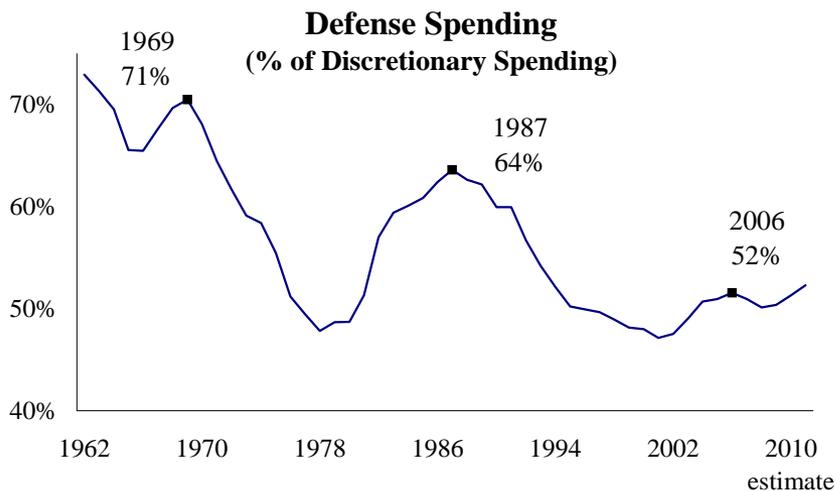
Source: OMB, Department of Defense and Oppenheimer & Co. Inc.

Case For Higher Defense Spending

■ *Defense spending is still near historical lows as % of GDP*



■ *Defense down to around 50% of discretionary spending*



Source: OMB, Department of Defense and Oppenheimer & Co. Inc.

Sacrificial Lambs, Tough Choices, or Peanut Butter

- Sacrificial Lambs: Programs are killed as examples often as a means to protect higher valued projects, generally targets the weak, lighter backlash...Think Comanche, Crusader, VXX
- Tough Choices: Strategic level reshuffling of priorities with resources available...Think DDG-1000 vs. DDG-51, TSAT vs. AHEF/WGS
- Peanut Butter: Inescapable mandatory cuts across the board; few, if any programs find sanctuary...Think Graham-Hart-Rudman

*Sacrificial Lambs are the Easiest, Tough Choices is the Best....
But Peanut Butter is the Most Likely*

Dealing with the Downside of a Budget Cycle: Follow the Customer or the Technology?

- Strong Balance Sheets And Declining Addressable Markets Will Test Discipline
- Adjacencies Are Likely to Be Better Forged Through Customer Than Technology Know-How

"Their death rays, they say, will treat cancer. Their electric rail guns will loft commercial payloads into space and enrich earthling entrepreneurs. Their nuclear reactors, originally meant for war in space, will instead hurl astronauts toward the moon and Mars."

— *NYT, April 8, 1990 on the Military Industrial Base Repositioning*

Dealing With the Downside of a Budget Cycle: Supply Chain and Consolidation

- The Bad News: Sharp Drops Will Be Felt the Hardest Down the Chain

<i>(\$USD, Millions)</i>	<u>DoD FY06</u>	<u>DoD FY07</u>	<u>DoD FY08E</u>	<u>DoD FY09E</u>
Procurement, Marines				
Base		6	25	35
Supplemental		<u>412</u>	<u>288</u>	<u>23</u>
Total Proc, Marines	330	418	313	58
Other Procurement, Army				
Base		33	43	48
Supplemental		<u>266</u>	<u>359</u>	<u>176</u>
Total Other Proc, Army	245	300	402	224
MRAP buys (units)	1,500	6,480	7,394	2,000
<i>Est shipset content</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>
Tot Est Radios in MRAP Budget	45	194	222	60
Est Company Radios in Budget	\$620	\$912	\$937	\$342
<i>% Change</i>		<i>47%</i>	<i>3%</i>	<i>-64%</i>

- The Good News: Sellers and Buyers Will Be Motivated to Consolidate

Best Farm League Outside the Red Sox Organization

*Consolidating the supply base,
plenty of deals
are still being done ...*

*...though consolidation is
largely over at the top
of the defense food chain.*

U.S. Industrial Base

BA, GD, LMT, NOC, RTN

CSC, GE, HON, LLL, SAI, UTX

ATK, Booz, Bechtel, COL, GR, KBR, HRS, DCP, HRS, ITT, TXT, URS

ARINC, Battelle, CAI, CUB, EDS, MANT, OSK, TDY (and hundreds of others)

Defense-related M&A

<u>Year</u>	<u>Transactions</u>	<u>Price/Sales</u>
1993	233	NA
1994	243	NA
1995	228	NA
1996	237	1.04
1997	251	1.15
1998	573	1.63
1999	173	1.30
2000	207	1.30
2001	343	1.15
2002	252	1.04
2003	307	1.41
2004	322	1.24
2005	371	0.85
2006	377	0.78
2007	334	1.03
2008*	273	1.05

Source: Infobase Publishers, Inc

*Through Aug 2008

Deal Flow Has Dwindled, Likely Returns with a Vengeance As Top-lines Flatten

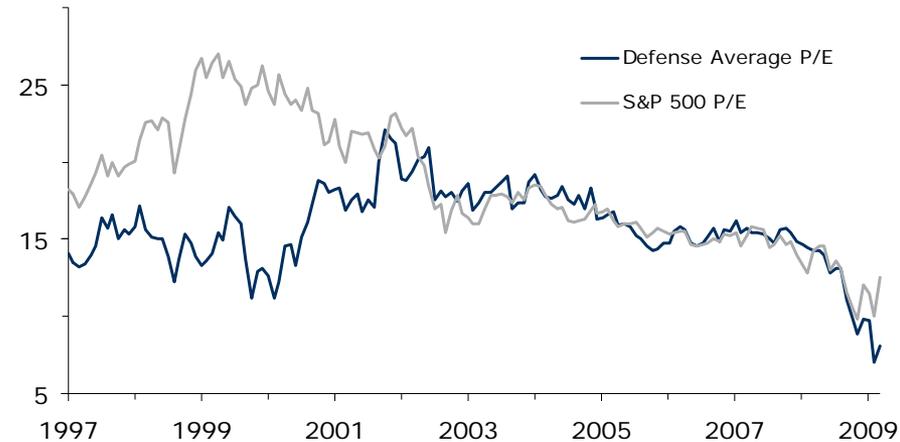
Valuation

Defense Historical P/E Analysis	Current	5 yr	10 yr
	<u>CY09E</u>	<u>Historical</u>	<u>Historical</u>
GAAP P/E			
General Dynamics	7.6	14.5	15.2
Lockheed Martin	10.4	16.6	17.6
Northrop Grumman	9.9	15.2	13.9
Raytheon	<u>9.3</u>	<u>17.0</u>	<u>16.5</u>
Average GAAP P/E	9.3	15.8	15.8
Economic P/E			
General Dynamics	7.6	14.7	NA
Lockheed Martin	10.5	16.7	NA
Northrop Grumman	10.2	15.4	NA
Raytheon	<u>10.3</u>	<u>26.1</u>	<u>NA</u>
Average Economic P/E	9.6	18.2	NA

Source: Oppenheimer & Co. Inc. estimates and FactSet.

*Multiples reasonable
reflecting budget uncertainty*

P/E Trends
S&P and Large-cap Defense



Source: FactSet and Oppenheimer & Co. Inc.

*Post 9/11, the group began to
move in line with the market*

*Defense multiples are reasonable on an historical basis
and are now in line with the market despite a better growth profile*