



DCMA

The Economic Crisis and Its Impact on the DIB: Defense Industrial Base Forecasts 2010-2020

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- **BLUF**
- **Economic crisis history**
- **Current situation for DIB**
 - **Military Spending**
 - **NASA**
 - **Healthcare**
- **Economic forecasts and trends**
- **Additional DIB issues**
- **Final thoughts**



Bottom Line Up Front

Demand

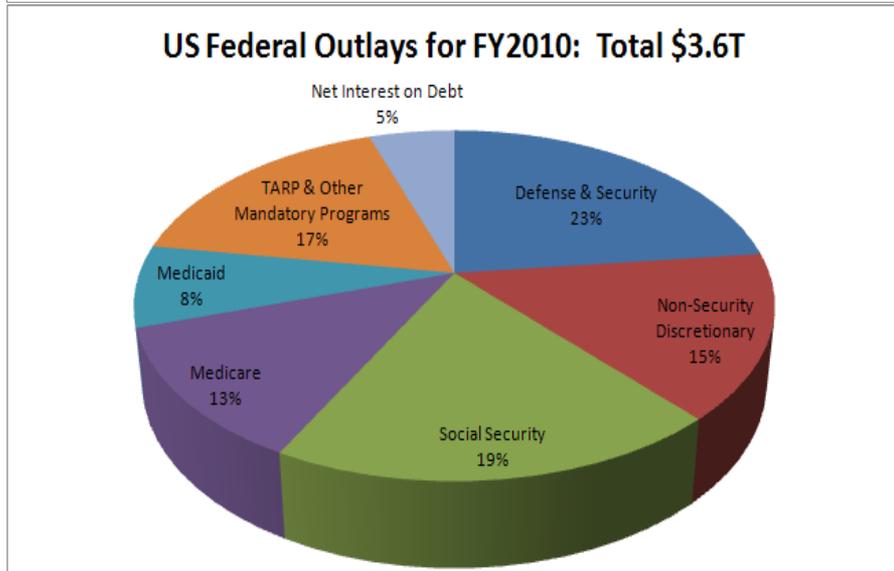
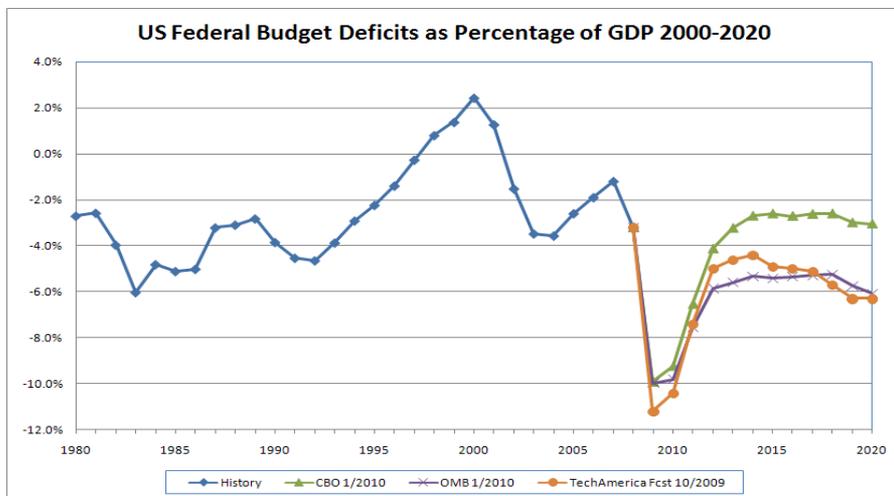
- Recession likely ended Summer 2009
- \$1T stimulus for infrastructure, tax cuts, and healthcare reform
- \$1.5T budget deficit for FY2010
- US reducing military effort in Iraq
- US surge in Afghanistan
- Healthcare reform
- Decline in Defense budget and contracting until 2020
- Investment and readiness compete for very scarce dollars against healthcare, entitlements, and economic recovery
- Aging DoD procurement workforce
- Aging and worn-out equipment

Supply

- Recession hit the Defense and Aerospace industries in 2010
- Defense industry growth will be modest at best for next decade
- Defense industry likely to divest manufacturing capabilities
- Rising energy and raw material prices
- Labor Markets are contracting with a premium on skilled labor
- New round of Defense consolidation possible
- Increasing concentration of the DIB
- Increasing foreign ownership and dependency in lower tier industries
- Increasing spin-offs of manufacturing divisions



| Year | Events | Key Statistics |
|------|--|--|
| 2007 | <ul style="list-style-type: none"> •US and other housing market crash •Declining value of the U.S. dollar •Rising energy and materials costs •US economy falls into recession •Credit markets begin to freeze | <ul style="list-style-type: none"> •Estimated loses in real estate \$150-\$400B in the US •U.S. Gov't deficit \$162B (1% of GDP) •Fed funds at 4.5% •Manufacturing Capacity Utilization: 79% |
| 2008 | <ul style="list-style-type: none"> •Oil and Materials markets peak then crash •Major banks in the U.S. and Europe collapse •Global stock markets fall by 20-60% •Global coordinated reduction in interest rates •U.S./Fed implements \$750 TARP and other bailouts | <ul style="list-style-type: none"> •Oil Peaks at \$150/Barrel •S&P falls 45% between Jun-Nov •U.S. Gov't deficit \$455B (3.6% of GDP) •U.S. GDP falls 6.2% in real terms in 4th Qtr •Fed Funds rate falls to 0.25% •Manufacturing Capacity Utilization: 76% |
| 2009 | <ul style="list-style-type: none"> •Stock markets continue to decline •\$787B American Reinvestment and Recovery Act (ARRA) •Consumers reducing debt and consumption spending •GM & Chrysler go bankrupt - \$100B+ Bailout •Japanese, UK, & European economies in deep recession •Propose overhaul of financial regulation & U.S. healthcare | <ul style="list-style-type: none"> •DJIA closes at 6594; 12yr low 2/2009 •US Gov't deficit: \$1.8T (13% of GDP) •CPI declines first time since the 1950s •Unemployment hits 9.5% •Manufacturing Capacity Utilization at 65% •140 bank failures; highest since 1992 |
| 2010 | <ul style="list-style-type: none"> •Weak Recovery begins 2010 through stimulus spending •Big Banks have recovered; smaller banks still struggling •Sovereign Debt Crisis: | <ul style="list-style-type: none"> •US Govt Deficit \$1.5T (9.8% of GDP) •Unemployment hits 10% •Manufacturing Capacity Utilization at 69.2% •50 additional bank failures: 700+ problem banks |



Rising Tide Deficits and Debt

- Deficit around \$1.4T for 2010 (10% of GDP)
- U.S. publicly held debt is projected to grow from 62% of GDP to 65%-82% range by 2020
- Rising government financing costs
- Falling tax revenue, rising unemployment, and healthcare costs
- Entitlement spending is projected to explode after 2018
- Growing global concerns on U.S. spending
- Healthcare reform: Historic Budget Buster?
- Bush Tax Cuts expire at the end of 2010: What tax cuts will be extended, if any?
- Japan now our largest creditor
- The \$64 Trillion Question: How long are global investors willing to buy U.S. Treasury Securities at currently low interest rates?

Necessity

- Cost rising far faster than general inflation
- Rising amounts of chronic disease requiring continuing care
- Lack of IT penetration in this industry
- 45+ Million uninsured or under insured Americans
- Health issues leading cause of personal bankruptcy in the U.S.
- Reduces labor market efficiency and mobility
- US manufacturers are constrained by high health insurance costs
- Major factor in GM & Chryslers' bankruptcies
- American manufacturers must compete against foreign companies that do not have to provide health insurance
- Forces more Automation – Substitution of Labor with Capital

Costs and Provisions

- Affordability
- Cuts to Medicare by \$500B
- Entitlement budget train wreck in 2018-2025
- Rising Medicare & other taxes
- No U.S. Tort Law reform
- Major provisions to date:
 - Full implementation in 2018
 - Requires most Americans and businesses to buy health insurance
 - Subsidizes for small business to provide health insurance to employees
 - Sets up Insurance exchanges
 - Heavily regulates health insurance providers
 - Taxes high end health insurance plans
 - Raise capital gains and taxes on incomes over 250K
 - Covers about 32M uninsured people

Impact on DoD

- Potential squeeze on DoD spending after 2013
- Health reform could slow the growth of DoD healthcare programs (TRI-Care)
- Overhead Impact - unclear:
 - Could reduce overhead costs for some major prime contractors
 - Could increase overhead costs for some prime contractors.

Impact on the DIB

- Could keep smaller to medium sized manufacturers in business – reduces cost burden
- Allows for more responsive labor markets
- Improved healthcare access may keep aging population in the workforce longer
- Higher taxation levels could discourage economic growth
- Possible increase in administrative costs impacting overhead
- Large company write-downs impacting profitability

MARCH 5, 2010

Sovereign Debt's Hot Spots

In light of the recent focus on sovereign risk and difficulties in the periphery of Europe, economists at RBC Capital Markets assembled a snapshot of economies to distinguish those that appear to be under the most duress. Among the several measures it examined were fiscal deficits, debt loans, growth rates and inflation. The 'sovereign risk' index includes those and others. The higher the number the riskier the country. Click on column headers to sort the table.

| | |
|-----------------------------|---|
| Average | Standard deviation from z-score less than 0 |
| Worse than average | Standard deviation between 0 and 1 |
| Much worse than average | Standard deviation between 1 and 2 |
| Worst compared with average | Standard deviation greater than 2 |

| Developed Countries | Fiscal Balance (% of GDP) | Gross Public Debt (% of GDP) | Real GDP Growth % | Inflation | Sovereign Risk Index |
|---------------------|---------------------------|------------------------------|-----------------------------|-----------------------------|----------------------|
| Ireland | Much worse than average | Worse than average | Worst compared with average | Worst compared with average | 0.98 |
| Greece | Worse than average | Much worse than average | Much worse than average | Average | 0.90 |
| Portugal | Worse than average | Worse than average | Worse than average | Worse than average | 0.59 |
| United Kingdom | Much worse than average | Worse than average | Average | Average | 0.52 |
| Italy | Average | Much worse than average | Average | Average | 0.43 |
| France | Worse than average | Worse than average | Average | Average | 0.37 |
| Spain | Worse than average | Average | Much worse than average | Average | 0.33 |
| Japan | Worse than average | Worst compared with average | Average | Worst compared with average | 0.28 |
| United States | Much worse than average | Worse than average | Average | Average | 0.21 |
| Belgium | Average | Worse than average | Worse than average | Average | 0.15 |
| Austria | Average | Average | Worse than average | Worse than average | 0.14 |
| Netherlands | Worse than average | Average | Worse than average | Worse than average | 0.08 |
| Germany | Average | Worse than average | Average | Average | -0.06 |
| Canada | Average | Worse than average | Average | Average | -0.19 |
| Finland | Average | Average | Worse than average | Average | -0.30 |
| Denmark | Average | Average | Average | Average | -0.45 |
| New Zealand | Average | Average | Average | Average | -0.49 |
| Australia | Average | Average | Average | Average | -0.52 |
| Sweden | Average | Average | Average | Average | -0.59 |
| Switzerland | Average | Average | Worse than average | Worse than average | -1.06 |
| Norway | Average | Average | Average | Average | -1.32 |

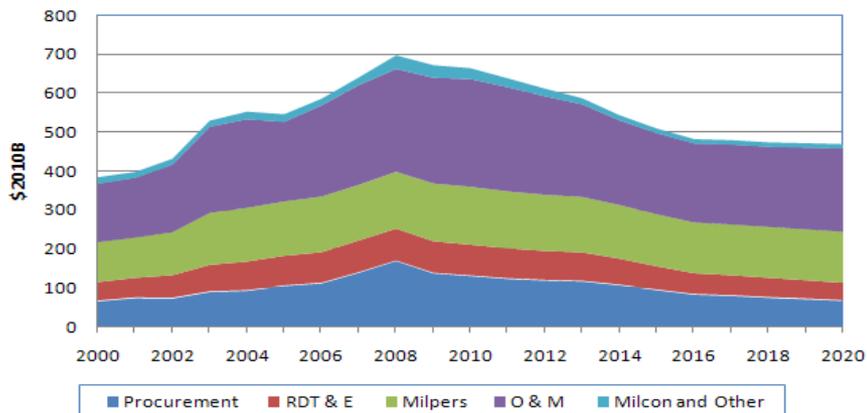
Source: Royal Bank of Canada Capital Markets

Potential Next Steps

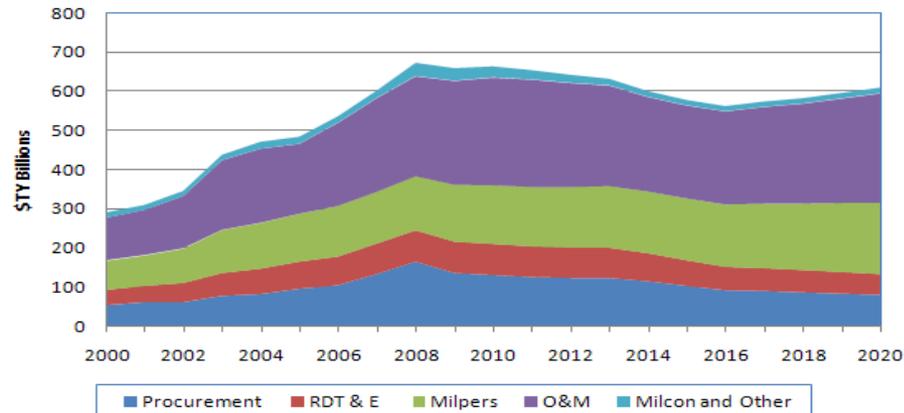
- Greece and European Nations are or near default on debt
- Falling Euro & rising US Dollar for now
- Lower interest rates in the US for now
- Potential for new conflicts
- European Union implemented rescue package – too little, too late?



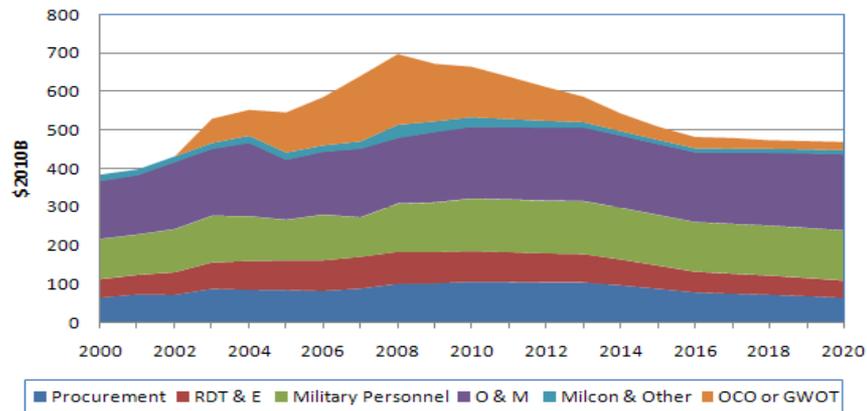
DoD Budget by Title Trends 2000-2020
Forecasts after 2010



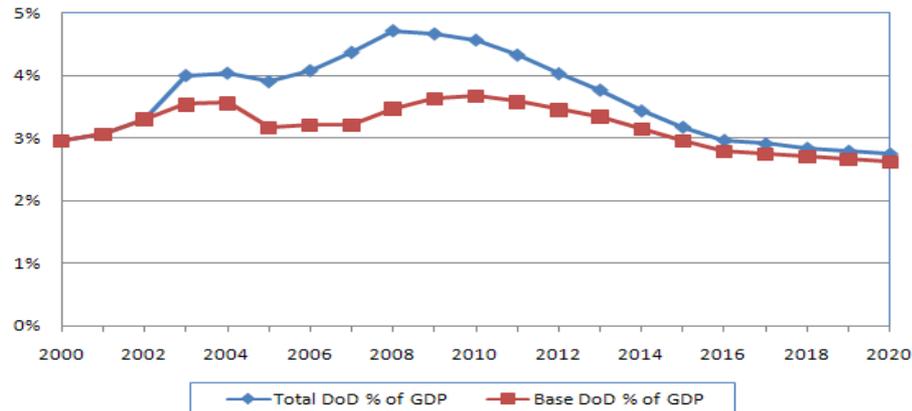
DoD Budget by Title Trends 2000-2020 -
Forecasts after 2010



DoD Base vs OCO Budget 2000-2020
Forecasts after 2010

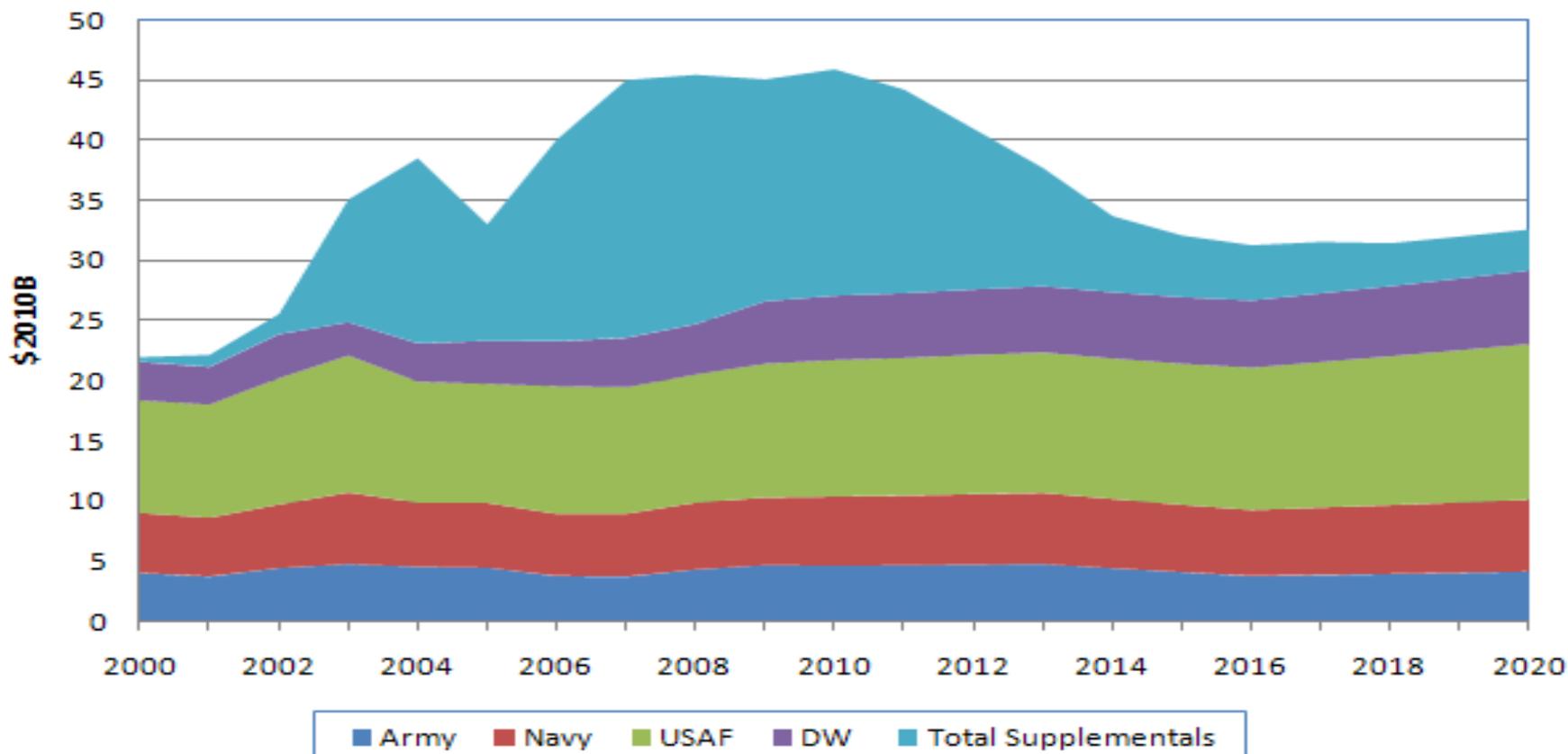


DoD Budget Percentage of GDP Trends
2000-2020 Forecasts after 2010



Source: TechAmerica10/2009 – Forecasts after 2010

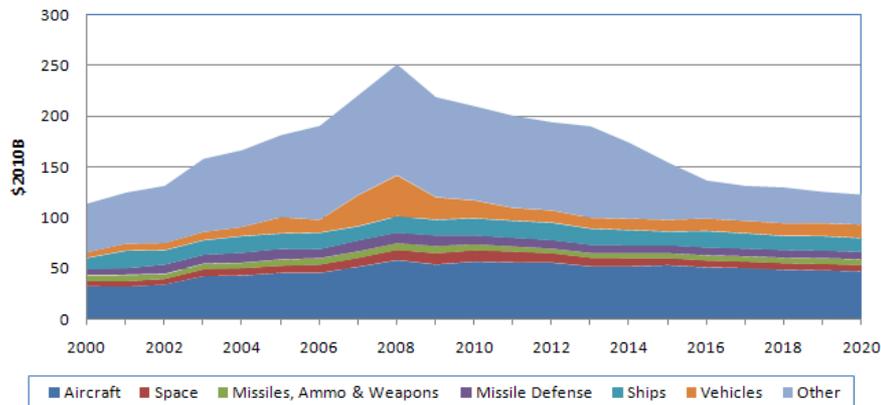
DoD Industry Addressable O&M Base Budget Trends 2000-2020 Forecasts after 2010



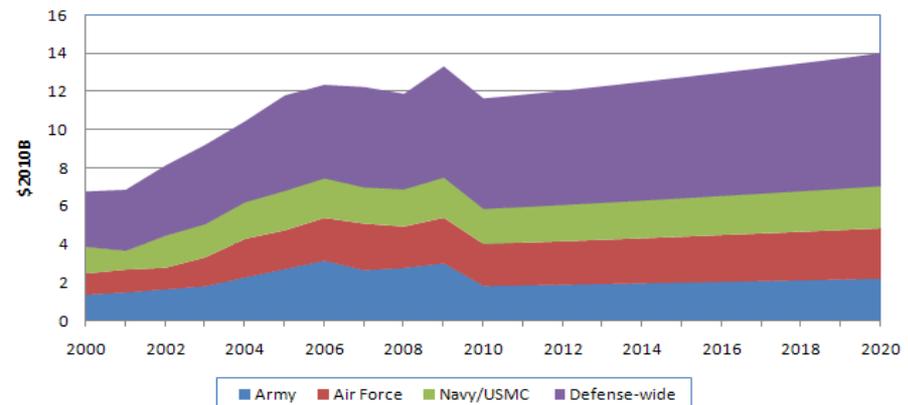
Source: TechAmerica10/2009 – Forecasts after 2010

DoD Investment Budget

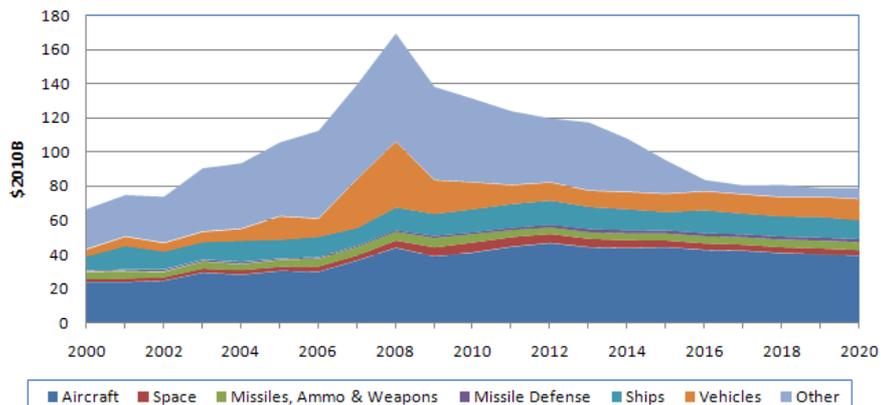
**DoD Investment Budget Authority Trends 2000-2020
Forecasts After 2010**



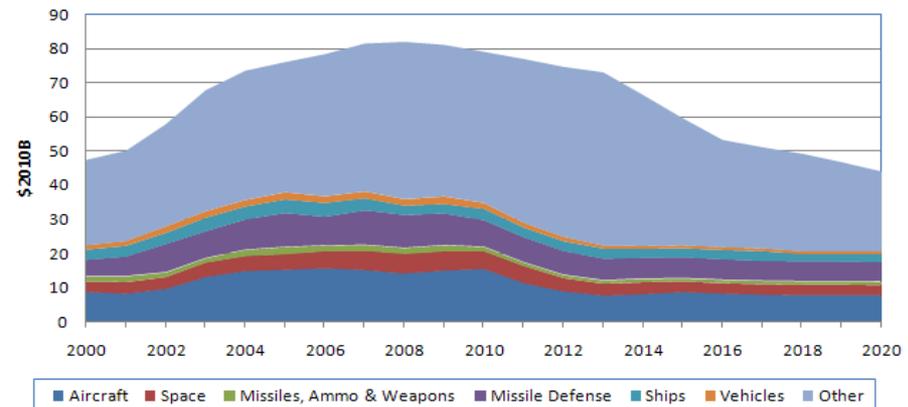
**DoD Science & Technology Budget 2000-2020
Forecasts after 2010**



**DoD Procurement Budget Authority 2000-2020
Forecasts after 2010**

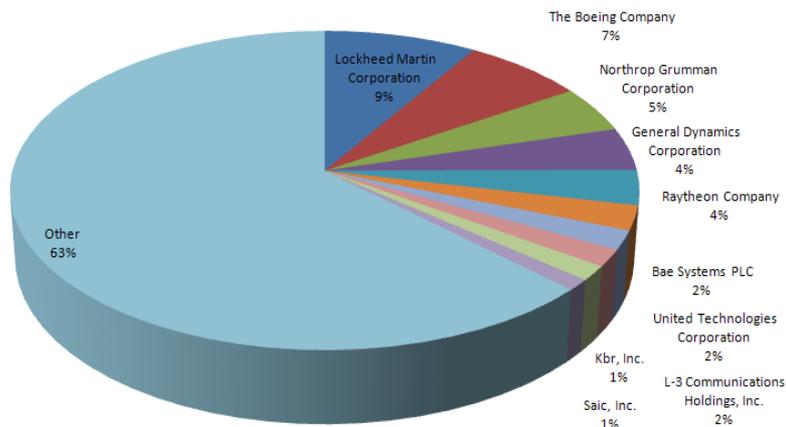


**DoD RDT&E Budget Authority 2000-2020
Forecasts after 2010**



Source: TechAmerica10/2008 – Forecasts after 2010

DoD Contract Dollar Value 2000-2010: Total \$2.5T

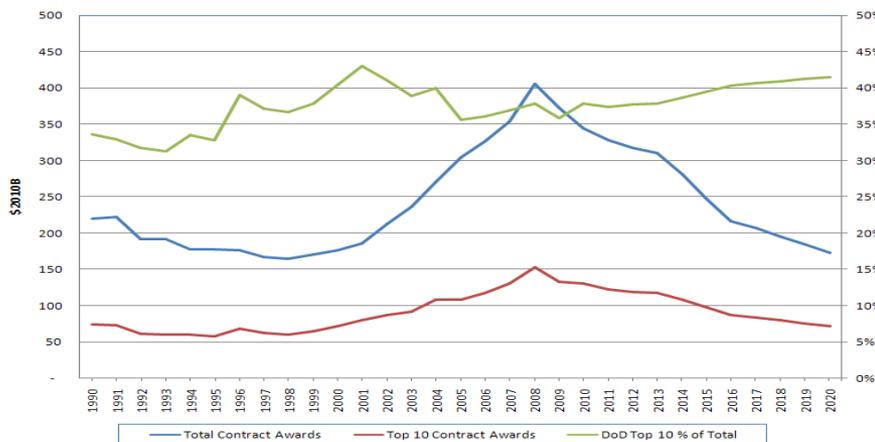


Number of DoD Contractor Trends 2000-2020



Note: Contractors defined as entities winning a contract.

Contract Award Value Trends 1990-2020 Forecasts After 2009



- Defense Industrial Base expands in terms of contracts and contractors because of the Global War on Terror
- As the wars wind down and the budget declines, the DIB will likely contract as contract awards fall
- The DIB expansion keyed by construction, consulting, and contracting out govt. functions



Quadrennial Defense Review

- First QDR to fully address wartime priorities
- Hybrid Warfare: prepare for conventional and unconventional war
- Need to take care of “Our People”
- Cyberspace domination
- Improve long range strike
- Shift to “Unmanned Systems and Capabilities” especially in aircraft
- New emphasis on cost and schedule over performance

Aging and Recapitalization Impacts

- Aging and war damaged platforms
- Many systems are at the end of design lifetimes
- Many vehicles are obsolete and worn out
- Can only reset and re-man a vehicle so many times
- High costs and delays in acquiring new systems
- About 85% of all Military vehicles need to be recapitalized or replaced

Defense Budget Cut?

- High deficits and domestic priorities
- Decline in perceived threat
- Many high-tech systems are behind schedule and over budget
- Shifting emphasis from high-tech to proven low tech systems
- Potential Congressional push back
- On-going wars?
- Last War vs. the Next War?

Perceived Weaknesses in Acquisition Workforce

- Too many cost overruns
- Hollowed out procurement DoD agencies:
 - Increase of 20,000 acquisition workers
 - DCMA declines from 30,000 in 1990 to under 10,000 in 2008
 - DCMA to Hire 3,000?
- Reliance on contractor personnel
- Aging workforce in the Federal Government – average age is over 50 for most agencies

New Defense Build-up

- 20 Year Cycle going back to 1840s
- Entitlement issues will determine DoD's budget
- New Technologies will require new systems
- 2020's budget increases not likely to match 2000's or the 1980's
- Greater emphasis on investment accounts
- Unmanned Systems (Robotics) could reduce personnel requirements and costs
- Need to maintain near-term Science & Technology (S&T) investment to reduce long-term program risk

Priority Programs

- Aging Inventories of aircraft, ships, and vehicles
- Aircraft: F-35, UAVs, Strategic Bomber, JTR, and Tankers/Air-lift
- Operationally Responsive Space (ORS) Systems
- Shipbuilding: DDGX, LCS, SSBNs, & Auxillary Ships
- Combat Vehicles: JLTV, UGVs, Abrams, and Bradley replacements
- Missiles: Joint Air-to-Ground Missile (JAGM), Hypersonics, and Strategic Missiles
- Ammo & Weapons: New Infantry Rifle, Ammo, & Directed Energy
- Other: Chem/Bio Defense, Communications Gear & IT

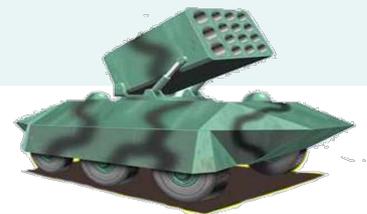
Questions

- Are we still in Iraq and Afghanistan?
- How will long-term budget issues be resolved?
- How well will current procurement programs for the 2010's be funded?
- Peer Competitor vs. Irregular Warfare/Hybrid Warfare
- Can and will the US maintain global military capabilities?
- Will S&T investment be maintained?
- Controlling O&M costs



New Technologies: 2010-2015

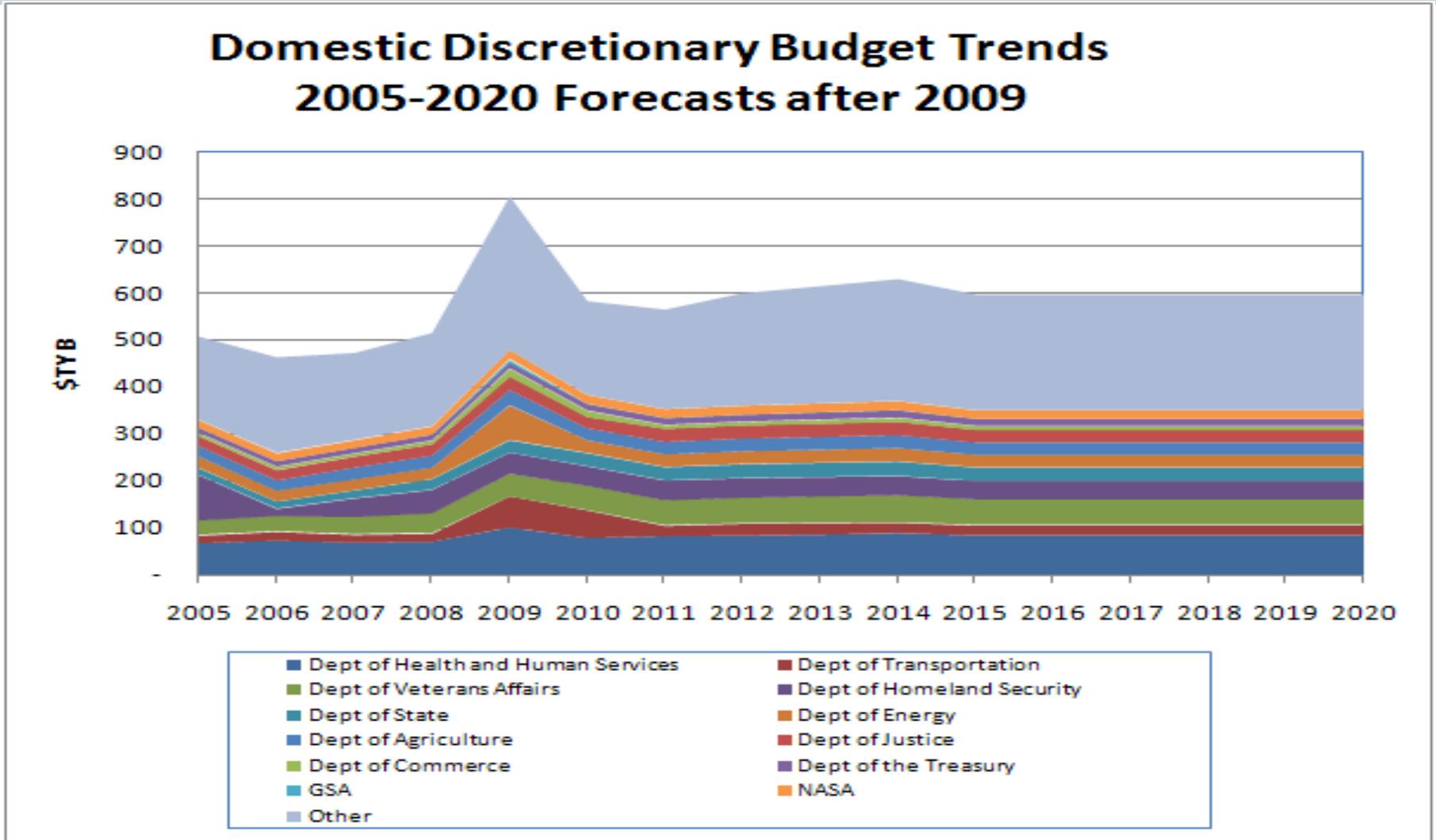
- IT & Digitalization
 - Mult-Core Processing
 - Terrahertz Computing
 - Cloud Computing
 - IT Security
- Nanotechnology
 - Carbon Nanotube Electronics
 - Photon Electronics
 - Motion Sensing & Simulation
 - Hull Coatings
- Sensors - LADAR/LIDAR



New Technologies: 2015-2030

- Non-lethal Weapons
- Directed Energy Weapons
- Robotics
 - Unmanned Vehicles
 - Loitering Munitions
- Alternative Power Systems
 - Fuel Cell and Batteries
 - Solar Cells
- Hypersonics
 - Kinetic Munitions
 - Advanced Propulsion – Scram Jet
- Biotechnology





Source: TechAmerica10/2009 – Forecasts after 2010





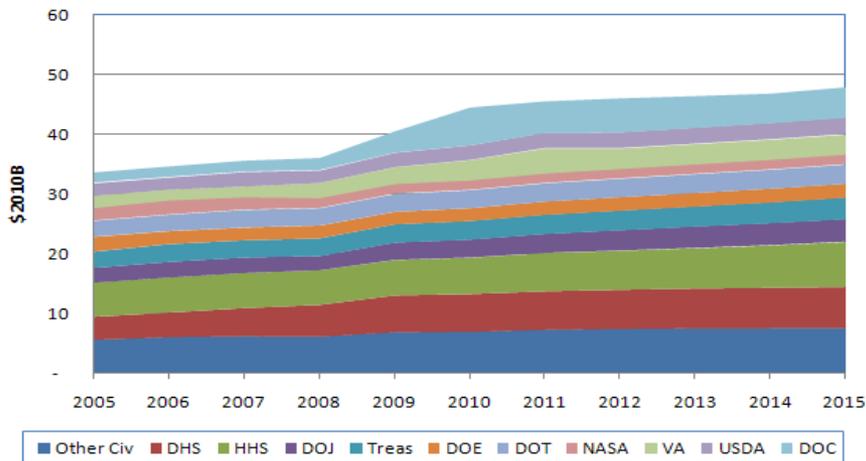
Civil Government rise driven by:

- ARRA investment
- Healthcare reform
- Replacement of retiring workers and automation of services
- IT Security is a top priority

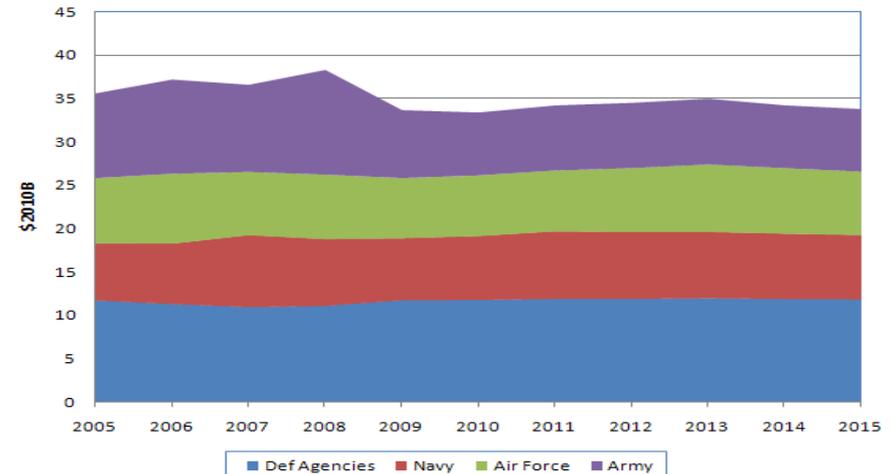
Defense IT is basically stable

- Army IT declined in 2009 & 2010 as IT investment in support of Overseas Contingencies.
- IT investment need matches inflation over the next five years
- Continuing need to invest in the latest technology

Civil Govt. IT Budget Trends 2005-2015
Forecasts after 2010

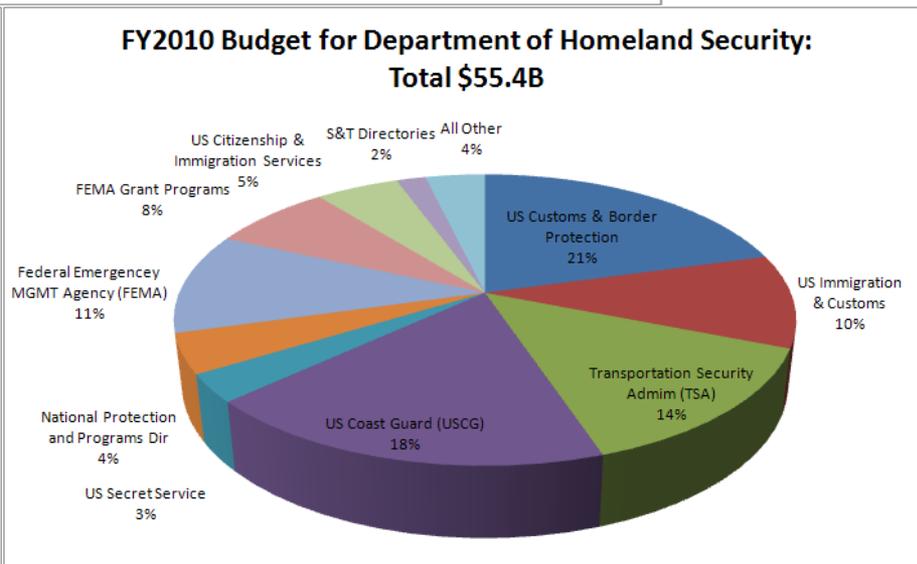
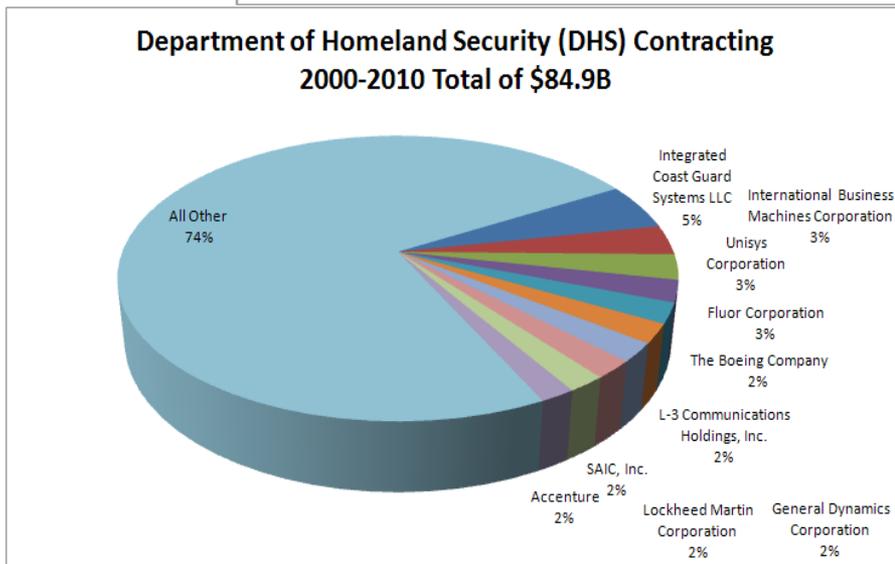
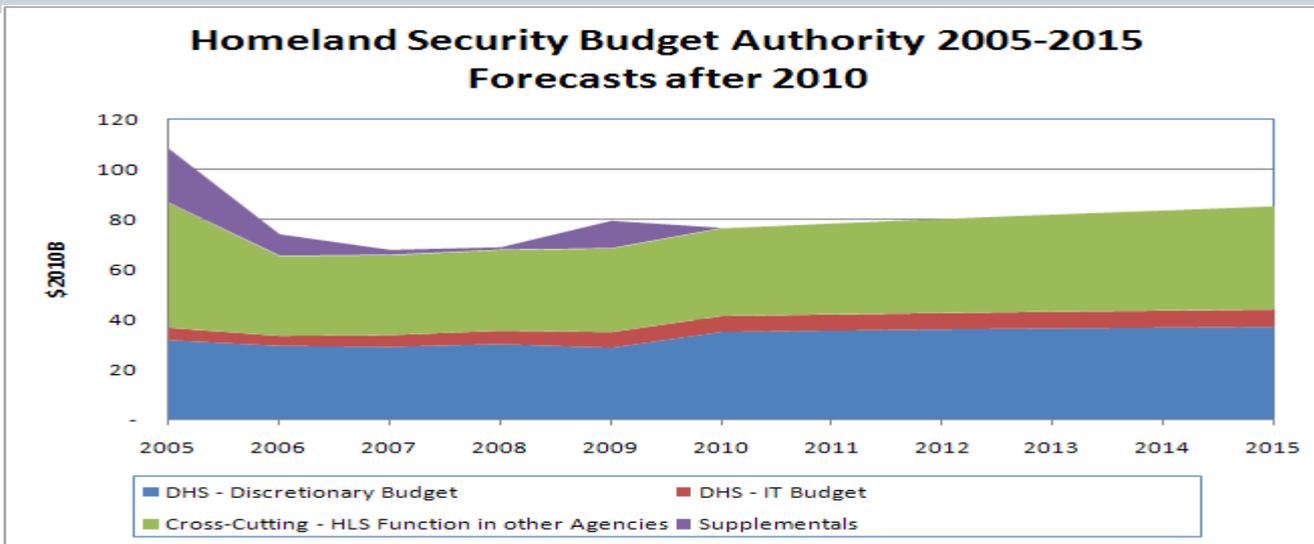


Defense IT Trends 2005-2015
Forecasts after 2010



Source: TechAmerica10/2009 – Forecasts after 2008

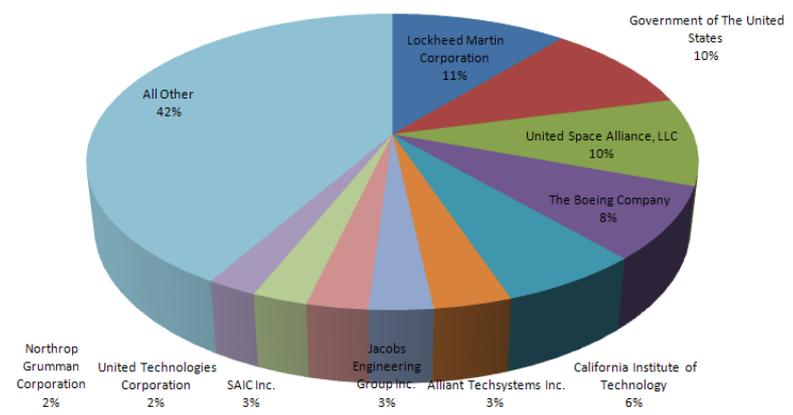




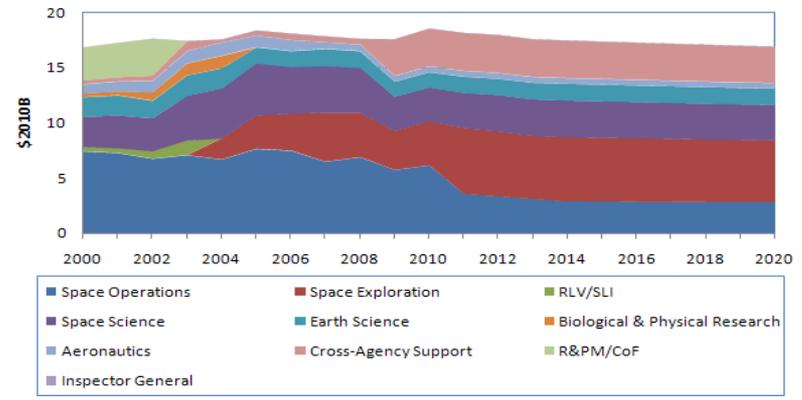
Source: DHS TechAmerica10/2009 & OMB - <http://www.usaspending.gov/index.php> - 2010 is partial year for actual as of 3/2010



NASA Total Contracts 2000-2010: Total \$115.3B



NASA Budget Trends by Category 2000-2020
Forecasts after 2010



Obama's Space Policy

- International Space Station (ISS) operates to 2020 and beyond
- Constellation cancelled as recommended by the Augustine Commission
- Focus on new technology development and launch facilities
- Shift in focus from established contractors to new start-ups
- Space contractors are assume greater amounts of program development and operational risk
- Obama's budget adds \$6B over the next 5 years
- Robust Planetary and Earth Observation program

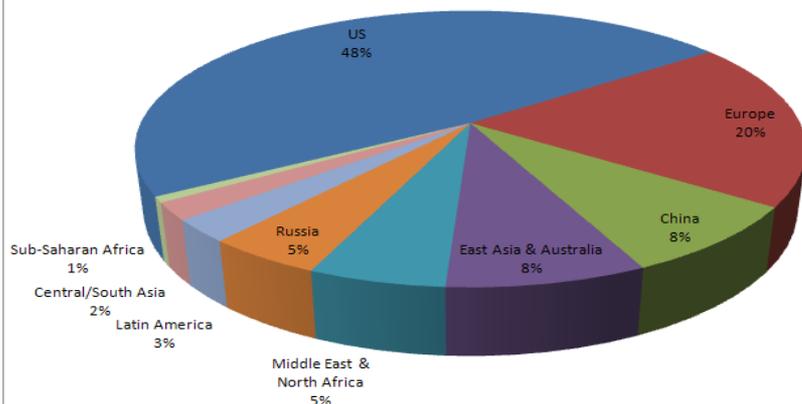
Looming Gap with no U.S. Manned Space Vehicle available for 5+ years:

- NASA to retire the Shuttle in 2010/11
- No true Shuttle replacement vehicle possible before 2020
- Shift ISS supply and personnel ferrying missions to private sector contractors.
 - Space Ex – Falcon LV and Dragon Capsule are leading candidates
- Orion continues as a lifeboat for the ISS
- NASA's Man Rating requirements presents significant technical and cost challenges in developing manned space systems

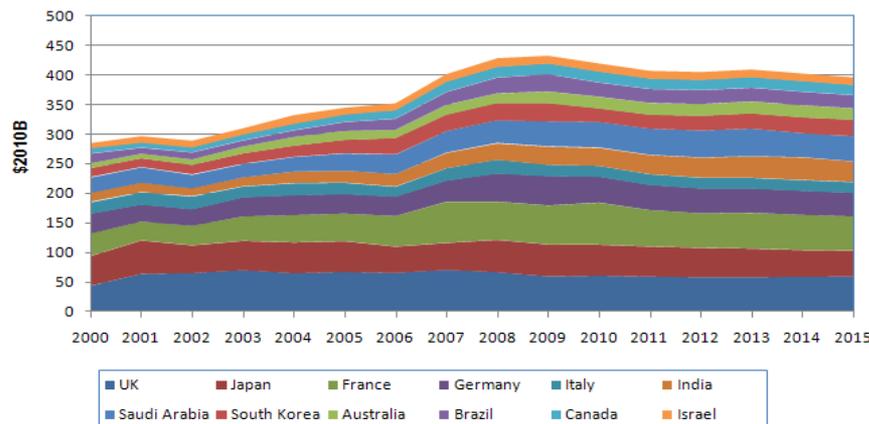
Source: TechAmerica10/2009 - OMB - <http://www.usaspending.gov/index.php> - 2010 is partial year for actual as of 2/2010



Global Defense Spending for 2009 Total \$1.5T



Defense Budgets of Large Non-US Defense Markets 2000-2015 - Forecasts After 2009



Defense Budgets Peaked in 2008

- Aging equipment
- Interoperability with the U.S.
- Increasing international cooperation on defense programs: F-35 & MEADS
- Global Economic Crisis is reversing the trend

Defense spending is shifting from Europe to Asia

- Asian economies will have the money, population, and requirements
- Increasing security risks and threat perceptions in Asia

U.S. Exports are hampered because of the following:

- U.S. Systems are often too complex and costly
- Cheaper foreign alternatives
- Offset requirements
- U.S. Export controls are outdated

Falling Output & Rates of Capacity Utilization

- Total manufacturing rate reached post WWII lows
- Falling utilization rates in various defense product industries
- Hollowing out of US Industrial Base
- China could overtake the U.S. in manufacturing by 2020

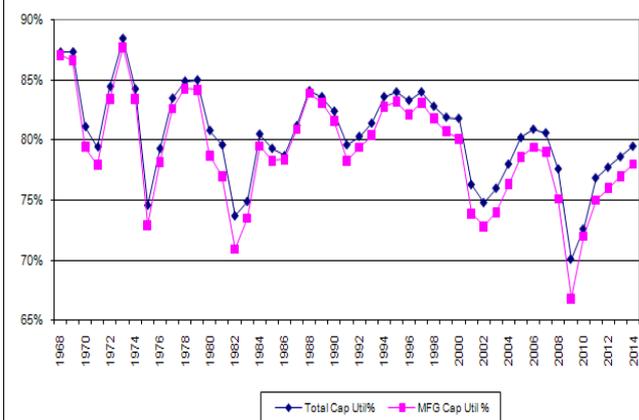
Frozen Credit Markets

- Small companies having difficulties securing financing for contracts
- Larger companies paying more for financing operations
- Little M&A activity except for small cash deals for nearly 2 years
- Increases in bankruptcies and liquidations

High Unemployment

- 10M+ jobs lost since Dec 2007
- Migration concerns
- Major Defense firms have started cutting jobs
- Delaying retirements and early retirement
- Rising unemployment and under-employment
- High cost of health insurance

Capacity Utilization Trends 1968-2014
Forecasts after 2010



Pulling Ahead

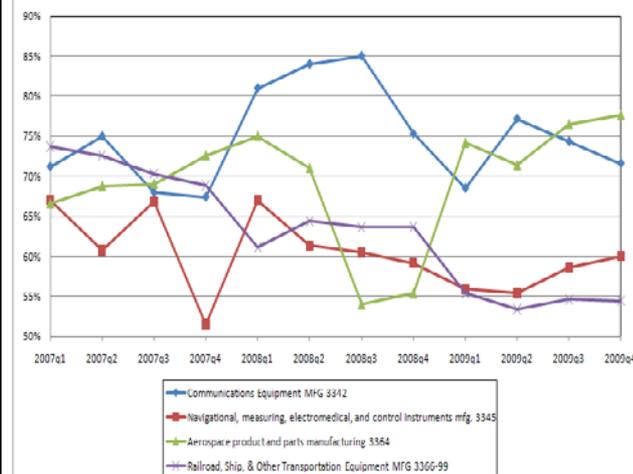
Real value-added manufacturing

■ U.S. ■ China



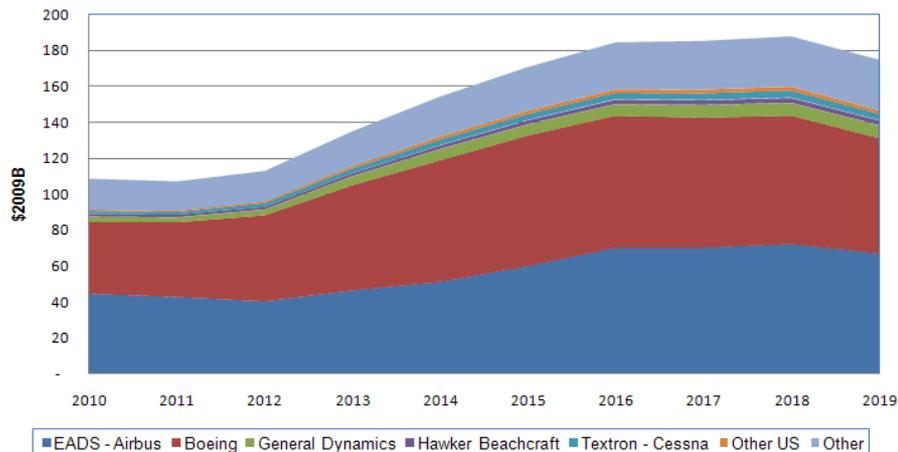
Note: Projections start in 2009. Source: Global Insight

Defense Industries Capacity Utilization Trends 2007-2009

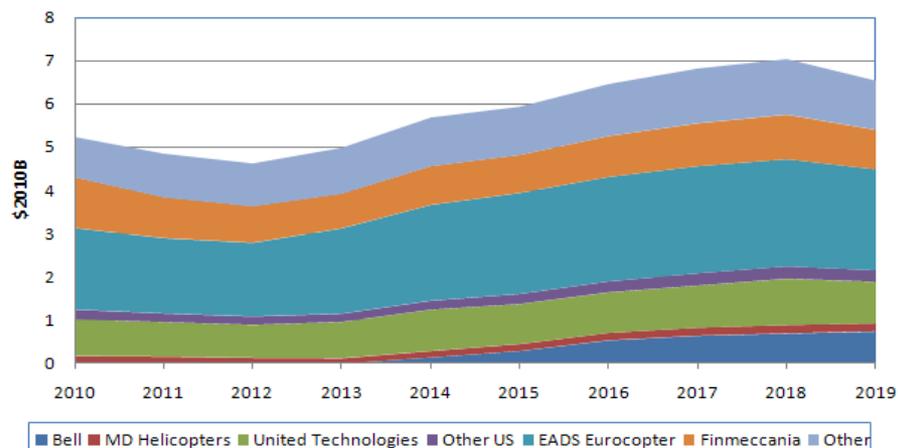




Civil Fixed Wing Value of Production 2010-2019



Civil Helicopter Value of Production 2010-2019



Boom times are at an end

- Global Financial Market Meltdown in 2008
- Delays in deliveries
- Record low order intake in 2009
- Falling demand for business jets and general aviation aircraft
- Significant Supply Chain and Material Cost issues

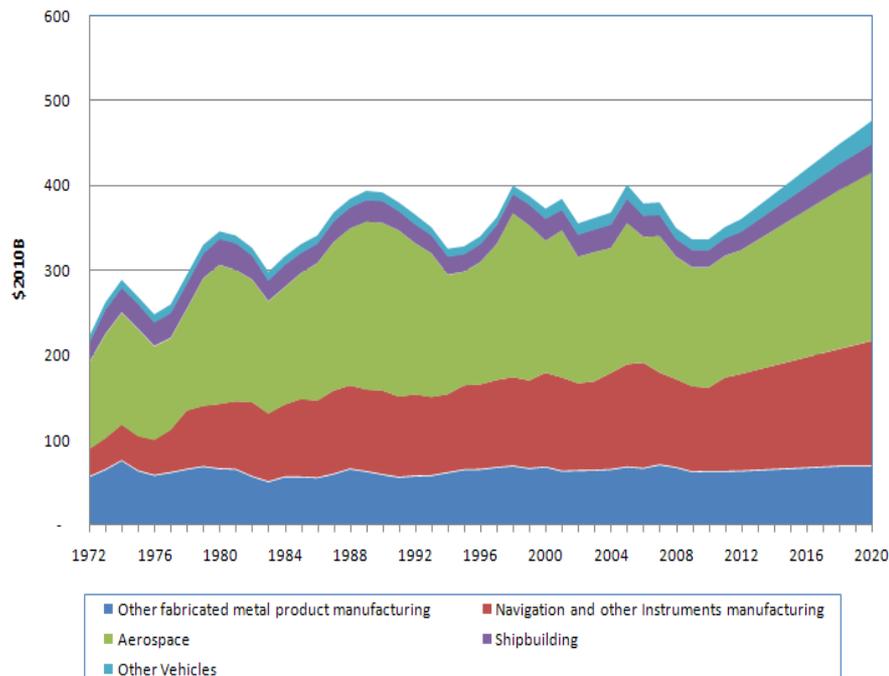
Shallower down-turn

- Market expansion in the Middle East and Asia
- Aging aircraft, high fuel costs, and environmental concerns
- New models (787 & A350) from Boeing and Airbus to address above issues
- After declines in 2009, backlog still provides cushion

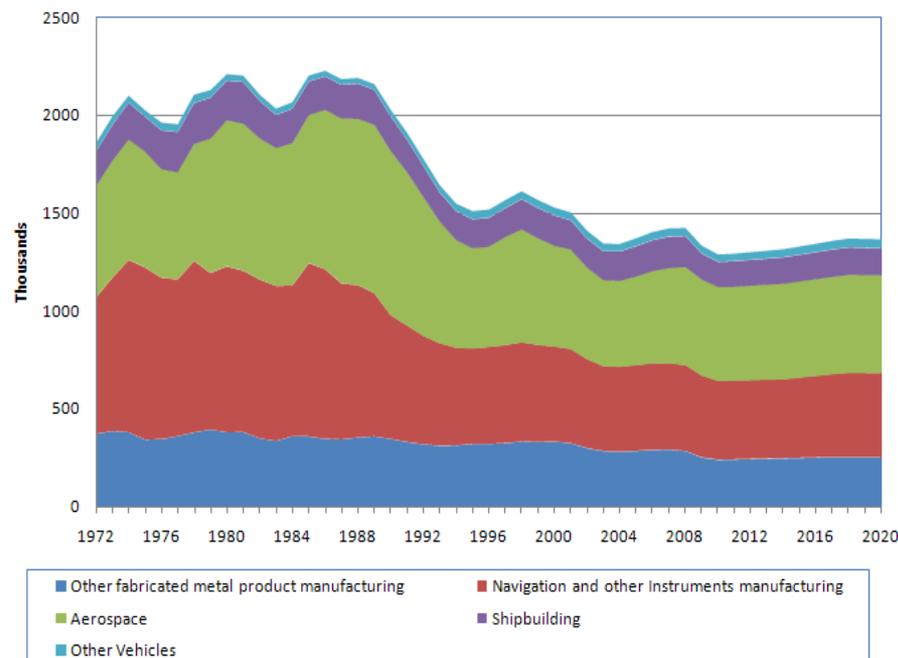
Defense Industrial Base Impact

- Workload stable for now but will likely decline in 2010
- Employment is likely to fall in 2010 but stable through 2016
- Concerns over sub-tier producers
- Rising overhead cost in the future

BLS Industry Output 1972-2020 Forecasts after 2008



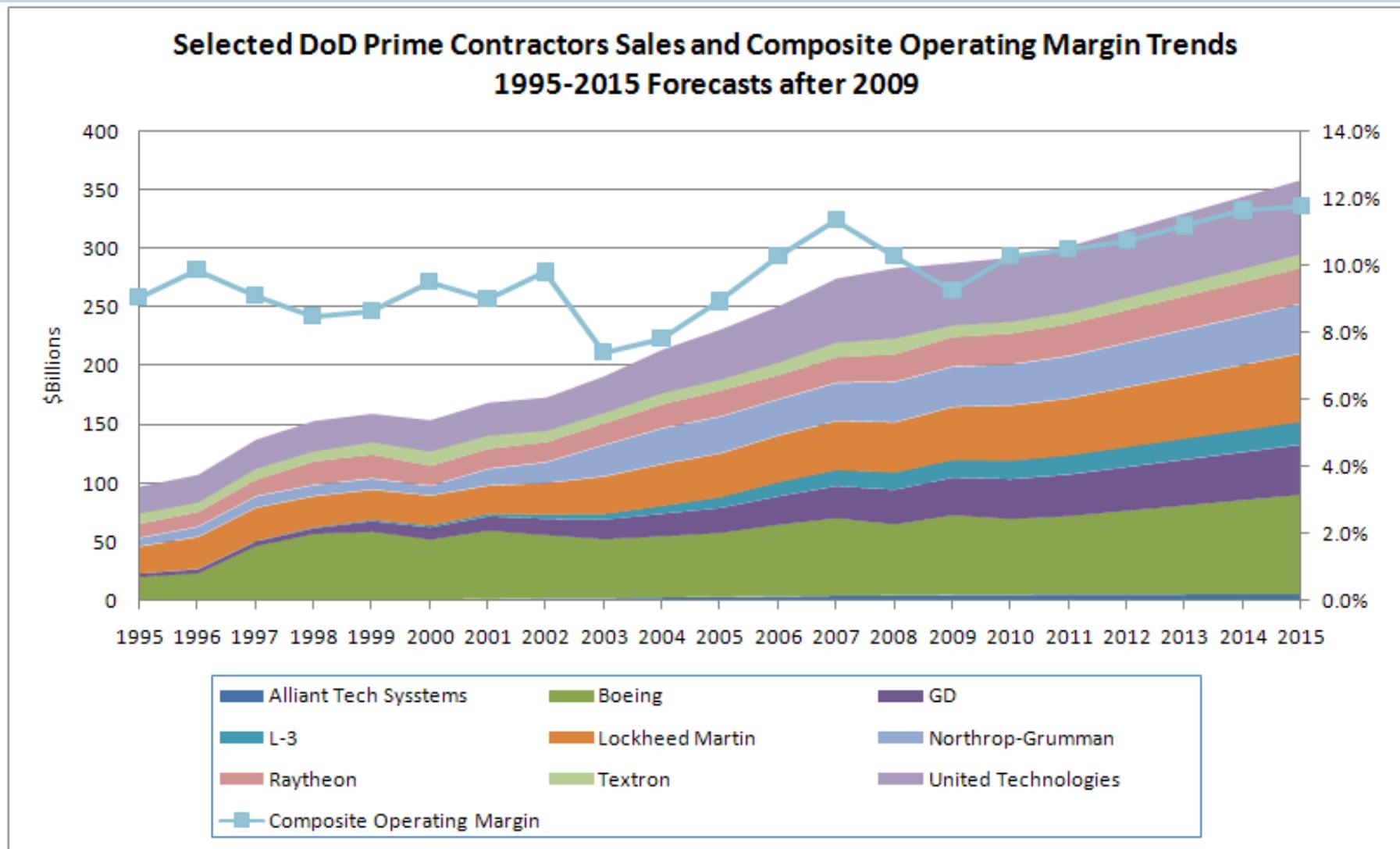
BLS Industry Employment 1972-2020 Forecasts after 2010



- Output soars because of commercial demand and productivity gains
- Defense Industry Employment down 42% from Cold War peak
- Instruments and Other Metal Products have experienced significant import penetration and automation

Source: BLS Employment Survey through 2010 and Forecasts for 2011-2018 BLS as of 12/2009 – DCMA Forecasts for 2019 & 2020

| Forecast International Defined Aerospace and Defense Systems Markets | Units | | | | | | Value of Production in \$2009M | | | | | |
|--|---------|---------|-----------|----------|--------|-------|--------------------------------|-----------|-------------|----------|-------|-------|
| | 2010 | 2019 | Total | % Change | CAGR* | US%** | 2010 | 2019 | Total | % Change | CAGR* | US%** |
| Military Markets | | | | | | | | | | | | |
| Fixed Wing Military Aircraft | 647 | 644 | 6,380 | -0.5% | -0.1% | 42% | 29,588.1 | 34,777.4 | 320,252.6 | 17.5% | 1.9% | 53.1% |
| Military Helicopters | 584 | 558 | 6,114 | -4.5% | -0.5% | 44% | 10,213.1 | 9,478.3 | 111,036.6 | -7.2% | -0.8% | 62.0% |
| Launch Vehicles | 40 | 22 | 300 | -45.0% | -5.0% | 36% | 2,575.7 | 1,262.1 | 18,577.4 | -51.0% | -5.7% | 61.9% |
| Satellites | 15 | 5 | 90 | -66.7% | -7.4% | 61% | 2,820.5 | 440.0 | 21,968.1 | -84.4% | -9.4% | 72.2% |
| Unmanned Systems | 9,943 | 8,255 | 85,028 | -17.0% | -1.9% | 39% | 3,247.3 | 3,530.9 | 34,532.9 | 8.7% | 1.0% | 51.2% |
| Aircraft Engines - Gas Turbines | 3,052 | 1,650 | 26,263 | -45.9% | -5.1% | 59% | 5,570.7 | 5,282.6 | 56,027.3 | -5.2% | -0.6% | 56.0% |
| Military Vehicles | 31,395 | 9,565 | 127,413 | -69.5% | -7.7% | 71% | 15,725.5 | 8,067.2 | 102,247.5 | -48.7% | -5.4% | 37.8% |
| Warships | 24 | 27 | 340 | 12.5% | 1.4% | 34% | 17,146.0 | 17,530.0 | 243,526.9 | 2.2% | 0.2% | 46.9% |
| Missiles | 47,328 | 32,447 | 368,788 | -31.4% | -3.5% | 25% | 9,092.5 | 10,673.8 | 99,615.0 | 17.4% | 1.9% | 23.7% |
| Munitions & Weapons | 662,100 | 457,461 | 5,227,804 | -30.9% | -3.4% | 71% | 2,668.4 | 1,496.9 | 18,200.4 | -43.9% | -4.9% | 70.4% |
| Naval Systems | 65,241 | 3,113 | 116,275 | -95.2% | -10.6% | 79% | 1,457.1 | 782.1 | 10,454.2 | -46.3% | -5.1% | 36.4% |
| Civil Markets | | | | | | | | | | | | |
| Fixed Wing Aircraft | 3,520 | 5,794 | 49,930 | 61.0% | 6.8% | 50% | 108,892.7 | 174,551.5 | 1,520,339.7 | 60.3% | 6.7% | 48% |
| Civil Helicopters | 1,559 | 1,858 | 16,641 | 19.2% | 2.1% | 50% | 5,237.8 | 6,537.2 | 58,171.7 | 24.8% | 2.8% | 27% |
| Aircraft Engines - Gas Turbines | 8,024 | 10,555 | 97,915 | 31.5% | 3.5% | 57% | 21,110.2 | 30,050.7 | 279,728.1 | 42.4% | 4.7% | 72% |
| Launch Vehicles | 54 | 52 | 489 | -3.7% | -0.4% | 18% | 3,229.7 | 4,213.4 | 47,645.3 | 30.5% | 3.4% | 40% |
| Satellites | 66 | 18 | 589 | -72.7% | -8.1% | 23% | 5,997.0 | 2,242.0 | 72,296.6 | -62.6% | -7.0% | 35% |
| Combine Markets - Civil + Military | | | | | | | | | | | | |
| Fixed Wing Aircraft | 4,167 | 6,438 | 56,310 | 54.5% | 6.1% | 49% | 138,480.8 | 209,328.9 | 1,840,592.2 | 51.2% | 5.7% | 49% |
| Helicopters | 2,143 | 2,416 | 22,755 | 12.7% | 1.4% | 48% | 15,450.9 | 16,015.5 | 169,208.3 | 3.7% | 0.4% | 50% |
| Aircraft Engines - Gas Turbines | 8,064 | 10,577 | 98,215 | 31.2% | 3.5% | 57% | 28,059.7 | 35,179.4 | 318,393.0 | 25.4% | 2.8% | 69% |
| Launch Vehicles | 94 | 74 | 789 | -21.3% | -2.4% | 24% | 5,805 | 5,476 | 66,223 | -5.7% | -0.6% | 46% |
| Satellites | 81 | 23 | 679 | -71.6% | -8.0% | 28% | 8,818 | 2,682 | 94,265 | -69.6% | -7.7% | 44% |



Source: Company Websites, Value Line 3/2010, & S&P Global Compustat Database.



2008 - 2010 Conditions

- Evaporating commercial backlog (GD & Boeing) in 2009
- Stocks to took large hits in 2008
- FASB-158 (accounting for pensions) has reduced equity positions of most major defense contractors
- Health Reform write-downs: Boeing \$100M in 1st Qtr 2010

Current Outlook

- Slowing revenue & profit growth
- Large procurement program cuts
- Acquisition reforms may reduce profitability
- Large DoD backlogs will mitigate program cutbacks until 2011
- Profitability impacted at companies with commercial segments
- Lay-offs at commercial segments

Merger & Acquisition Issues

- Stagnant M&A market in 2008-2009
- Defense Industry faces problems in enhancing shareholder value
- Divestitures are possible
- New round of mergers and acquisitions possible
- Acquisitions over the last 20 years have been at the expense of corporate R&D and capital expenditures



Aging Workforce

- Crisis has delayed retirements and brought people back to the workforce
- Highly skilled workers will be in short supply, especially, engineers, scientists, and computer personnel
- Traditional “Defined Benefit” retirement programs are being replaced by 401K “Defined Contribution” programs

Labor Migration

- To contain costs, manufacturing work is shifting out of the Midwest, Northeast, and Pacific States to interior South and Southwestern states
- Many Aircraft and Spacecraft production facilities are over 50 years old
- Differences in cost of living and taxation driving worker and company migration trends.

Foreign Sourcing and Ownership

- Falling dollar encourages foreign sourcing and mergers with foreign partners
- US DIB is being hollowed out by foreign dependencies for key components
- Industrial “Know How” is moving overseas
- Infrastructure, healthcare issues, lack of skills, tax climate, and regulations hinder competitiveness

Energy & Material Costs and Availability

- Plunge in oil prices
- Inflation could return
- Reduction in mining capacity and slowing of the growth of energy production
- China and India are still growing
- Current recession slowing the growth of energy & mining productive capacity
- ARRA has money for Alternative Energy development

Thawing merger & acquisition market

- Frozen credit markets in 2008 are now beginning to thaw
- Budget uncertainty created by QDR and lack of guidance from DoD
- Budget cuts could spur a new round of consolidation in the next decade
- Private Equity Investment companies could dump defense companies

Technology & Policy Change Creates Growth

- Growth of UAV's will bring Aircraft players into the market
- Operationally Responsive Space (ORS) allows for Small Satellites and Launch Vehicle use by DoD
- Foreign competition and penetration in US DIB is possible

Manufacturing facility consolidation

- Prime contractors focusing on design, integration, and service providing at the expense of manufacturing
- Aging facilities with aging workforces in high cost geographical areas
- Need to maximize shareholder value
- Supply chain issues could mitigate this trend



Points to Ponder

- Recession is likely over but the recovery is weak
- Administration fiscal policy along with monetary policy is extremely expansive and will have significant long-term impact on the economy
 - Stimulus in 2009
 - Healthcare Reform
- Defense top line is going to take cuts: How Much and When?
- The QDR repeats many policies and goals expressed over the past 20 years
 - New Urgency on cost containment and schedule
 - Preparation for a multiple types of warfare
 - Emphasis on IT and Cyberwarfare
- DIB is in good shape to weather this down-turn

