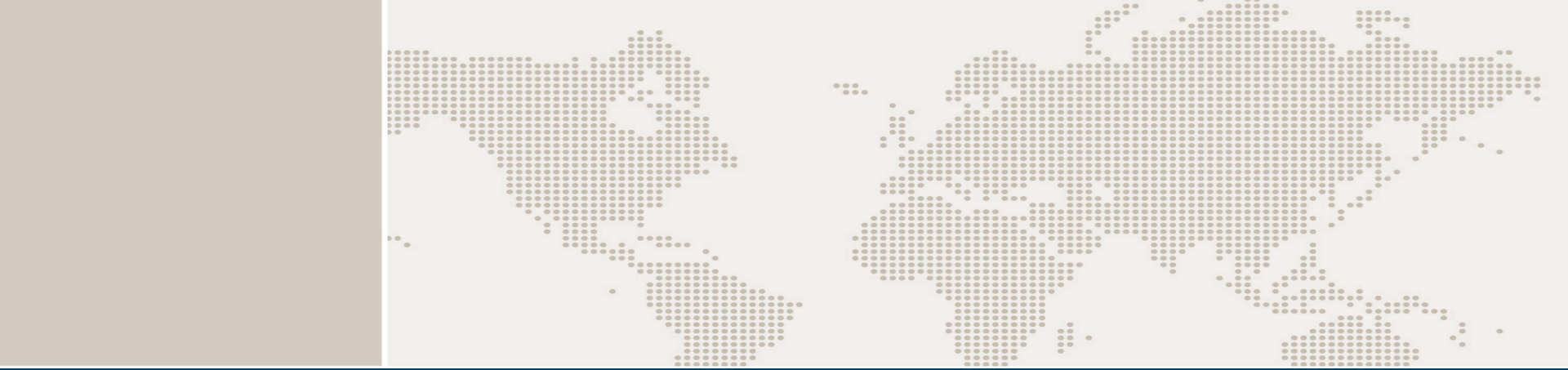




Analysis of Defense Products Contract Trends, 1990-2014

Principal Investigator: Andrew Hunter

Researchers: Jesse Ellman and Gregory Sanders

May 14, 2015

Defense-Industrial Initiatives Group

Center for Strategic & International Studies

202-775-3183

www.csis.org/diig

CSIS | CENTER FOR STRATEGIC &
INTERNATIONAL STUDIES



DEFENSE-INDUSTRIAL
INITIATIVES GROUP

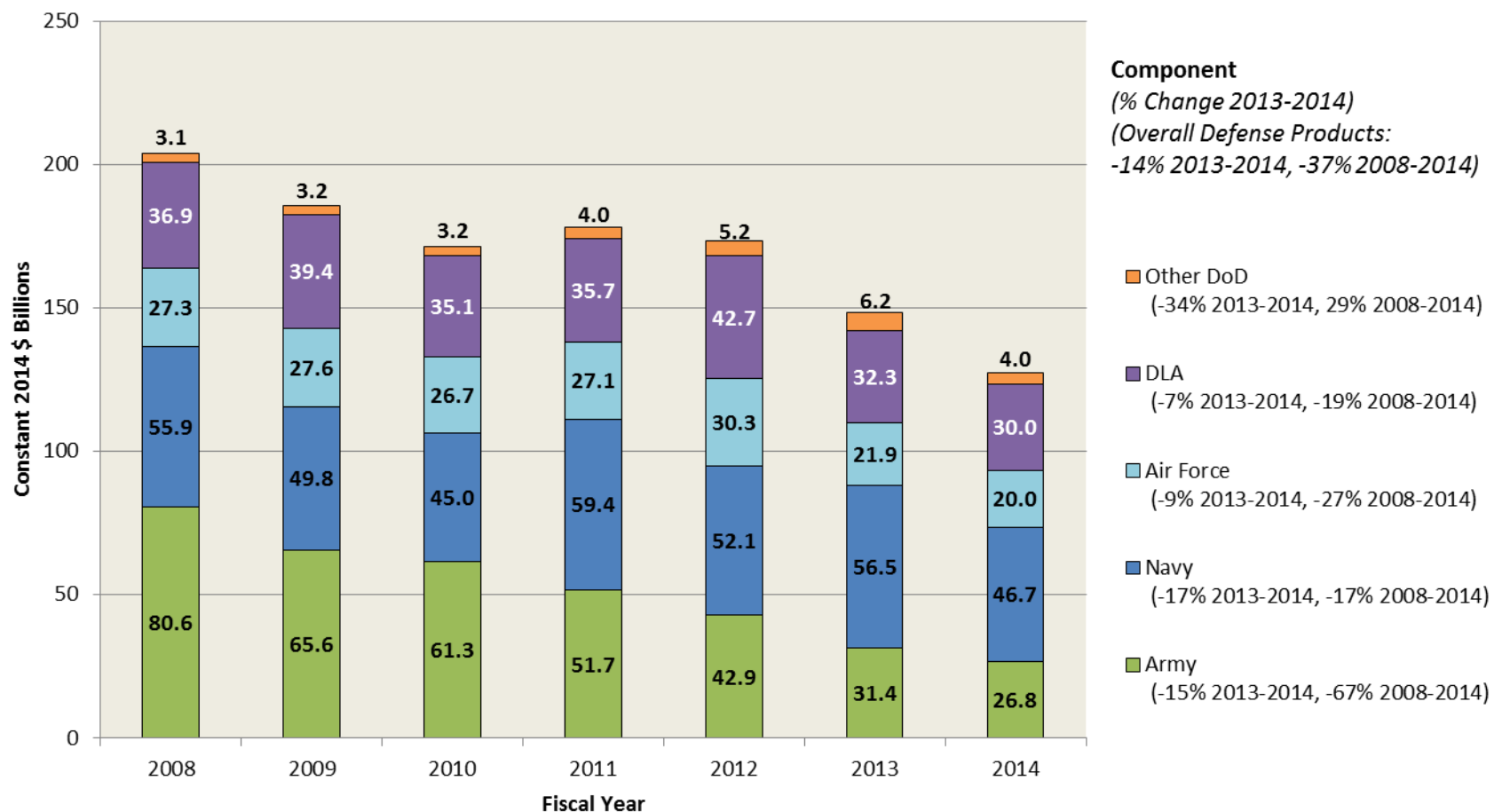
Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 14 MAY 2015		2. REPORT TYPE		3. DATES COVERED 00-00-2015 to 00-00-2015	
4. TITLE AND SUBTITLE Analysis of Defense Products Contract Trends, 1990-2014				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Center for Strategic & International Studies, Defense-Industrial Initiatives Group, 1616 Rhode Island Ave NW, Washington, DC, 20036				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES Presented at the 12th Annual Acquisition Research Symposium held May 13-14, 2015 in Monterey, CA.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 20	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Methodology

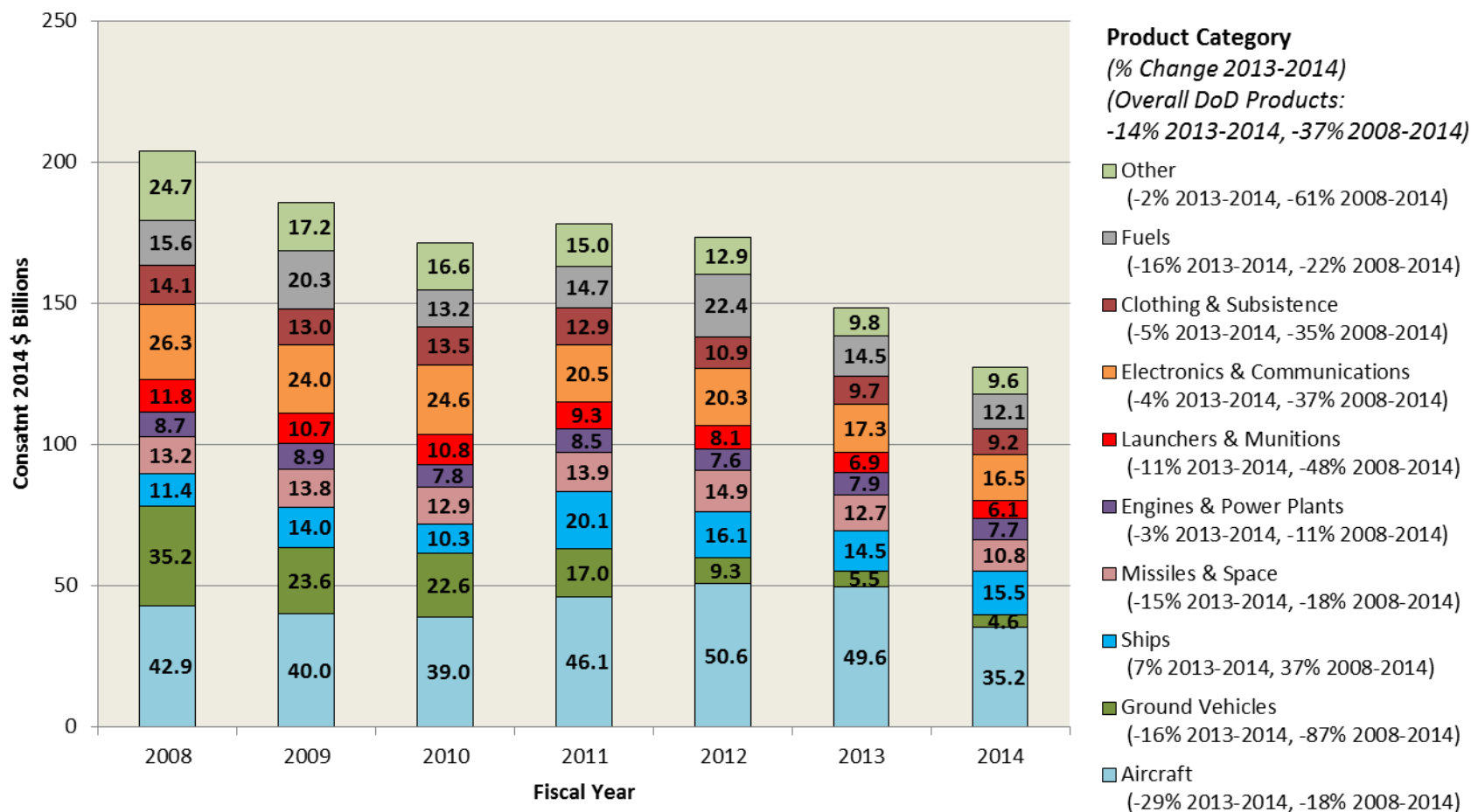
This slide describes the overall methodology employed to develop this dataset. Aggregated data downloads from FPDS are unavailable for pre-2000 data, requiring a different approach.

- The Federal Procurement Data System (FPDS) was the primary source for this electronic data summary for 2000-2013. For 1990-1999, data from the legacy DD350 contract information system was used.
- Federal regulations require only that all unclassified prime contracts worth \$3,000 and above be reported to FPDS, although this level has varied during the study period.
- FPDS data are constantly being updated, including those for back years. As a consequence, the dollar totals for a given year may have changed since the data was downloaded.
- Contract classifications sometimes differ between FPDS and individual companies, resulting in contracts that a company considers as services being labeled as products by FPDS and vice versa.
- Overseas Contingency Operations funding and other supplemental appropriations are not separately classified in FPDS.
- All dollar figures are in constant 2014 dollars.

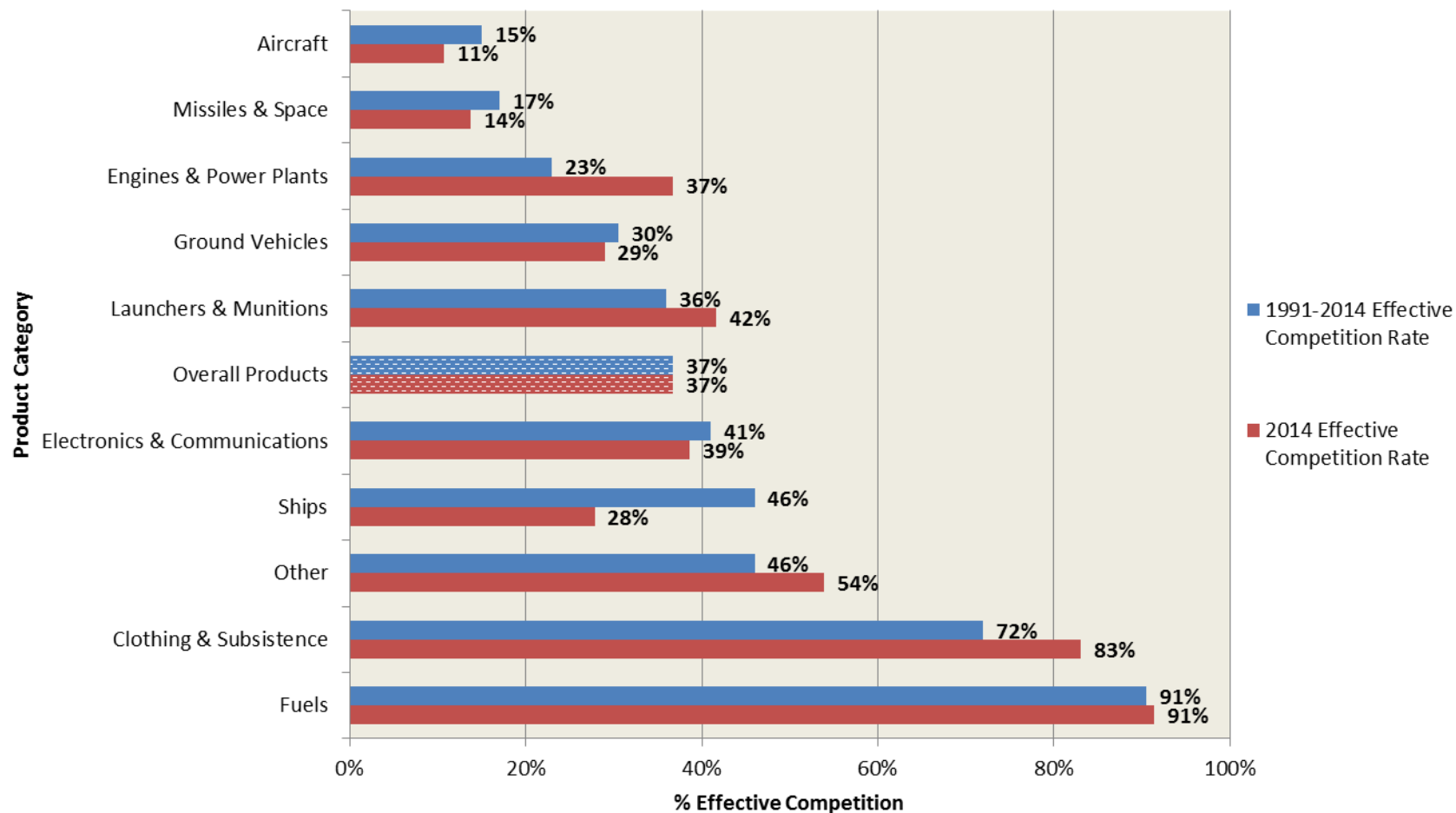
Defense Products Contract Obligations by Component, 2008-2014



Defense Products Contract Obligations by Product Category, 2008-2014



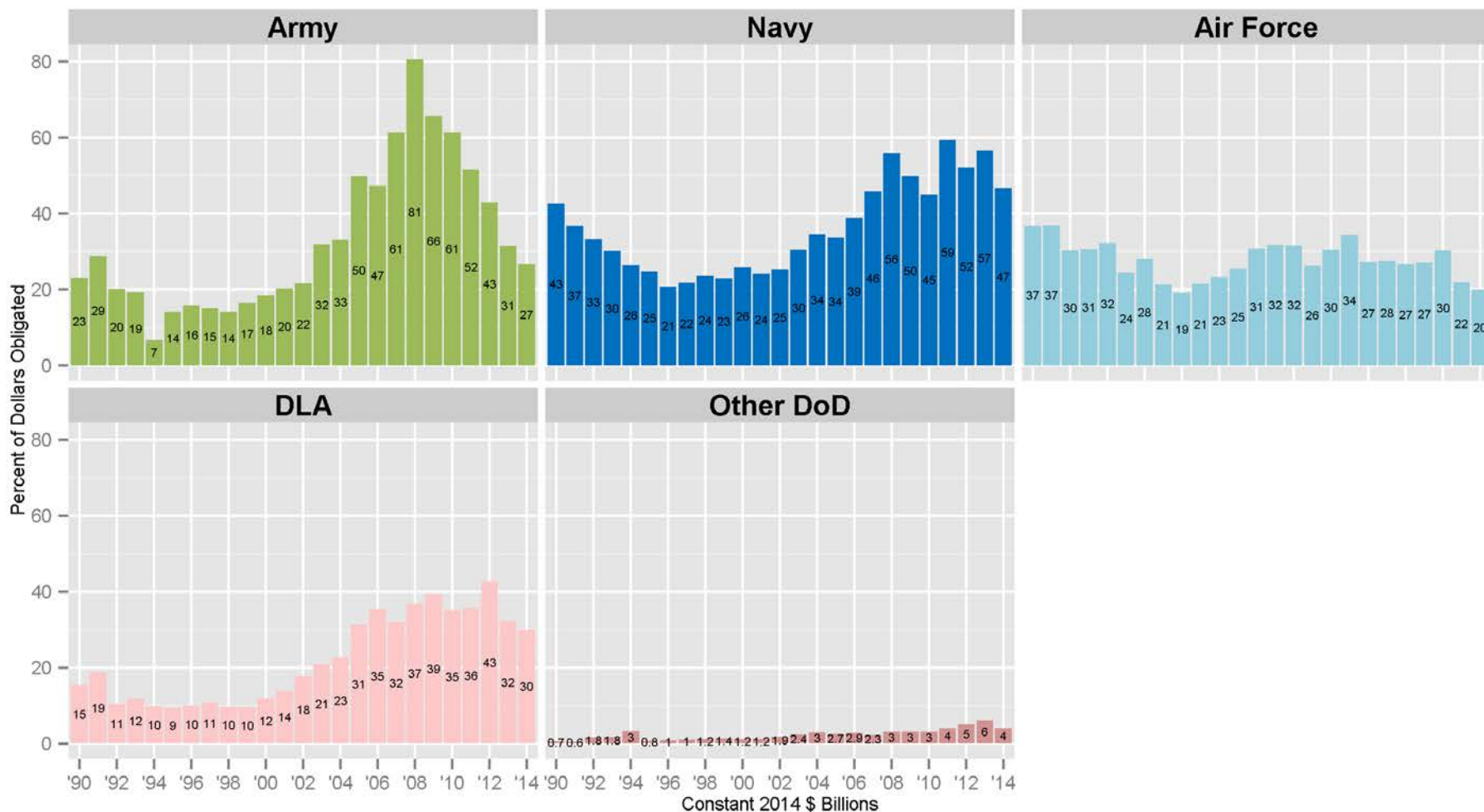
Rate of Effective Competition for Defense Products by Product Category, 2014 vs. 1991-2014



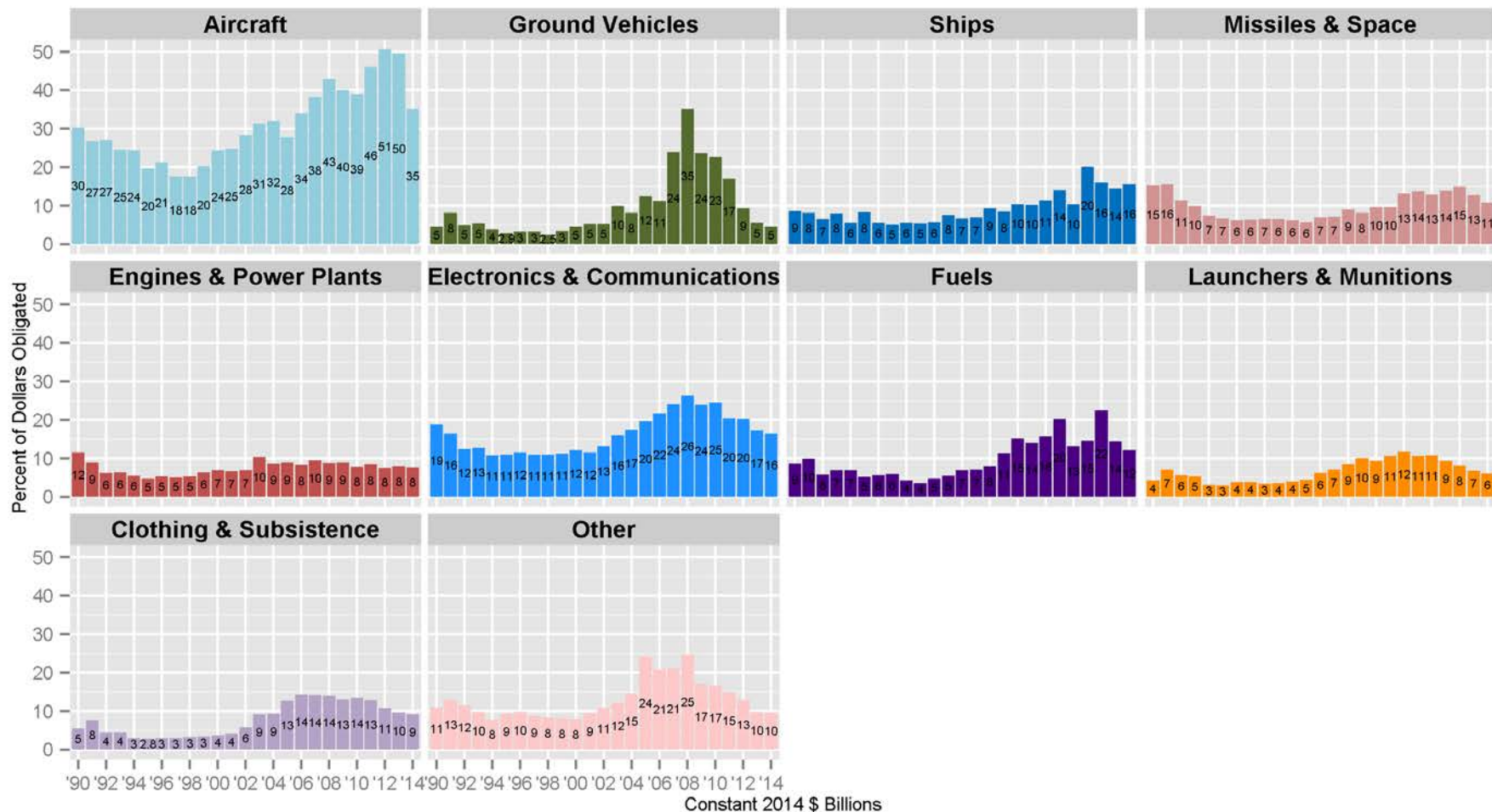
Notable Data Limitations Pre-2000

- DD350 data for FY1990-FY1999 reflect pre-FY2004 reporting thresholds, which did not require DoD to report more than summary information on contracts below \$25,000.
- FY1990 has a significant percentage of data left blank or otherwise unclassifiable, mostly in the fields used for competition, pricing mechanism, and vehicle.
- Prior to FY1997, DD350 data did not reliably differentiate between numbers of offers greater than 2 (such that most contracts receiving 2 or more offers had “2” listed as under number of offers.) As such, pre-1997 competition data has reduced granularity in terms of number of offers.
- CSIS had intended to use pre-2000 data from the FPDS webtool (https://www.fpds.gov/fpdsng_cms/index.php/en/) for validation of the DD350 data. In the course of investigation, however, CSIS discovered significant contracting activity from FY1990-FY1995 missing from FPDS, on the order of \$20 billion/year (in then-year dollars).
 - Upon further investigation, CSIS discovered that these missing obligations are a mix of contracts entirely missing from FPDS and contracts missing a significant percentage of their value in a given year (with the difference not shifted to surrounding years).
 - CSIS consulted with DoD officials to determine the sources of this data inconsistency. Some of the discrepancy may be related to data for certain types of contracts (like Foreign Military Sales) not being transferred into FPDS when that system was stood up. In addition DD350 data was frozen after validation and FPDS

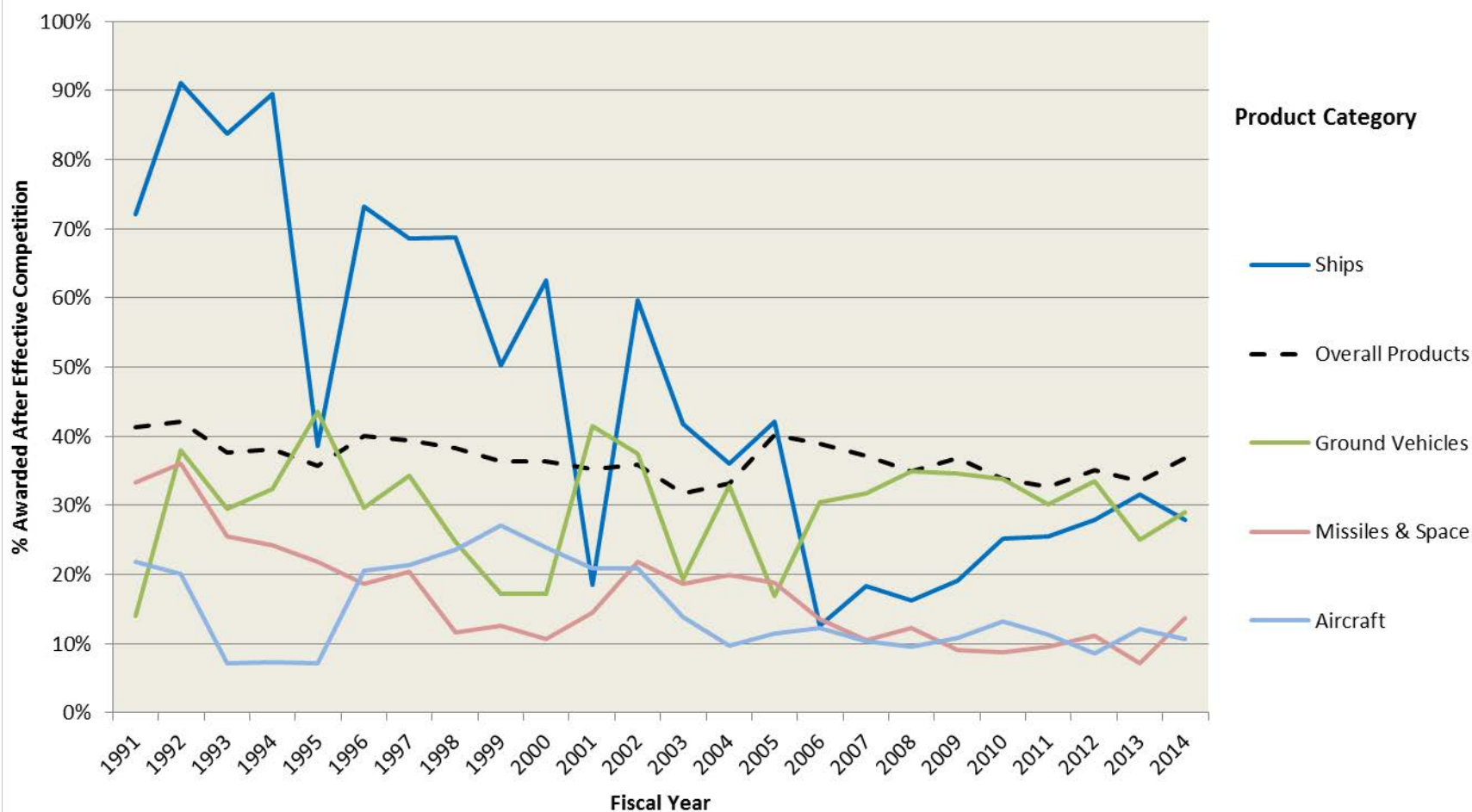
Defense Products Contract Obligations by Component, 1990-2014



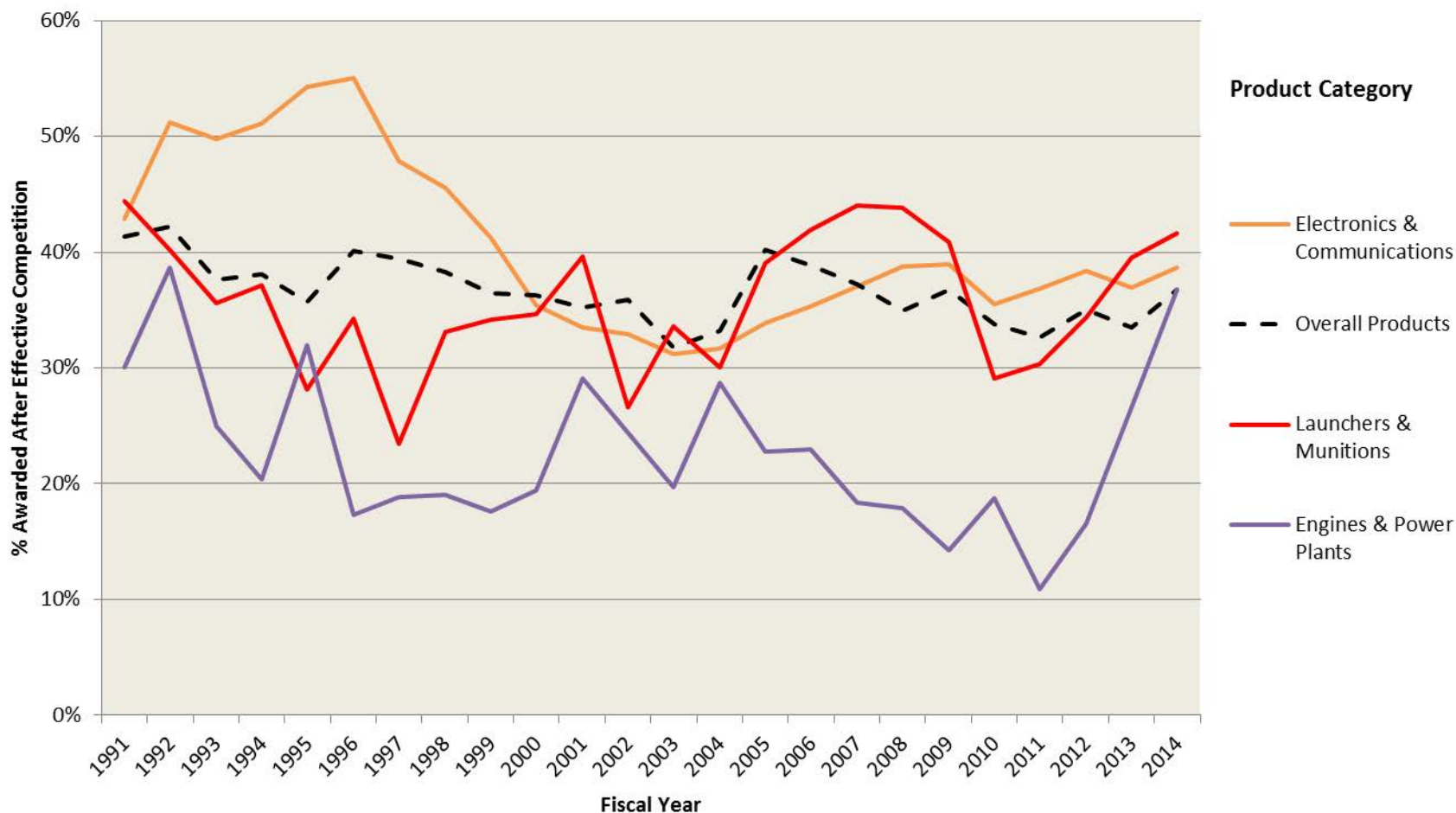
Defense Products Contract Obligations by Product Category, 1990-2014



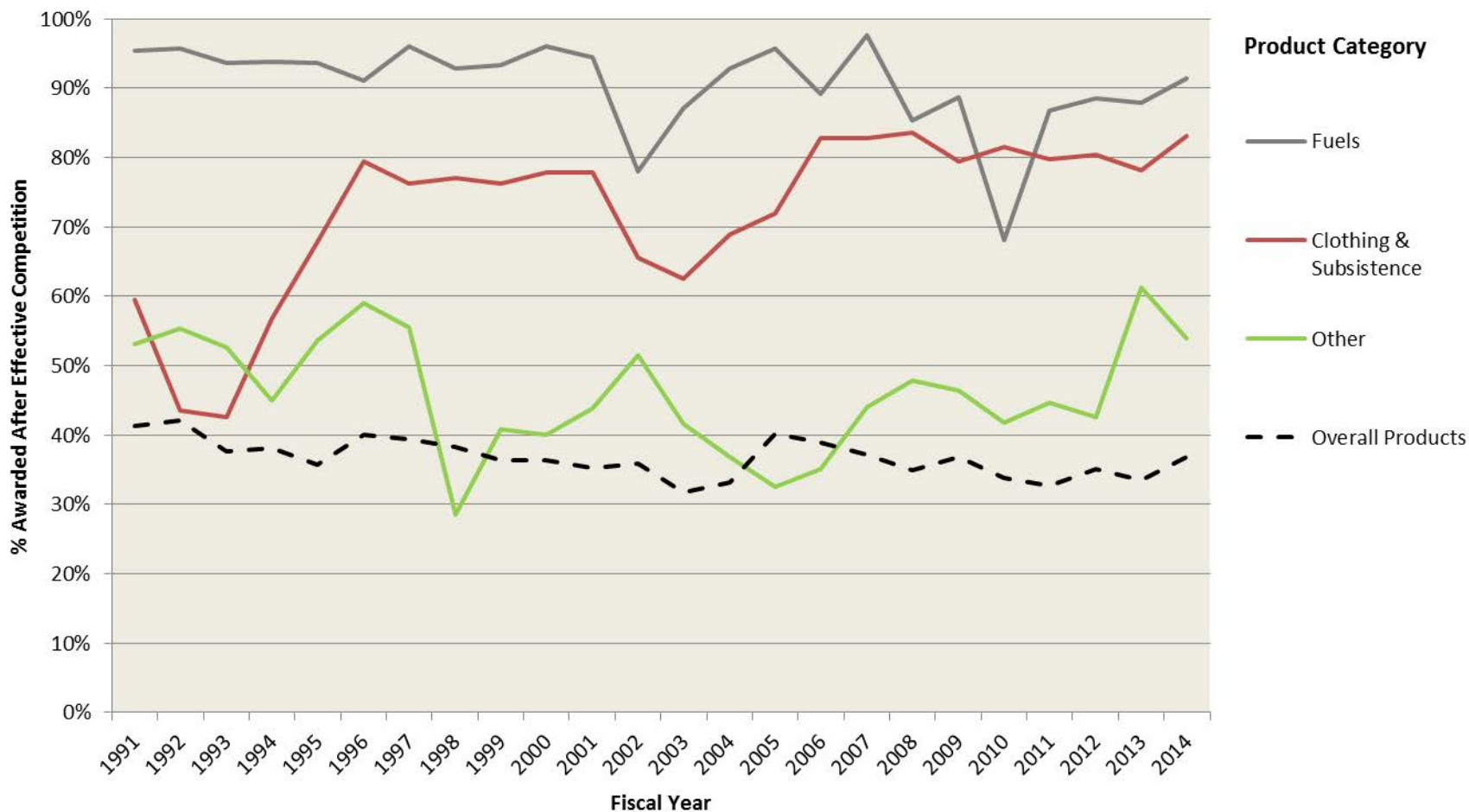
Rate of Effective Competition for Defense Products by Product Category, 1991-2014 (I of III)



Rate of Effective Competition for Defense Products by Product Category, 1991-2014 (II of III)



Rate of Effective Competition for Defense Products by Product Category, 1991-2014 (III of III)



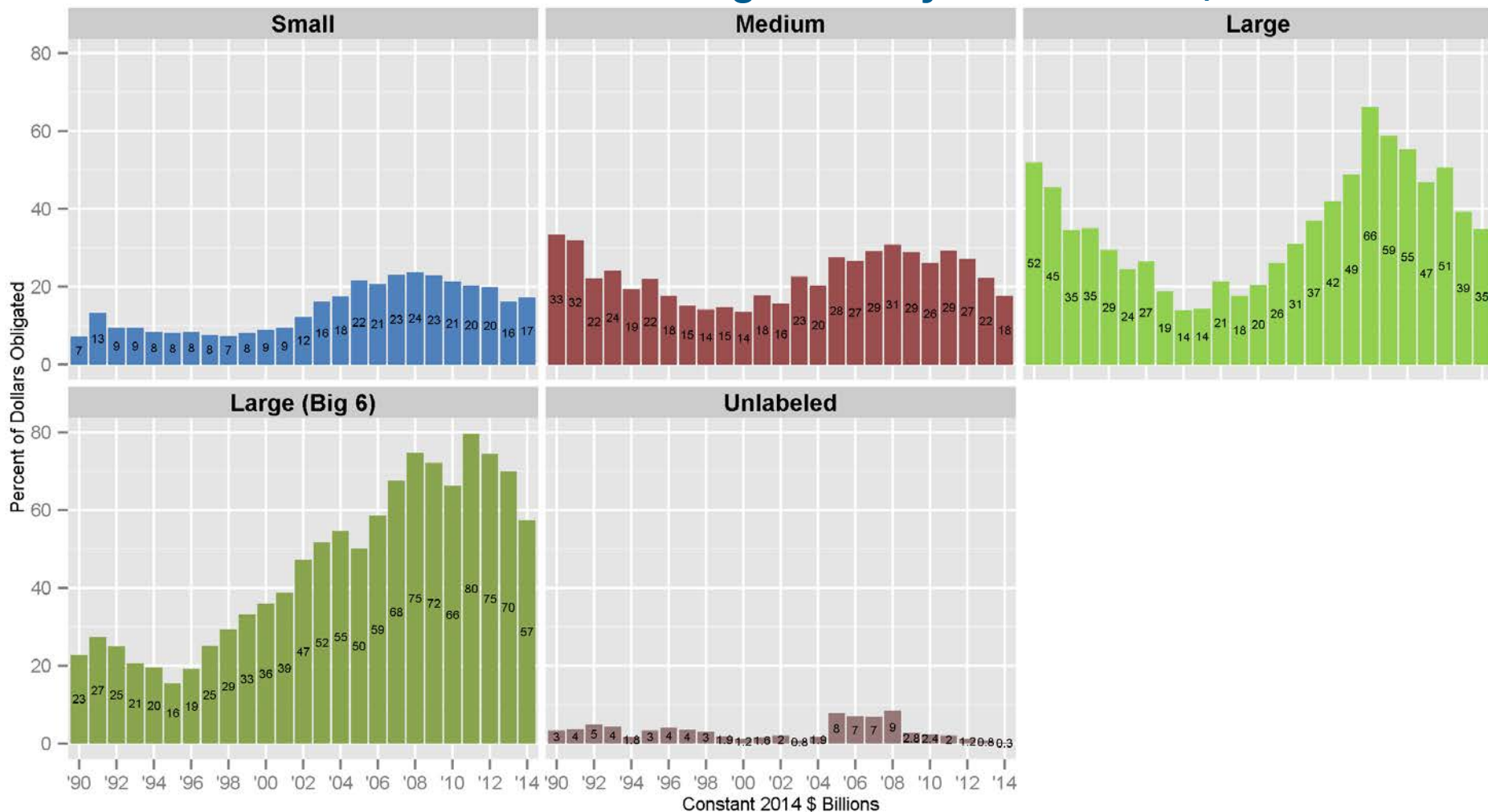
Definition of the Big 6 pre-Last Supper

We keep our Big 6 classifications consistent based on current top companies:

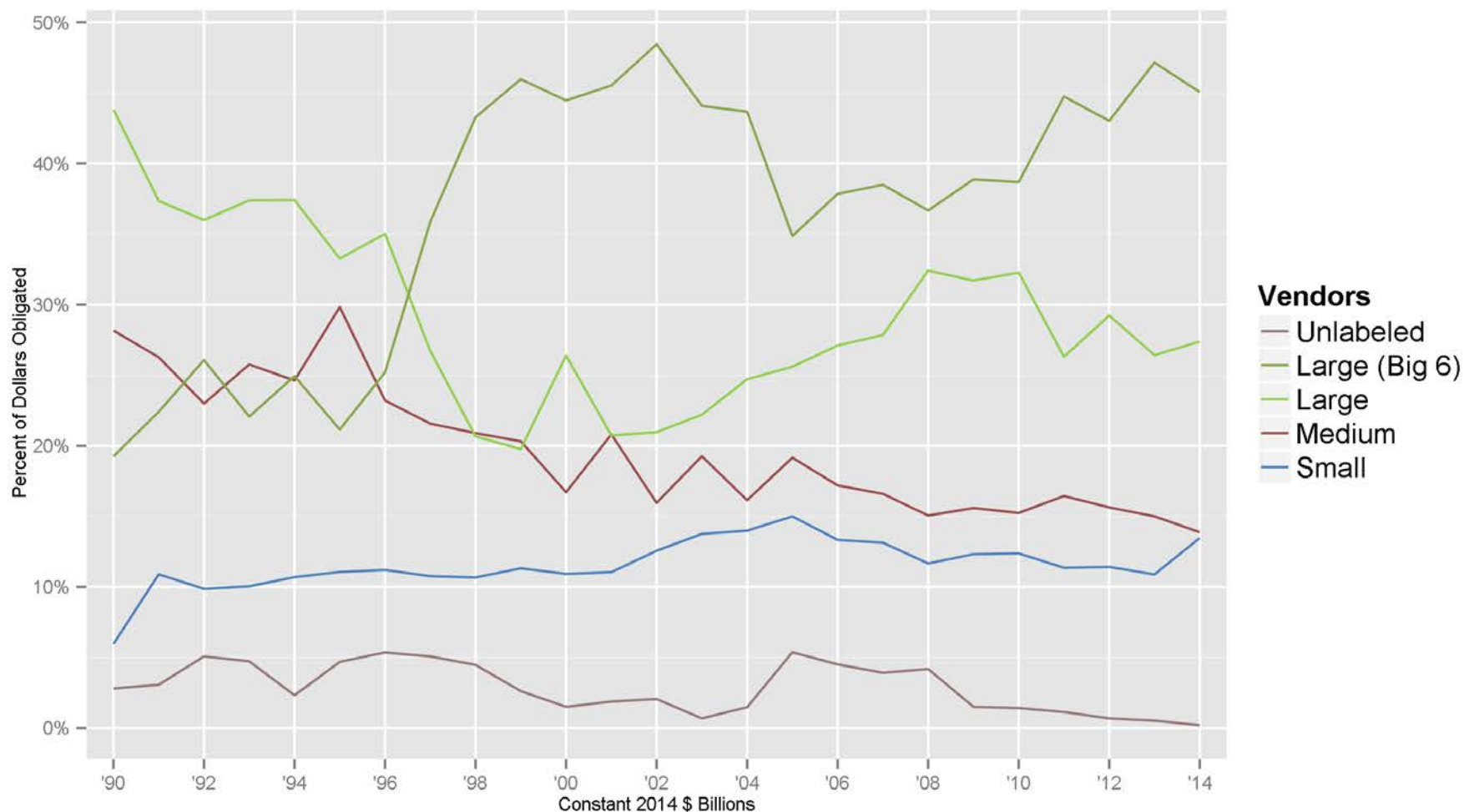
- **Lockheed Martin (or Lockheed)**
- **Boeing**
- **Northrop Grumman**
- **Raytheon**
- **United Technologies**

This excludes Martin Marietta and McDonnell Douglas.

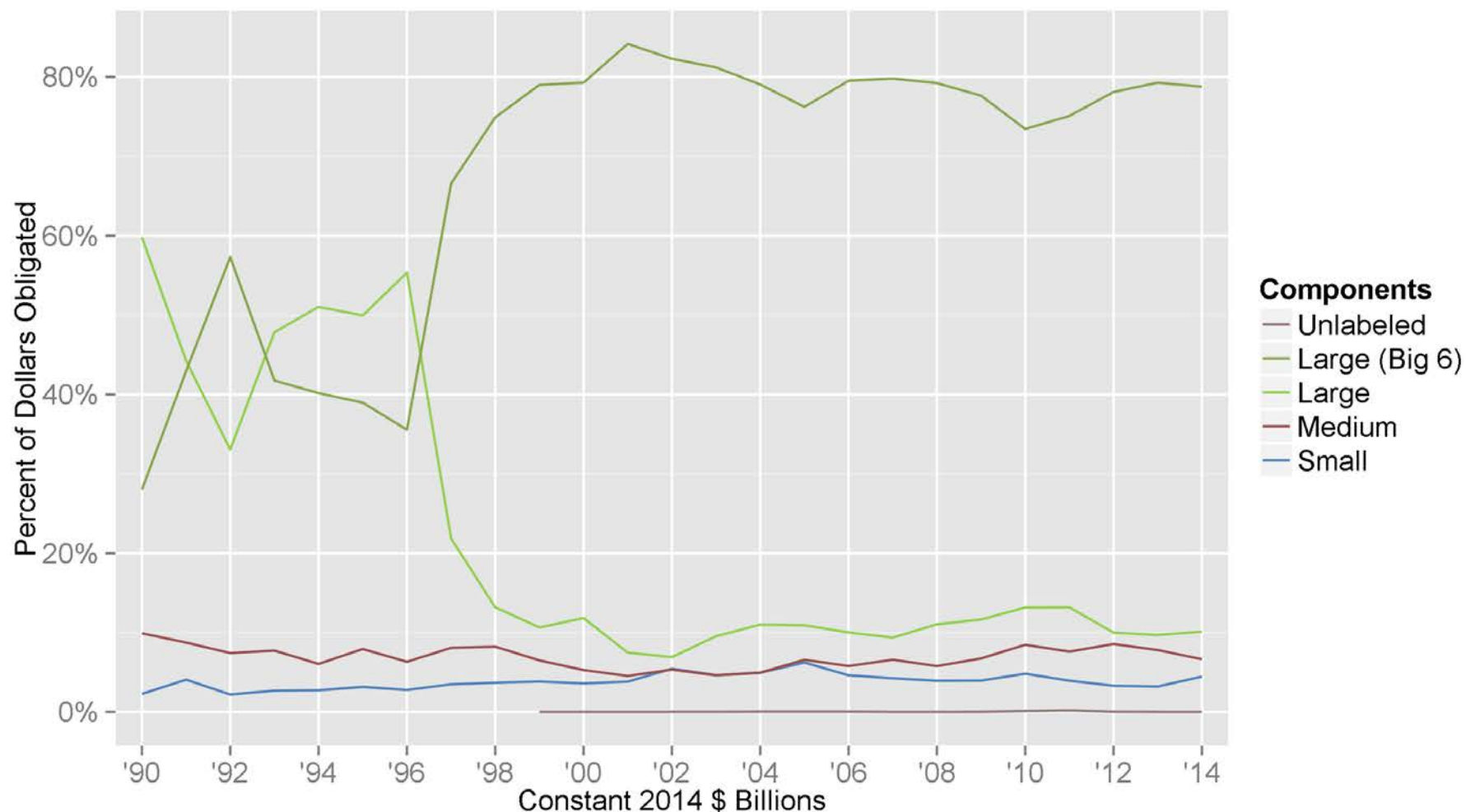
Defense Products Contract Obligations by Vendor Size, 1990-2014



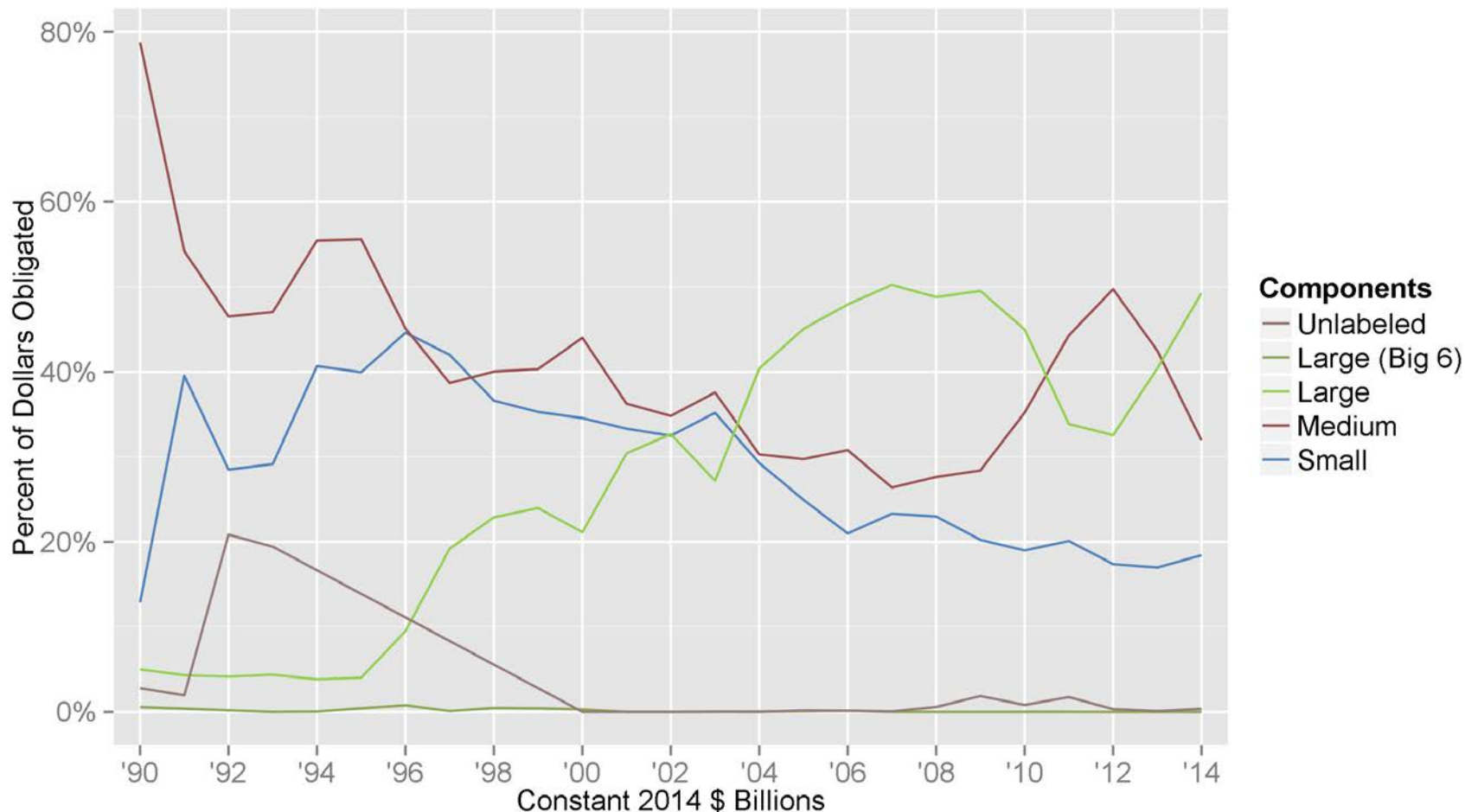
Defense Products Contract Obligations by Vendor Size, 1990-2014



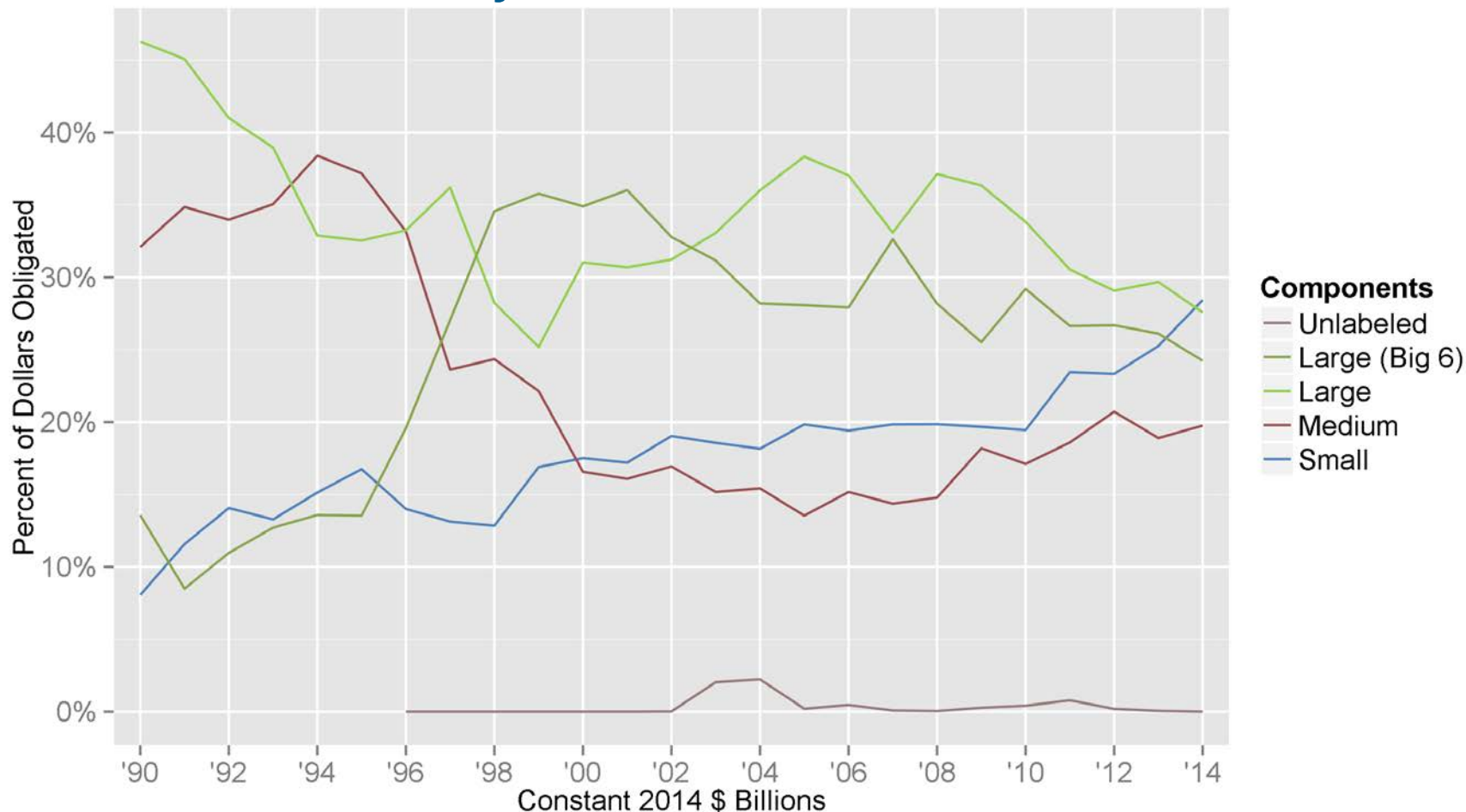
Defense Aircraft Contract Obligations by Vendor Size, 1990-2014



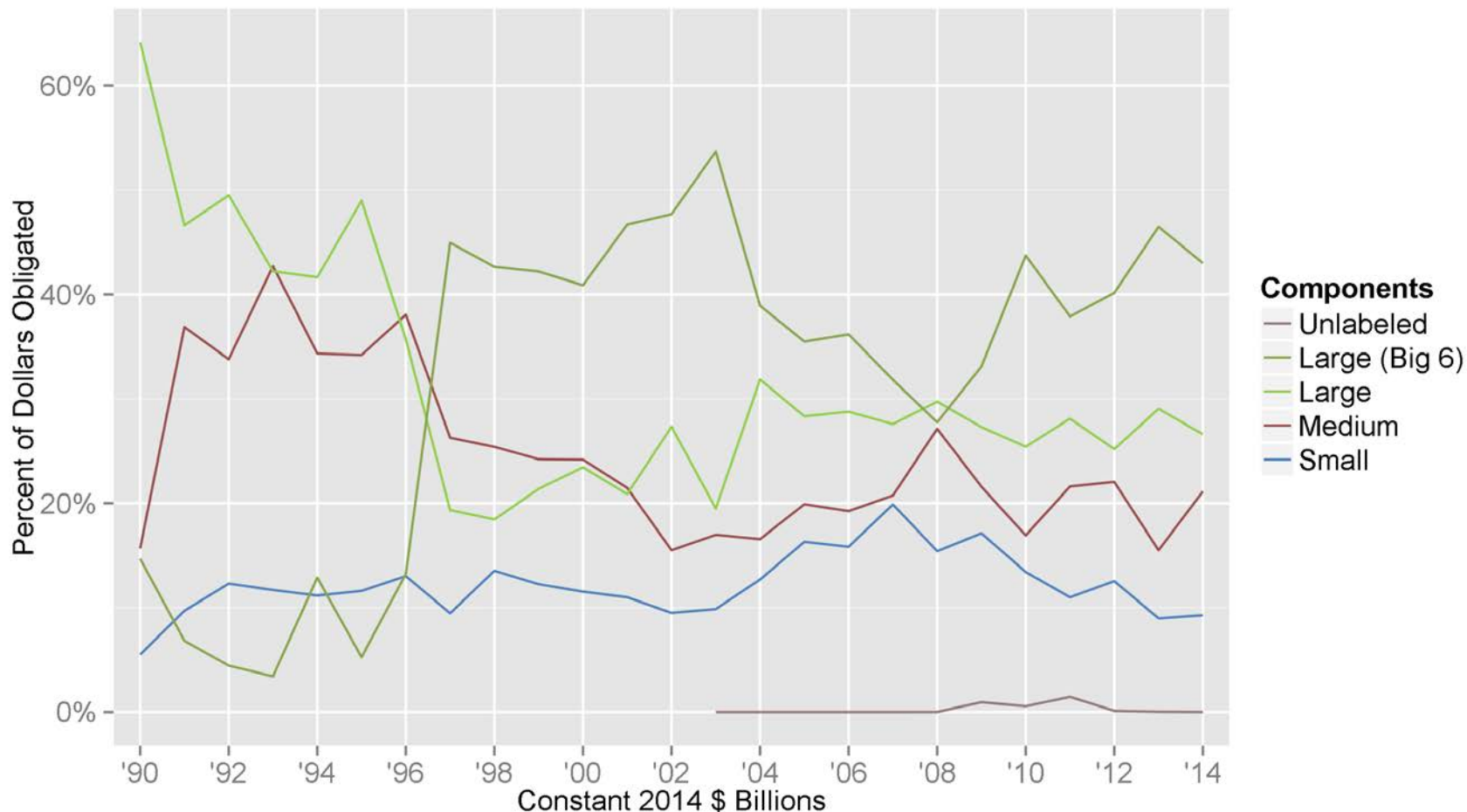
Defense Clothing & Subsistence Contract Obligations by Vendor Size, 1990-2014



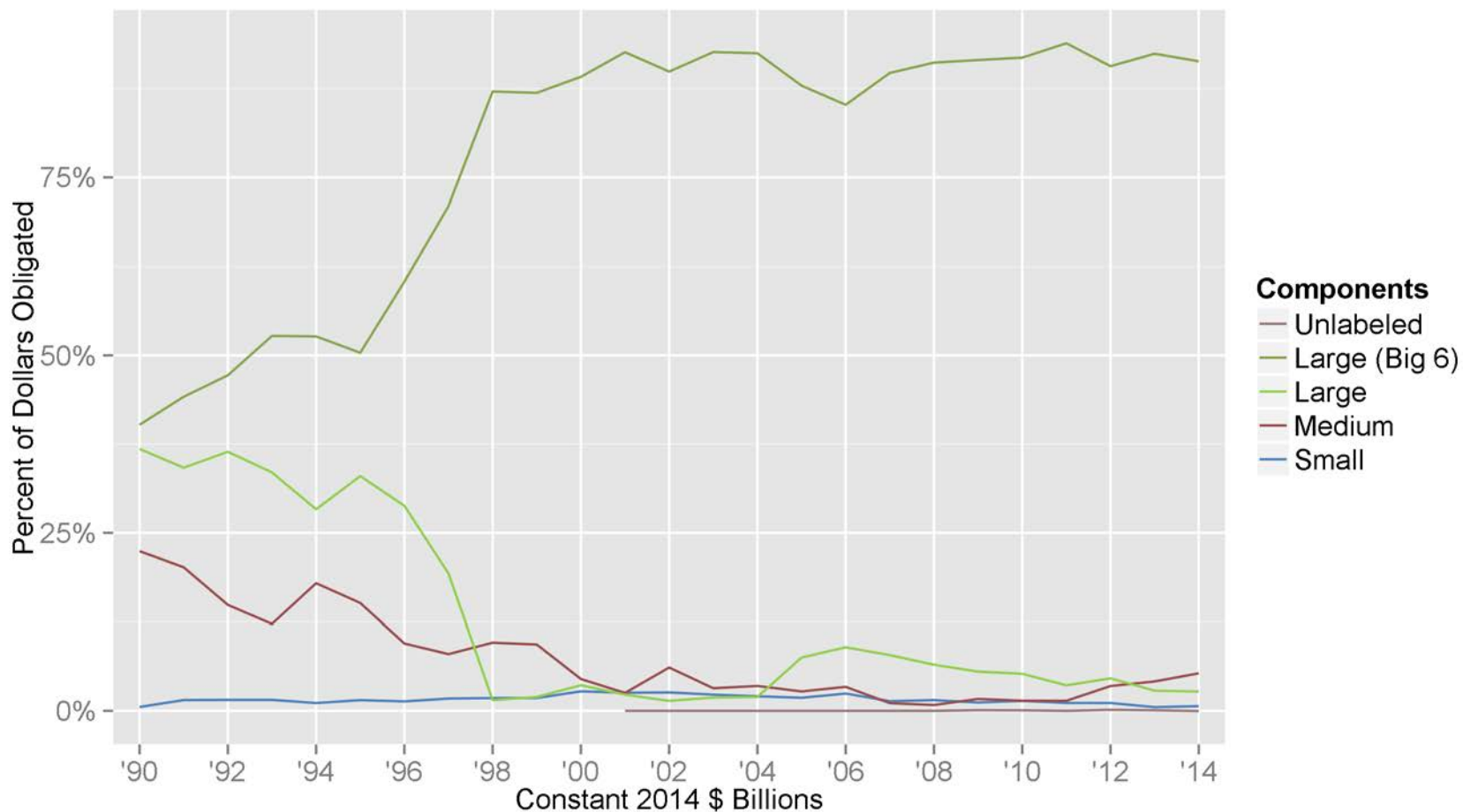
Defense Electronics & Communications Contract Obligations by Vendor Size, 1990-2014



Defense Launchers & Munitions Contract Obligations by Vendor Size, 1990-2014



Defense Missiles & Space Contract Obligations by Vendor Size, 1990-2014



Conclusions

The current downturn has seen the relative preservation of contract obligations going to the Big 6 defense vendors, despite the divestment of Northrop Grumman's large shipbuilding unit into Huntington Ingalls Industries.

Sequestration has had an enormous impact on defense products contracting, even in the context of the overall decline since the peak in 2008.

Cuts in obligations were not evenly distributed among the major DoD components and product categories in 2013 and 2014.

Want to go deeper? Cross-section data available at <http://www.GitHub.com/CSISdefense/products>