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The revolution in federal procurement, 1980–present

Abstract: This paper examines revolutionary changes in the federal procurement regime that have taken place over roughly the past thirty-five years. The procurement process has long been formalized, but contractors were dispersed across the country and tended to furnish tangible goods in singular and discrete transactions. As a result of technology, global competition and security threats, ideological shifts, and fiscal changes, procurement spending exploded after 9/11 and today the regime forms “information communities” in which private companies exert both political and economic influence and supply staffing and information to the federal government within a continuous and seamless relationship where lines demarcating responsibilities and personnel are blurred.

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In June 2013, Edward Snowden, a former Central Intelligence Agency (CIA) employee and National Security Agency (NSA) contractor for Dell and Booz Allen Hamilton, passed along thousands of classified documents to three journalists who quickly wrote stories incorporating them for a number of newspapers. Snowden’s expressed motive was to reveal the extent of the federal government’s surveillance. The leak was sensational. It led immediately to a warrant for Snowden’s arrest—he had fled to Hong Kong—and a divisive debate over public safety and privacy. It was also not unique. Three years later another Booz Allen contractor, Harold Thomas Martin III, was accused of stealing top-secret intelligence that, if disclosed according to the Department of Justice, “could be expected to cause exceptionally grave damage to the national security of the United States.”

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The many commonalities of the episodes' principals are instructive. Snowden and Martin had worked both for the government and for private contractors. They gathered and analyzed sophisticated information on a continuing basis. They had been employed by a largely anonymous company headquartered in the Washington D.C. area that did in excess of one billion dollars-worth of business annually with the NSA. Their professional lives are indicative of a new and dramatically different federal government procurement regime.

The modern procurement process is usually portrayed as complex and formal. It is governed by statute, court decisions, federal regulations, and presidential orders. Formalization began with the establishment of the General Services Administration (GSA) in 1949. It continued with the creation of the Office of Federal Procurement Policy (OFPP) within the Office of Management and Budget (OMB) and pursuant universal Federal Acquisition Regulations (FAR) in 1974; the passage of the Competition in Contracting Act in 1984; and the concerted procurement reform effort, manifest in both the Federal Acquisition Streamlining Act (FASA) and Federal Acquisition Reform Act (FARA), that were central to President Bill Clinton's "reinventing government" project.¹ Rules today dictate that prospective contractors meet general standards including a demonstrated capacity to fulfill the contract and a record of integrity and business ethics.² Contract decisions themselves are subject to a variety of constraints, including statutes and regulations about competitive and sealed bids made within a transparent process evaluated based upon previously accepted criteria such as the provision of "best value" to the government; paying prevailing wages; "buying American" so as to advantage domestic suppliers; providing "maximum practicable opportunities" to small businesses; issuing contracts in geographic areas where there is a surplus of labor or history of business "underutilization"; supporting minority-, women-, and veteran-owned small businesses; and evaluating firms' past performance and hiring of illegal immigrants or replacements for striking workers.³ Indeed, by the early 1990s, federal purchasing officers were, according to a Merit Systems Protection Board report, complaining the process was too "rule-bound" and lacked creativity and innovation.⁴ Attempts to move procurement decisions outside the regular process—such as congressional earmarks and the kind of no-bid expedited contracting that was popular after Hurricane Katrina and

1 Kelman (2005); Gitterman (2013).

2 Manuel (2013).

3 Fernandez, Malatesta, and Smith (2013); Gitterman (2013).

4 Kelman (1990; 2005); *The Washington Post* 21 July 1992, "Procedures Overwhelming Study Says: Officers 'Basically Qualified but Rule Bound'," Bill McAllister, A17.

during the early years of the wars in Afghanistan and Iraq—are often quickly curtailed.⁵

Post-award practices are also heavily regulated in an effort to prevent cost overruns attributable to inefficiency and fraud. In 2004, the General Services Administration (GSA) created a sophisticated database, the Federal Procurement Data System–Next Generation (FPDS-NG) to provide detailed information about contracts and assist with oversight. The acquisition workforce grew from 30,000 to 37,000 between 2008 and 2014.⁶ Contractors who violate performance standards face punishment in the form debarment, suspension, and even prosecution.⁷

The federal procurement regime has therefore been complex and formal for some time. But as the careers of Snowden and Martin suggest, the process has changed dramatically in several important ways. These changes have their roots in the early 1980s and accelerated rapidly after 2000, but have been largely ignored by academics—even though the federal government spends over half a trillion dollars on the acquisition of goods and services from private vendors annually.⁸ Today federal procurement is rarely taught in schools of public affairs, policy, or management, and the political science literature often lumps contracts inelegantly together with other spending to understand the dynamics of distributive policymaking.⁹

This paper constitutes an effort to fill the void and describe federal procurement’s central features today. It does so by focusing on four key characteristics

5 The House and Senate placed moratoriums on earmarks in 2011. For more on contingency contracting, see the Commission on Wartime Contracting in Iraq and Afghanistan’s June 2009 report, “At What Cost? Contingency Contracting in Iraq and Afghanistan.” It can be found at: https://cybercemetery.unt.edu/archive/cwc/20110929221553/http://www.wartimecontracting.gov/docs/CWC_Interim_Report_At_What_Cost_06-10-09.pdf.

6 *Washington Post* 20 January 2014, “Outgoing Top Contract Official Reflects on Federal Procurement,” Joe Davidson, A11.

7 Kelman (2005); Manuel (2013). Efforts to manipulate the acquisition process happen quite regularly. In March 2011, a former U.S. army major was convicted of numerous counts of bribery for his role in manipulating contracts in Iraq and in March 2013 two San Diego defense contractors were found guilty of a corruption scheme at a naval station. More spectacularly, Rep. Duke Cunningham (R-CA) pled guilty to offering contracts for kickbacks to a defense contractor in 2005. Top Boeing officials were jailed for their role in a 2003 effort to illegally secure a contract for tanker aircraft.

8 All data on procurement spending come from the website USASpending.gov and the Federal Procurement Data System (<https://www.fpds.gov>).

9 Berry, Burden, and Howell (2010); Bickers and Stein (2000); Kriner and Reeves (2015); Rundquist and Carsey (2002); Snider and Rendon (2012).

and how they contrast with the traditional procurement process they have replaced.

The growing cost and changing focus of procurement

Perhaps the most noticeable effect of the revolution in procurement is the increase in federal spending committed to it. [Figure 1](#) shows that procurement expenses accelerated tremendously around 2001; in real terms nearly doubling for defense and increasing 50 percent for all other functions by 2009. These added funds were roughly commensurate to the size of the federal government's annual budget deficits between the last surplus in 2001 and the recession in 2008. The decline since 2012, particularly in defense, is a function of the sequestration or automatic spending cuts first put into place by the Budget Control Act of 2011. Together, the data serve to undercut a traditional understanding that federal spending, particularly in malleable categories like procurement, is subject to

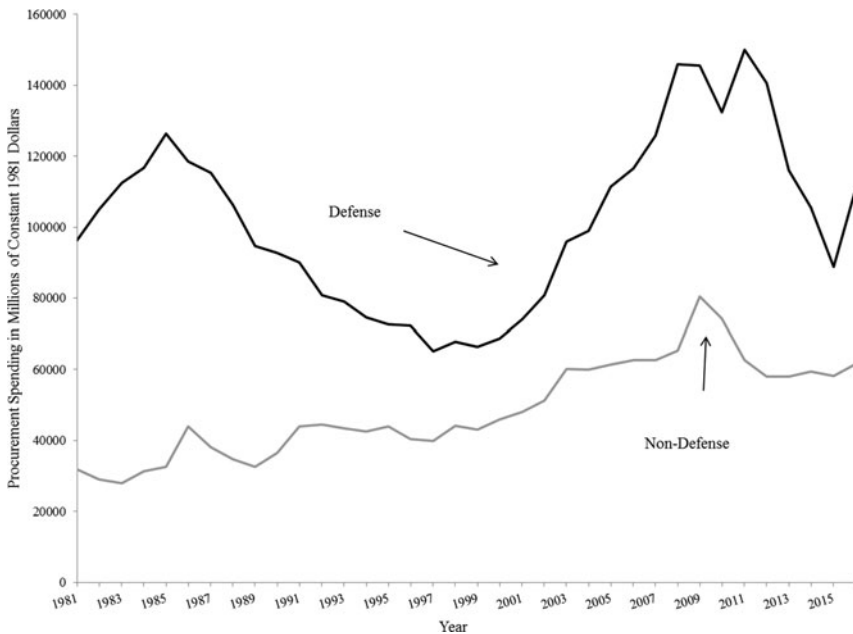


Figure 1: Annual Procurement Spending By Type, 1981–2016 (constant 1981 dollars)

presidential manipulation and the political business cycle.¹⁰ They also challenge the argument that administrations use escalated defense spending as a kind of counter-cyclical policy to boost the economy when it sags.¹¹

The greater procurement spending over the second half of the period is largely, although not entirely, a result of the broad response to 9/11, the wars in Afghanistan and Iraq, and Hurricane Katrina in 2005. The Department of Defense (DOD) dominates but the Department of Homeland Security (DHS) has impressive numbers, too. It was issuing about \$14 billion in annual contracts just a half decade after its establishment in 2002—the Federal Emergency Management Agency (FEMA), that coordinated the response to Katrina, is located within DHS. During 2011–13 there was a significant spike in DHS contracts, attributable to a number of other natural disasters—such as a widespread drought and Hurricane Sandy—but increases in the department’s procurement spending are secular, and outlays on contracts increased by about 40 percent between the “non-disaster” years of 2008 and 2015.

Interestingly, and as [figure 2](#) demonstrates, although there was a significant acceleration of procurement spending in both nominal and real terms from 2001 to 2009, the proportion of its budget the federal government spends on contracts has declined since the early 1980s. The end of the Cold War brought a peace dividend and slowed growth at a time when the government’s obligations to entitlements like Social Security and Medicare expanded dramatically—between 1981 and 2001 spending on these two programs increased from \$186.5 billion to \$650 billion a year. As a result, the considerable escalation in procurement expenditures since 2001 only pushed contracts back to about 18 percent of annual outlays in 2008. The proportion of all federal spending that constituted procurement then slipped quite precipitously with sequestration, reaching just over 10.5 percent in 2015. Many contractors, particularly in the defense field, laid-off workers. From 2008 to 2014, *Politico* estimated five of the biggest recipients of federal procurement collectively shed about 70,000 jobs.¹²

¹⁰ Nordhaus (1975); Tufte (1978).

¹¹ Derouen and Heo’s (2000).

¹² Wright and Munsil (2014). The five were Lockheed, Boeing’s defense unit, Raytheon, General Dynamics, and Northrup Grumman.

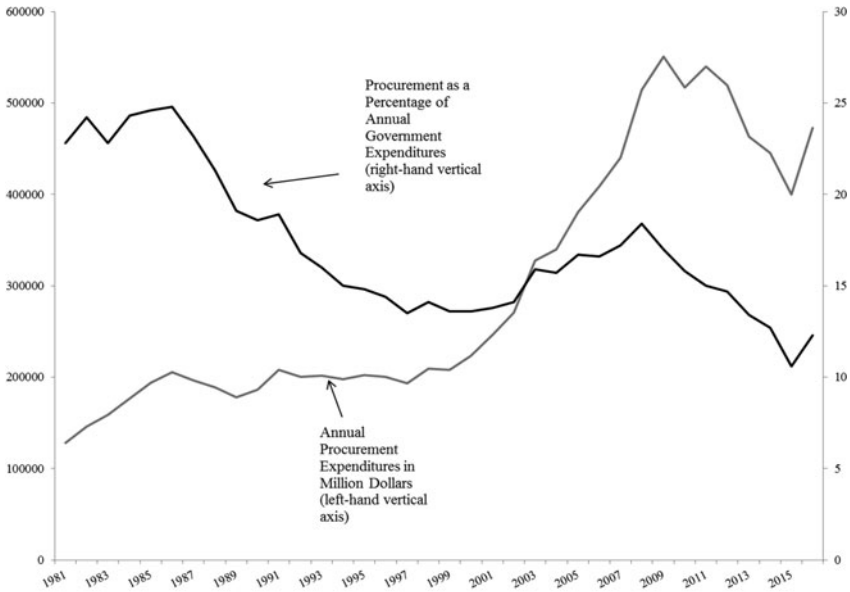


Figure 2: The Amount and Proportion of Procurement Spending, 1981–2016

From goods to services

Historically, most federal procurement was in the form of what the FAR calls “supplies” but what economists call goods. Here, the government signs a contract for the provision of a tangible product. Upon satisfactory delivery and payment the contract is effectively terminated and potential future contracts with the provider evaluated on the basis of the experience. The transaction consists of several chronologically-ordered discrete stages. Today, the federal government acquires considerably more in the way of services. As a result, contractors are providing product on a continuing basis. Procuring agencies review its quality repeatedly and contracts, as a result, can be altered in midcourse.

The greater reliance on services is not easy to quantify. Unfortunately, FPDS-NG does not categorize contracts into goods or services. According to a Congressional Budget Office (CBO) analysis undertaken for the House Budget Committee leadership in 2015, however, government spending on service contracts was estimated at \$259 billion in 2012 compared to \$211 billion on goods.¹³

¹³ The letter containing the CBO analysis can be found at: <https://www.cbo.gov/publication/49931>.

Paul Light suggests that in 1990 the number of federal contract manufacturing jobs was 92 percent of those in services.¹⁴ By 2002, the proportion had dropped to about 70 percent. The transformation to service is also demonstrated by the work of the corporations that now find themselves among the largest contractors. Healthcare furnishes a particularly useful example. There are corporations like McKesson that continue to supply the federal government with goods—in this case largely drugs for Veterans' Affairs and TRICARE. But much of the growth is in the provision of services. By 2016, Humana Inc. was receiving roughly \$3.6 billion a year in annual federal procurement, principally to administer Medicare contracts. HealthNet was doing about \$3 billion in business to do the same thing for Medicaid, TRICARE, and Veterans' Affairs operations, in addition to Medicare. Terremark and Hewlett-Packard were commissioned to run the healthcare.gov website.

Much of the shift to services is driven by Washington's need for sophisticated information. To compete with other nations, scrutinize the private interests it regulates, and serve adequately its 320 million citizens, the federal government must be informed. Financial and military might and the competent administration of established economic and social processes are impossible without sophisticated knowledge. The large defense sector has a particular need for it. Within the national security community there is widespread agreement that the weaponry of the future must be tremendously varied and complex if the United States is to maintain its role as the world's preeminent military power.¹⁵ Although in preliminary stages, DOD is investing in autonomous and semi-autonomous weapons (that do not need or only partially require a human operator like drones), ground-penetrating and other advanced radar, satellite technology, and more sophisticated conventional systems like the Joint-Strike Fighter.

In the past, defense companies were clearly distinguishable from their government customers and tended to be situated away from Washington so as to exploit certain geographic and human resources—for example, contractors like Electric Boat, Bath Iron Works, and Huntington Ingalls made ships on the Atlantic coast and Hughes Aircraft and Rockwell Collins took advantage of expertise native to southern California. They received orders for tangible goods from the government and filled them in a segmented and sequential process. Once the contract was signed, the government waited for delivery.

To a certain extent, much defense and national security contracting is like this today. Boeing still produces aircrafts for the federal government. However, there is a large new generation of contractors who provide information and services to assist the government on national defense, military operations, and homeland

¹⁴ Light (2006).

¹⁵ Gansler (2011), 79–117.

security.¹⁶ These firms include Westat, InDyne, Alion Science and Technology, Orbital Sciences, SGT, Dyn Corp, Artel, Telos, Alliant Tech Systems, and Leidos. Alliant provides a wide variety of armaments to DOD and DHS. Some of these are quite simple, like guns and ammunition, but others, such as missile warning and defense, are highly technical. In 2010, it received \$2.7 billion in procurement, although, as a result of sequestration, this was cut nearly in half by 2015. In 2010, Leidos, then known as SAIC (or Science Applications International Corporation), had 44,000 employees and received \$6.8 billion in contracts making it the eighth largest recipient of federal procurement dollars. In 2015, those figures were reduced by the sequestration cuts to 13,000 and \$2.1 billion respectively, but it was still a major player. It is in the “brain business” and sells expertise in the field of “information warfare” to NSA and CIA.¹⁷ In 2005, Joan Dempsey, a former CIA deputy director, referred to it as a “shadow intelligence community.”¹⁸ Booz Allen Hamilton, the management and technology consulting firm that Snowden and Martin worked for, now regularly features in the annual list of top contractors and received nearly \$3.3 billion in contracts in 2016 from both defense and civilian agencies.¹⁹

Nowhere is this transformation more dramatically displayed than by what Harris (2014) calls the “Military-Internet Complex” or the federal government’s effort to combat enemies in the “fifth domain” of warfare, cyberspace. In this secretive and highly technical realm, NSA, DHS, and other federal units, spend billions of dollars annually—nearly \$20 billion in FY 2017—to protect the nation’s information, infrastructure, and defenses from “hacks” by foreign governments, criminal gangs, and rogue individuals. Resources are also directed toward spying and offense, as the successful Stuxnet operation against Iran’s nuclear program revealed.²⁰ Contractors in this field from large to little-known boutique firms sell their expertise and make proprietary data and networks available.²¹ They do not

16 The post-World War II origins of this form of private consultancy are discussed in McKenna (2006), 80–110.

17 Barlett and Steele (2007).

18 Shorrock (2005).

19 For more on Booz Allen Hamilton, see Appelbaum and Lipton (2013). The company came under federal investigation in 2017 for billing irregularities.

20 *The New York Times* 1 June 2012, “Obama Order Sped up Wave of Cyberattacks Against Iran,” David E. Sanger, p. A1.

21 Small companies like CrowdStrike Services and Mandiant (Harris (2014), 64–5, 108–11, 204–10) are particularly important contractors in cyber defense. Reality Leigh Winner, the contractor arrested for passing along a top-secret NSA document about Russian efforts to hack into computers and disrupt the 2016 presidential election, worked for another company that assisted the government on these matters, Pluribus International. Winner worked in Georgia, but Pluribus is headquartered in Alexandria, Virginia.

produce a tangible deliverable over the course of a clearly-defined process in any conceivable sense of the terms.

The central role of information in the new procurement regime is demonstrated by the growing number and proportion of defense contracts subject to new administrative practices designed to facilitate their delivery. DOD, DHS, and Department of Health and Human Services (HHS) contracts for complex services are increasingly subject to flexible cost-reimbursement rather than traditional up-front fixed-price rates.²² Under the “indefinite delivery/indefinite quantity” (IDIQ) system established by FASA and FARA contracts need not stipulate quantities or exact design and can be fulfilled by multiple vendors working together. The agreements constitute open-ended and multi-year arrangements that deepen the relationship between the agency and contractor and effectively limit the number of companies capable of offering competitive bids.²³ Government-wide acquisition contracts (GWACs), another product of FASA, are a form of IDIQ that allows vendors to consolidate agreements across agencies in a form of “omnibus contract.”²⁴ Agile contracting, used specifically in information technology projects, is increasingly popular, as well. Here the parties enter into a preliminary test phase before agreeing on the particulars of the contract.²⁵

As a result, the dollars spent using traditional purchase orders or definitive contracts have decreased markedly. In 1994, 79.5 percent of DOD procurement was in the form of purchase orders or definitive contracts, by 2010 52.5 percent was in some type of IDIQ.²⁶ DOD and DHS seem to utilize IDIQ-type contracts more than do other agencies.²⁷

The proportion of the defense budget committed to research, development, testing, and evaluation (RDT&E) has grown sharply, as well. The RDT&E account within the defense procurement budget accelerated rapidly from \$45 billion to \$65.4 billion in constant 2007 dollars from 1996 to 2007.²⁸ The federal government understands the value of weapons systems is not contained in their metal, plastic, glass, and wiring but in their design. This understanding is enhanced by the significant costs in time and money incurred by mistakes in manufacturing.

²² Kim and Brown (2017).

²³ Rueda-Benevides and Gransberg (2014); Wedel (2009) 93–6.

²⁴ Snider and Rendon (2008).

²⁵ Ravindranath, Mohana. 2014. *The Washington Post* 21 April 2014, “Cracking the Code for Federal IT Solutions,” Mohana Ravindranath, A9.

²⁶ Ellman, Morrow, and Sanders (2012).

²⁷ Kim and Brown (2012).

²⁸ Gansler (2011), 252–79.

The new contractor

The need to procure sophisticated and specialized information has driven the government's increased reliance on private contractors. This has been accelerated in an era when fiscal resources are limited and elected officials of both parties have made concerted efforts to reduce the size and cost of the federal workforce.²⁹ Presidents Harry Truman and Dwight D. Eisenhower were initially responsible for the dependence on contractors. The goal was to broaden political support for the growth of government necessitated by the social welfare state and the Cold War.³⁰ Indeed, Eisenhower was the author of the original "Circular A-76" that stated the federal government "will not start or carry on any commercial activity to provide a product or service for its own use if such a product or service can be procured from private enterprise through ordinary business channels."

It was President Ronald Reagan and his Budget Director David Stockman, however, who gave the memo real teeth in 1983.³¹ From then private contractors were to replace federal workers, not supplement or provide political cover for them. Both Presidents Reagan and Clinton forged other more concrete proposals to decrease the number of civilian government workers during their terms in office and both had some success—although Clinton considerably more so, specifically with his Federal Activities Inventory Reform (FAIR) Act of 1998.³²

The peace dividend at the end of the Cold War brought about a dramatic reduction in military personnel. In the twelve years between 1987 and 1999, there were nearly 40 percent fewer Americans in the armed services—the number shrinking from about 2.2 million to roughly 1.4 million. Wars, particularly those in Iraq and Afghanistan, helped re-inflate these figures, but only slightly and temporarily and by 2015 the size of the military was about back to where it had been at the turn of the millennium. The financial crisis of 2008 had a palpable effect with President Barack Obama presiding over a stagnation in the civilian workforce, although it did start to grow slowly again by the beginning of his second term. All told, whether as a product largely of economic necessity,

²⁹ Guttman (2006).

³⁰ Wedel (2009) 78.

³¹ Tolchin and Tolchin (2011), 170–2.

³² Clinton's effort, called the National Performance Review (NPR) and spearheaded by Vice President Al Gore, was launched almost immediately after he came into office. It constituted a six-month efficiency review of the federal government and contributed to a roughly 250,000 decline in the number of federal executive civilian employees during his time in office (Kettl and Diluio (1995)). Reagan never really had a formal plan beyond proposing to eliminate some federal departments, and although he was able to limit the growth of the federal workforce in his first term, it began to increase markedly again after 1984.

geopolitics, or policy choice, the number of federal workers and military personnel declined from about 5 million in 1980 to roughly 4.2 million in 2015. Annual federal expenditures increased more than six-fold over the same period.

Private contractors have filled the void; a development Light calls the “shadow government.”³³ Precise data on the size of the contracting workforce are prohibitively difficult to calculate, but in a revision to his study cited earlier, Light estimates there were about 7.6 million jobs occupied by private employees performing federal contracts in 2005; the increase being particularly dramatic in the first George W. Bush term when about 2.5 million of these positions were created.³⁴ This was a direct result of the “President’s Management Agenda” that formalized and incentivized “competitive sourcing.”³⁵ Despite intentions to scale back on contractors, the Obama Administration did not stop the growth.³⁶

Not surprisingly, controversy has accompanied the dramatic increase in the number of private contractors. Much is based upon inflated costs and fraud—as Truman noted when chair of the Senate Select Committee to Investigate the National Defense Program, “I have never yet found a contractor who, if not watched, would not leave the government holding the bag.” There have been some publicized causes of fraudulent billing by contractors in recent years—such as Inchcape Shipping that was suspended from doing business with the Navy and whose owner was arrested on charges of conspiring to bribe officials.³⁷ The Trump Administration has repeatedly pointed to the cost overruns of Lockheed Martin’s F-35 fighter—the price has doubled since its unveiling fifteen years ago. The Project on Government Oversight has frequently noted that federal contract positions are more expensive than comparable civil service jobs.³⁸ There are also significant legal and security problems associated with the massive increase in private military contractors in war zones, such as those employed in Iraq and Afghanistan.³⁹ In one extreme example, while serving American troops,

33 Light (1999).

34 Ibid. (2006).

35 Weld (2009), 73–6.

36 Tolchin and Tolchin (2011), 165–6.

37 *The New York Times* 30 November 2013, “Scandal Widens Over Contracts for Navy Work,” Christopher Drew and Danielle Ivory, A1.

38 Chassy and Amey (2011).

39 Engbrecht (2010); Singer (2007); Stanger (2011). There are all sorts of practical and legal considerations surrounding the deployment of private contractors in combat operations. Should such individuals be considered agents of the state? Should conventional military resources be used to protect them in the same way they do government personnel? For more on these matters, see Singer (2007).

several employees of the contractor Blackwater killed seventeen Iraqi civilians in 2007.⁴⁰

Finally, it is important to note the relationship between private contractor and government official has become more complex and the lines separating them increasingly blurred. Cost constraints, hiring obstacles, and the relaxation of outsourcing rules over the past couple of decades, particularly after Clinton's NPR, have motivated procuring agencies to bring in contractors to do all types of things, including accounting, clerical, and janitorial tasks that do not require great expertise and that in the past would have been done by federal employees. In many cases individuals work side-by-side in the same space on the same projects doing the same things in what is often called the "blended workforce." Nothing distinguishes them except their employer and possibly wages and benefits.⁴¹ Nowhere is this perhaps more evident than at Liberty Crossing in McLean, Virginia, where several thousand federal workers and private contractors toil together at the Office of the Director of National Intelligence and National Counterterrorism Center.⁴²

The geographical distribution of federal procurement

The revolution has also brought about profound shifts in the geographic distribution of procurement and the dollars associated with it. In the early 1980s, Markusen et al. identified the "gunbelt," which encompassed principally the states of New England, the West Coast, Texas, Florida, and the Plains. It was corporations located here that captured the lion's share of defense contracts.⁴³ Since then, there has been a marked increase in the total and proportion of procurement dollars that are spent in the Washington area, defined here as D.C., Maryland, and Virginia. From 1980 until 2010, whereas the amount of money the federal government spends on procurement grew by 240 percent, Maryland's and Virginia's shares each grew about twelvefold and D.C.'s from \$300 million to around \$18 billion. Much of the acceleration occurred after 2001, but it is also clear that

⁴⁰ Tolchin and Tolchin (2011), 183.

⁴¹ Bachner and Ginsberg (2016), 43–5, 68–70; *The New York Times* 4 February 2007, "Contractors Take on Biggest Role Ever," Scott, Shane and Ron Nixon, A1; Wedel (2009), 81.

⁴² *The Washington Post* 19 July 2010, "A Hidden World, Growing Beyond Control." Dana Priest and William M. Arkin, A1.

⁴³ Markusen et al. (1991).

Virginia, particularly, was attracting more contract dollars as early as the mid-1990s.

Figure 3 reveals this quite dramatically. It charts the region's increased share of federal contract spending and compares it to a significant decline in the proportion going to California, once the hub of the defense sector. Today, D.C., Maryland, and Virginia receive between one in every five and one in every four dollars spent on procurement. Again, the post-2001 period is important, but the take-off point seems to occur prior, in the mid-1990s. Whereas Maryland and Virginia often struggled to break into the top five states by the amount of procurement money received per capita before the mid-1990s, they have consistently been number one and two since—D.C. would always be first if it were a state.

The data suggest a strong proximity effect and firms receive federal contracts largely because of their distance from federal policymakers. To some extent the D.C. region has always done well. Federal agencies are in constant need of supplies and equipment, short-term staffing and consultancy, and repairs to physical plants.⁴⁴ There are hundreds of small businesses in the area that receive contracts to undertake these mundane, repeated, and relatively inexpensive tasks purely because they can perform them quickly and easily. Yet by 2015, the average federal contract was worth about \$129,000; in the D.C. region it was valued at about \$179,000. It is not just small firms that are receiving the region's increased allotment. Three times more of the top 100 contractors by dollars awarded were from the D.C. area in 2010 than in 1983.

To further demonstrate the importance of geographic proximity, the Virginia jurisdictions located closest to D.C. generally accounted for about 50 percent of the state's annual federal procurement dollars before 1990; today that figure is over 90 percent with, in 2015, Fairfax County alone accounting for about 45 percent.⁴⁵ The naval shipyards in Newport News were traditionally important to Virginia's lucrative defense contracts. Today, as we have noted, the money finds its way to very different kinds of firms, many of which call places like previously sleepy Tyson's Corner home.

⁴⁴ *The Washington Post* 16 August 2011, "Great Falls Reflects Big Windfall," Annie Gowen, A1, provides a nice portrait of one such contractor and how providing the federal government a rather small and routine service made her rich.

⁴⁵ The D.C.-area municipalities are Prince George's and Montgomery counties in Maryland and Alexandria, Fairfax, Falls Church, and Manassas cities and Arlington, Fairfax, Loudoun, and Prince William counties in Virginia—the latter group defined as D.C. region or Region 8 by the Virginia Association of Counties.

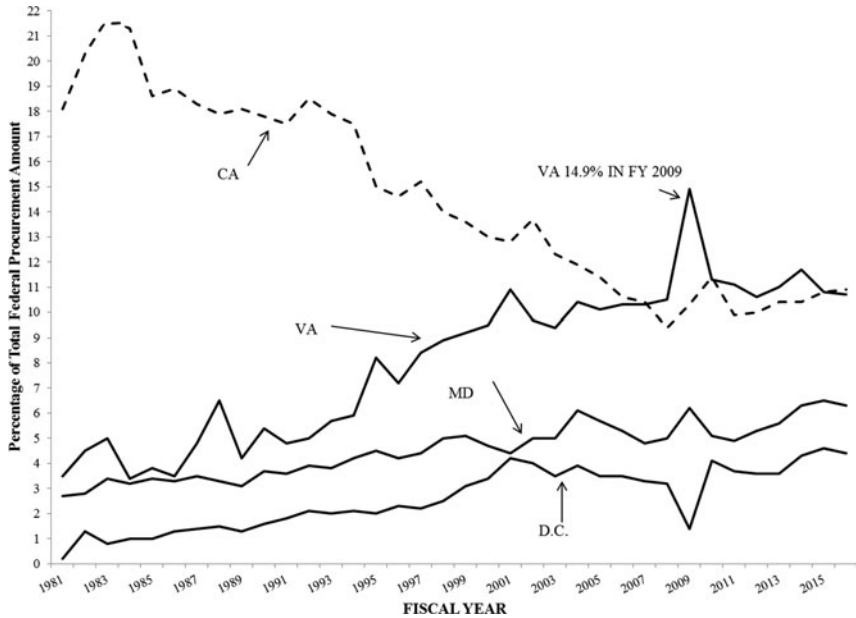


Figure 3: The Percentage of Procurement Dollars Spent in the Washington Area and California, 1981–2016

Information communities: a model for the new procurement process

I offer a singular model, one built on various theoretical contributions from social science, to bring together the disparate characteristics of this new procurement regime. The model certainly leans on existing political science, but consigns campaign finance and conventional lobbying to a supplementary role in procurement outcomes. To quickly demonstrate the limitations of a traditional political-influence understanding of the new regime, consider how it might explain emerging geographic patterns in contracts and procurement spending. A half-century of research shows that a large presence on the House and Senate Committee on Armed Services and, to a lesser extent, Appropriations assists in a state's efforts to secure procurement dollars for firms situated there.⁴⁶ It is true that Virginia has had particularly healthy representation on Armed Services since 1980.⁴⁷ But

⁴⁶ Dexter (1963); Taylor (2010); Thorpe (2014), 109–24.

⁴⁷ For example, if we use measures of Armed Services membership that are calculated as the mean by-Congress percentage of the delegation that is on the committee, Virginia has by some

Maryland has not. Moreover, only two members of the Maryland and Virginia delegations—Rep. Steny Hoyer (D-MD) and Rep. Eric Cantor (R-VA)—have been in the formal congressional leadership in recent decades.⁴⁸ If we also consider that D.C. has no representation in the Senate and its House member does not have formal voting rights, this explanation loses even more force.

The model I propose I call “information communities.” It has two principal components. The first is political and based upon what we might call “personal contact.” This particular argument is made appealing by a number of important changes in procurement procedures and American politics more generally. The basic mechanism is repeated and meaningful contacts between high-level managers of contracting firms and the decision makers within government involved in procurement. These contacts do not constitute lobbying in the formal sense of the term. The interactions can be quite unofficial. But they are also distinct from an established broader and looser network of business and government elites. The contacts are effective. As a result, companies seeking procurement have located their leadership and headquarters in the D.C. area.

Indeed, research suggests corporate managers are increasingly active in Washington, even if much of their work takes place behind the scenes.⁴⁹ Lobbyists are keen to demonstrate—and often skillfully exaggerate—the value of what they do, signaling to their corporate overseers the importance of personal association.⁵⁰ This is consistent with findings showing the frequency of contact between the interest and government decision-maker has material impact on policy outcomes.⁵¹

As noted, procurement procedures are so considerable today that contracting decisions are quite formulaic and oversight increasingly vigorous. A large and more aggressive media watches for violations of these rules. It is possible to circumvent the highly structured process, but there are obvious political, and sometimes legal, costs of doing so. What discretion there remains in the process after the important reforms of the 1970s and 1980s is now largely in the hands of appointed, not elected, officials. Such individuals are generally uninfluenced by campaign contributions and political arguments made by lobbyists. Instead, they might be swayed by offers of favors directly from outside interests, including promises of

distance the highest score for any state in the Senate during this period and, at just over 40 percent of its membership, the highest for any medium-to-large sized state in the House.

48 Hoyer served as majority leader in the 110th and 111th Congresses—he was minority whip in the 108th–109th and 112th–115th—and Cantor as minority whip in the 111th Congress and majority leader in the 112th and 113th Congresses.

49 Drutman (2015), 143–6; Nownes and Aitalieva (2012).

50 Drutman (2015).

51 McKay (2012); Nelson and Yackee (2012); Yackee and Yackee (2006).

employment.⁵² Such offers have greater credibility if they come directly from high-ranking managers within the firm soliciting government contracts.

Moreover, direct communications from the contracted firm's hierarchy demonstrate a level of commitment and trust important in an era when the costs of violating procurement rules are considerable. Procuring agencies presumably wish to avoid the embarrassment of waste and fraud and can be more easily assured it will not occur if the message is delivered directly by a firm's top brass.

These efforts are clearly supplemented by campaign contributions and lobbying expenditures.⁵³ As suggested above, traditional methods of influence continue. Indeed the amount of formal lobbying on executive agencies intended to pressure administrative decision making has increased markedly.⁵⁴ When ranked in the category of individual corporations, top contractors remain the heaviest spenders on lobbying and campaign contributions to federal candidates—Lockheed Martin, Boeing, Raytheon, and Honeywell are particularly generous and nearly always in the top ten with companies like Walmart and UPS.⁵⁵ But note that the contact I describe is qualitatively different from giving to campaigns and spending on lobbying. It is clearly more opaque and, although impossible to observe in any systematic manner, plausibly as effective.

The second component of the model is distinctly more technical, economic, and sociological. These "information communities" are different from the canonical models of interest group influence and executive decision making like "iron triangles" or "subgovernments" and "issue networks."⁵⁶ Information communities

52 We do know that members of Congress and their staff leave for lobbying positions in large numbers (*The Washington Post* 13 September 2011, "Congress to K-Street and Vice-Versa." T.W. Farnam, A14.). There has been much less systematic study of executive branch officials and "revolving door" rules limit their capacity to lobby immediately after leaving their government positions (Maskell (2010))—President Obama issued an executive order in 2009 that prohibited political appointees in his administration from working "directly and substantially" on contracts issued by her previous employer on behalf of an outside interest for two years after leaving government service. However, as LaPira and Thomas (2012) show, we have good reason to believe it occurs at high levels nonetheless and anti-revolving door rules have had limited effect. Moreover, such rules may actually encourage the type of personal contact I describe. With their strong ties to decision makers, some executive branch officials have left for positions within corporations where their responsibilities formally exclude lobbying.

53 Gordon and Hafer (2005); Yackee and Yackee (2006).

54 Boehmke, Gailmard, and Patty (2013).

55 The data needed to make these assertions can be found on the Federal Election Commission website (<http://www.fec.gov>) and the Center for Responsive Politics website (<http://www.opensecrets.org>).

56 Adams (1981); Carpenter, Esterling, and Lazer (2004); Chubb (1983); Gais, Peterson, and Walker (1984); Hallacher (2005); Hecl (1978); West, Henderson, and Peterson (2012).

reveal a more seamless integration into a broader and more equitable and interdependent community of actors. For economists, the transaction between agency and contractors is usually thought of in market terms. Information communities closely resemble vertically-integrated firms. As noted, there are relationships at the elite level—policy makers on the government side, senior management on the corporate side. As in existing theoretical models, there also exists a revolving door between company and government that, as former federal officials' institutional loyalty fades, best serves the contractors' interests. None of this is particularly new to the defense industry, personnel transfers between DOD and top contractors were frequent and numerous in the 1970s.⁵⁷ But there is now also a substantial and deep economic synthesis to the extent that low-level employees often have direct and repeated contact with counterparts in the government agency. Political scientists have shown that important information is increasingly conveyed through campaign contributions and lobbying.⁵⁸ Within these newer communities much of the information crucial to the relationship between private actor and government agency is transmitted at lower levels and tends not to be political or related to broad policy but technical and financial.

How have these information communities come about? As noted, whereas in the past employees of federal contractors worked at places remote from agencies they were supplying with tangible goods like warships, radar equipment, trucks, and computer software, today workers themselves are a critical commodity, and much procurement meets federal agencies' staffing needs.⁵⁹ More importantly, though, the government requires information. Because it is highly sophisticated, there exists a limited set of people capable of generating and interpreting the information. These individuals are imperative to both its suppliers and acquirers. The complexity of the information is such that contractor and agency must communicate regularly with one another if they are to maintain their relationship. The need to interact creates a sort of community of repeated feedback loops in which participants continually share and, as a consequence, increase the quality and quantity of the information. The contractor needs to generate new information to take advantage of the asymmetries essential for its value to the purchaser and the government must increase its capacity so as to exploit knowledge sufficiently. This dynamic brings changes to the capacities of suppliers and needs, real or possibly merely perceived, of acquirers. Such adjustments then deepen the necessity to

⁵⁷ Adams (1981), 77–92.

⁵⁸ Baumgartner et al. (2009); Esterling (2007); Hall and Deardorf (2006).

⁵⁹ As KBR's experience suggests, geographic proximity to Washington is not essential to secure this kind of business. KBR received \$3.6 billion in contracts in 2010, mainly in defense staffing and security personnel. It is based in Houston. Its political connections were discussed earlier.

share technical information within the community. The process is essentially what economists call a “knowledge spillover.”⁶⁰

The specifics of the D.C. region case fit the information-communities model. Washington had been home to important federal and university laboratories for decades but only attracted attention from private contractors when they were able to license innovations to private actors after 1980.⁶¹ The federal government, in turn, enhanced public financing of complex technical services that complemented this work, again increasing the amount of private investment in research and development and hence accelerating the spillover effect.⁶² Markusen et al. argue much of this development was attributable to the considerable investment in the Strategic Defense Initiative (SDI).⁶³

Highly specialized information communities like these tend to build up within a bounded physical place. As Glaeser et al. have observed “intellectual breakthroughs cross hallways and streets more easily than oceans and continents.”⁶⁴ In studies of the broader economy, economists often call them clusters or agglomerations and have noted significant ones exist in industries like entertainment (Los Angeles), light aircraft (Wichita), biotech (Boston and the Research Triangle in North Carolina), and information technology (San Francisco).⁶⁵ Within some economic sectors, however, clusters may be, at best, diffuse and small. Suppliers and producers are geographically scattered because the information generated within the sector is relatively unsophisticated and easily acquired. Labor is therefore inexpensive and widely available. Technological advancement and economies of scale permit national and even global supply chains. Indeed, this has happened to the procurement of defense hardware. Thorpe claims much of the congressional support for the expansion of military spending since World War II is the result of subcontracting practices distributing the procurement of national security products more broadly than originally thought, generally away from large firms in the major cities of the Rustbelt and West Coast to their suppliers in rural areas and small towns of the South and the West.⁶⁶

Even service-focused procurement need not create an information community. Healthcare furnishes the best example. Today contractors in this sector

60 Arrow (1962); Romer (1986). These are sometimes called “MAR spillovers” after the economists Alfred Marshall, Kenneth Arrow, and Paul Romer who discovered and extended the concept.

61 Feldman (2001).

62 Slavtchev and Wiederhold (2016).

63 Markusen et al. (1991).

64 Glaeser et al. (1992), 1,126.

65 Audretsch and Feldman (1996); Feldman (1993); Glaeser et al. (1992); Moretti (2012); Porter (1998); Rosenthal and Strange (2003).

66 Thorpe (2014), 72–80, 109–24.

largely provide administrative services, pharmaceuticals, and medical equipment; all of which are routine for them. There is little incentive to form a cluster to leverage informational gains. The healthcare products corporations supply the federal government are basic. Moreover, the sector's clients are numerous and dispersed. The industry's contractors do have a single customer in the federal government, but the consumers of its products are American citizens receiving Medicaid, Medicare, and veterans' healthcare. They are distributed across the country. The healthcare companies that receive the most federal procurement—such as McKesson, Humana, HealthNet, TriWest, and Cardinal Healthcare—are therefore dispersed and away from the D.C. region.

It is when the consumer is unambiguously singular and the information sought complex and advanced that there is considerable incentive for producers to locate close to it. It is under these conditions that clusters are most likely to arise. The most spectacular contemporary example of this in federal contracting is high-tech defense and national security policy. We have already discussed the emergence of a large number of firms that provide military staffing and expertise, intelligence analysis, communications, and many types of consultancy in national security matters. Nearly all of them reside in northern Virginia jurisdictions like Arlington, Falls Church, Fairfax, McLean, Reston, and Tyson's Corner—most because that is where they were conceived, some, like Leidos (when it was SAIC), relocated to the region.⁶⁷ Today, as tangible goods are composed of more sophisticated information, even most of the top hardware defense contractors are located in and around Washington, D.C., having moved to the area in the past couple of decades to be closer to their client at the expense of proximity to their subcontractors.⁶⁸ Northrop Grumman was the last major aerospace firm in southern California when it left for West Falls Church in 2011. The rationale for the change was quite explicitly geography.⁶⁹ Two of the corporation's major competitors for the really large DOD contracts, Lockheed Martin and General Dynamics, have been in the Washington area since the 1990s.⁷⁰ Consolidation has also enhanced the cluster. General Dynamics acquired the large contractors Bath Iron Works and Vangent in recent years.⁷¹

67 SAIC moved to Tyson's Corner in 2009 from San Diego, where it was often called "NSA West" (Harris (2014), 34).

68 Harrington and Campbell (1997).

69 *The Los Angeles Times* 5 January 2010, "Northrop Grumman Moving Headquarters from L.A. to Washington, D.C. Area," W.J. Hennigan and Tiggany Hsu, 7.

70 Lockheed Martin moved to Bethesda, Maryland, in 1995 after the merger with Martin Marietta and General Dynamics moved to Falls Church, Virginia in 1992.

71 For more much more on federal defense contracting since the early 1990s, see Ellman, Morrow, and Sanders (2012).

Conclusion

In his 1961 farewell address to the nation, Eisenhower encouraged Americans to “guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex.” The subject of his warning has been subsequently viewed as a “cabal” that “lurks in the shadows waiting for an unguarded moment in which to subvert the American way of life for its own venal purposes” and a kind of conspiracy to line industrialists’ pockets and send generals merrily off to war.⁷² If there is or ever was such an arrangement, it clearly does not exist in the same form today but the recent revolution in federal contracting, although not a coordinated strategy, has brought together the private sector and DOD in a tight community. Based largely on the government’s need for complex information systems, a revolving door of personnel cements the relationship. It is also clear defense companies continue their investments in rent-seeking. The wars on Terror and in Afghanistan and Iraq, like the Cold War before them, facilitated the process.

The revolution in contracting has reached beyond the military, however. Many different government agencies—in intelligence, homeland security, and health-care—need staff, services, and, especially, sophisticated information more than tangible manufactured goods.⁷³ This means successful contractors must provide human capital and place themselves close to an interface with their clients. Together, these agencies and their contractors form what I have called “information communities” in which the participants provide each other with knowledge and advice and, ultimately, buy and sell to one another in a series of seamless and repeated transactions that continually but incrementally alter the relationship. Proximity is certainly influential but the currency is not necessarily political. The top contractors lobby and donate to campaigns, but these efforts have fewer meaningful independent effects than they once did. It is the corporations’ integration into the community and established contracting process that matters.

There is still a great deal of work to be done on the information-communities model. I have described it but the evidence I present, although consistent with the model, is not particularly systematic. Can the information-communities model withstand more robust tests of the expectations it generates? Are policymakers and top executives in contracting firms increasingly close? Do these kinds of relationships increasingly shape procurement decisions? If so, is this at the expense of traditional tools of influence like formal lobbying and campaign finance? Another

⁷² Dunlap (2011), 135; Ledbetter (2011).

⁷³ Morgan and Campbell (2011) write of a “delegated welfare state” and how the federal government has relied on contractors to administer Medicare, particularly since 2003.

potentially fruitful line of questioning: Is the complexity of a contract and the project it enables related to the geographical location of the firm that wins it? Are the unit labor costs of a contractor correlated with its distance from Washington?

It is also reasonable to ask about the future of the procurement revolution as described by the information-communities model. In many ways we might expect it to continue. The firms that receive most federal contracting dollars are a consequence of a new world, one dominated by sophisticated technology in which information is the principal commodity and the boundaries between the public and private sectors are blurred. Matters that drove the revolution such as the emergence of the internet, terrorism, global military competition, and the government's extended reach into the healthcare sector remain central features of American life. Political reforms have done nothing to reverse it, either. Obama's efforts to stop the revolving door—he issued an executive order prohibiting underlings from lobbying members of the administration for two years following their departure—had little effect.⁷⁴ President Trump has vowed to “drain the swamp” and greatly attenuate the ability of private interests to influence policymakers, but as of writing has not commenced any meaningful effort to do so. It is true that since the passage of the Honest Leadership and Open Government Act of 2007 Congress has largely eliminated earmarks and tightened regulation of lobbying.⁷⁵ The Supreme Court's ruling in the *Citizens United* case of 2010 has presumably diluted the influence of direct contributions to candidates on policymaking.⁷⁶ But lobbying and PAC contributions did not fuel the revolution; they were associated with the ancien regime.⁷⁷

American politics remain subject to what a number of scholars call “crony capitalism”—the idea that the success of firms is dependent upon personal relationships between their principals and policymakers in government, relationships that reward rent-seeking.⁷⁸ Information communities do, as I have noted, generate important economic and social value for Americans. In this regard the procurement revolution might be thought of as positive. But to the extent that it has

⁷⁴ Gerstein (2015).

⁷⁵ Earmarks survive in their “zombie” form (Wright and Herb (2015)). The Honest Leadership and Open Government Act of 2007 brought greater transparency to lobbying and restricted a number of traditional practices. It also prevented former procurement officers from contacting their old agency for at least two years.

⁷⁶ The super PACs ostensibly created by *Citizens' United* have greatly changed the financing of federal elections, particularly at the federal level, and are more concerned with electoral outcomes than influencing policymakers (Dwyre and Braz (2015)).

⁷⁷ Tripathi (2000).

⁷⁸ Zingales (2012).

privileged certain contractors over others and subject procurement policy to more opaque, informal, and personalized decision making—after decades of rules designed to establish transparent, formal, and formulaic processes—the revolution contributes to, rather than mitigates, crony capitalism.

If the revolution is to be slowed, the most meaningful counterforce will likely be applied by fiscal policy. The government sequester significantly reduced the funds available for procurement. Initially, the procedure constituted an across-the-board rescission of \$85 billion from the FY 2013 budget, a 7.7 percent cut in defense expenditures alone. It also put into place caps on future discretionary spending in both defense and non-defense categories that were elevated negligibly by the Taxpayer Relief Act of 2012 and the Budget Control Act of 2014. As a result of the original sequestration and the inability of Congress and the White House to agree on precisely how to remove the caps, spending in FY 2014 and FY 2015 still declined—defense expenditures by roughly another 6 percent. As Democrats complain about inattention to domestic programs and Republicans fret over the country’s military preparedness, however, there are signs that procurement spending is about to increase markedly again. The omnibus appropriations bills passed for FY 2016 under the auspices of the Balanced Budget Act of 2015 contained slight increases in the major categories of government outlays that flowed to federal contractors. The FY 2018 version increased DHS spending by nearly 7 percent, DOD spending by about 10 percent.

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