UMD-CM-17-206

Evaluating the Impact of Small Business Set-Asides On Acquisitions Efficiency

> By William Lucyshyn and John Rigilano



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE

SCHOOL OF PUBLIC POLICY

June 2017

Disclaimer: This material is based upon work supported by the Naval Postgraduate School Acquisition Research Program under Grant No. N00244-16-1-0011. The views expressed in written materials or publications, and/or made by speakers, moderators, and presenters, do not necessarily reflect the official policies of the Naval Postgraduate School nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

The Center for Public Policy and Private Enterprise at the University of Maryland's School of Public Policy provides the strategic linkage between the public and private sector to develop and improve solutions to complex problems associated with the delivery of public services—a responsibility increasingly shared by both sectors. Operating at the nexus of public and private interests, the Center researches, develops, and promotes best practices; develops policy recommendations; and strives to influence senior decision-makers toward improved government and industry results.

Abstract

The Federal Government spent over \$470 billion on procurement in FY 2016. Spending of this magnitude creates opportunities for implementing selected national policies. For instance, current law requires that low-cost acquisitions be reserved exclusively for small business concerns, with qualifying businesses assuming the role of prime contractor. However, the pursuit of admirable social goals such as this may not always be rational from an economic or technical standpoint.

This report analyzes the distribution of small business procurement across industry sectors using data from the Federal Procurement Data System (FPDS). We show that a relatively small number of large firms dominate the federal contracting landscape in certain sectors, such as defense, and account for a significant proportion of procurement spending. Accordingly, set-aside policy has a disparate impact on the remainder of the spending, concentrating it into certain industry sectors where there are greater opportunities for small businesses, limiting free and open competition, and creating a series of unintended consequences for government (e.g. contracting and economic inefficiency) and small businesses (e.g. uneven and unsustainable growth and barriers to entry into the federal contracting space).



THIS PAGE INTENTIONALLY LEFT BLANK



Acknowledgements

This research was partially sponsored by the Naval Postgraduate School, and we are especially grateful for the support and encouragement provided by RADM (Retired) Jim Greene and Professor Keith Snider. We are especially grateful for the support of the interviewed firms, and the current and former federal government officials, for their participation and the valuable insights they provided. We would also like to thank our coworker Caroline Dawn Pulliam for her assistance with the planning and coordination of this study.



THIS PAGE INTENTIONALLY LEFT BLANK



About the Authors

William Lucyshyn is a Research Professor and the Director of Research at the Center for Public Policy and Private Enterprise in the School of Public Policy, University of Maryland. In this position, he directs research on critical policy issues related to the increasingly complex problems associated with improving public-sector management and operations, and with how government works with private enterprise. Current projects include modernizing government supply-chain management, identifying government sourcing and acquisition best practices, and analyzing Department of Defense business modernization and transformation. Previously, Mr. Lucyshyn served as a Program Manager and the Principal Technical Advisor to the Director of the Defense Advanced Research Projects Agency (DARPA) on the identification, selection, research, development, and prototype production of advanced technology projects.

Prior to joining DARPA, Mr. Lucyshyn completed a 25-year career in the U.S. Air Force. Mr. Lucyshyn received his Bachelor degree in Engineering Science from the City University of New York and earned his Master's degree in Nuclear Engineering from the Air Force Institute of Technology. He has authored numerous reports, book chapters, and journal articles.

John Rigilano is a faculty research associate at the Center for Public Policy and Private Enterprise. He received his Masters of Public Policy from the University of Maryland's School of Public Policy in 2011, where he also served as a graduate research associate at CPPPE. Prior to his time at UMD, Mr. Rigilano received his Bachelor of Arts from Penn State University in 2004 with a major in Anthropology. During his time at CPPPE, he has coauthored and contributed to numerous reports.



THIS PAGE INTENTIONALLY LEFT BLANK



Table of Contents

I. Introduction
II. Background
Set-Aside Goals
SBA Size Standards9
Subcontracting Rules
III. Small Business Representation in Federal Contracting
The Small Business Potential15
Growth of Small Business in the Professional Services Sector
IV. Unintended Consequences
Uneven and unsustainable growth
Barriers to entry
Contracting and economic inefficiency
V. Findings and Recommendations
References



THIS PAGE INTENTIONALLY LEFT BLANK



I. Introduction

The Federal Government, on average, spent half a trillion dollars annually on procurement over the last decade (\$470 billion in FY 2016), roughly 40% more than what was spent in real terms during the 1990s (see Figure 1).

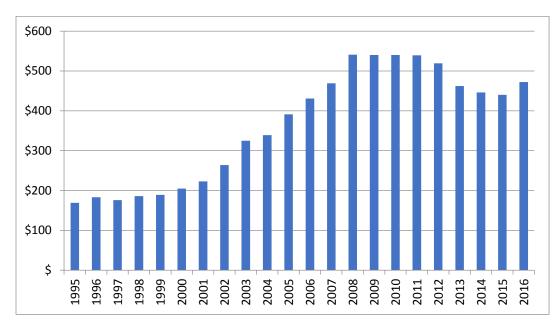


Figure 1. Federal contract spending, action obligations in then-year \$billions, 1995-2016 (analysis of FPDS data)

Spending of this magnitude creates opportunities for implementing socio-economic policies aimed at promoting small businesses, especially those owned by members of historically-disadvantaged groups (e.g. minorities, women). In 1988, Congress began requiring that "the President shall annually establish Government-wide goals for [small business] procurement" at specified minimum percentages (Beale, 2014).

This report analyzes the distribution of procurement across industry sectors using data from the Federal Procurement Data System (FPDS). We show that a relatively small number of large firms dominate the federal contracting landscape in certain sectors, such as defense, and account for a significant proportion of procurement spending. Accordingly, small business procurement policy has a disparate impact on the remainder of the spending, concentrating it into industry sectors where there are greater opportunities for small business. Unfortunately, this policy often limits free and open competition in the affected sectors, and can create a series of unintended consequences for government (e.g. contracting and economic



inefficiency) and small businesses (e.g. uneven and unsustainable growth and barriers to entry into the federal contracting space).

The advantages of small business—innovation and agility—have been recognized for decades. Small business is the "driver and engine of growth" and the "lifeblood of our economy" (Obama, 2014). However, there are indications that current policy may fall short of its intended objectives: promoting the growth and prosperity of small business, improving government acquisitions efficiency, and fostering economic growth.



II. Background

The Small Business Act of 1953 established the Small Business Administration (SBA) as an independent agency of the federal government to "aid, counsel, assist, and protect, insofar as is possible, the interests of small business concerns in order to:

- Preserve free competitive enterprise;
- Ensure that a fair proportion of the total purchases and contracts or subcontracts for goods and services for the Government (including but not limited to contracts or subcontracts for maintenance, repair, and construction) be placed with small-business enterprises;
- Ensure that a fair proportion of the total sales of Government property be made to such enterprises; and
- Maintain and strengthen the overall economy of the Nation" (15 U.S.C. & 631).

The Small Business Act also recognizes that this policy is directly tied to the health of the nation's Industrial Base. This policy is reflected in Part 19 of the FAR.

A small business must meet the following criteria to qualify under SBA requirements:

- Meets SBA industry-specific size standards
- Is organized for profit;
- Has a place of business in the U.S.;
- Operates primarily within the U.S. or makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor;
- Is independently owned and operated; and
- Is not dominant in its field on a national basis. (SBA, 2015)

Since its creation, the role of the SBA has grown significantly through the creation of programs designed to assist the development of small businesses. These programs include financial assistance through loan guarantees and bonding programs; federal contract procurement assistance, management assistance, and specialized outreach to women, minorities and armed forces veterans.

The federal government has implemented two policies—the so-called "Rule of Two" and small business "set-aside" goals—in order to ensure that that small businesses are provided the opportunity to compete for federal contracts.



The "Rule of Two"

According to Federal Acquisition Regulation (FAR) 19.201 the government shall provide "maximum practicable opportunities in its acquisitions to small business" In fact, federal agencies' contracting officers *must* set aside any and all acquisitions above the micro-purchase threshold of \$3,500 provided that there is a reasonable expectation, based on market research, that offers from at least two responsible small business concerns will be received at fair market prices (FAR 19.502). Any decision to *not* set aside a particular acquisition must rely on objective facts, and not the mere discretion or speculations of the contracting officer.

Enforcing the "Rule of Two"

In 1998, application of the 'Rule of Two' became the subject of a significant ruling in the implementation of small business set asides. At issue was a solicitation for "mobile reuse centers" for the storage of hazardous materials. The initial solicitation was unrestricted—i.e. subjected to full and open competition. A small business, *Safety Storage, Inc.*, wrote to the contracting agency requesting the solicitation be reissued as a small business set aside. The letter identified similar products that *Safety Storage* and another local business had manufactured for a number of years.

The contracting agency, Defense Industry Supply Center, rejected *Safety Storage's* request, arguing that small businesses had never manufactured the mobile reuse centers with the requested specifications. *Safety Storage* protested the decision to the Government Accountability Office (GAO).

In its ruling, the GAO concluded that "the record does not show that the contracting officer reasonably investigated whether the procurement could be set aside for exclusive small business participation." Specifically, there was no evidence to suggest that the small businesses were incapable, technically or otherwise, of testing and supplying the mobile reuse centers. Furthermore, the GAO found that the contracting officer had failed to contact the small businesses that responded to the solicitation, the SBA, or the agency's Small Business Utilization Specialist. Significantly, the GAO ruled that *any determination against a set-aside must be supported by objective facts* and that that burden had not been met.

The GAO's decision in the *Safety Storage* case lent strength to the FAR's 'Rule of Two.' Subsequent rulings have clarified what constitutes sufficient cause to reject a set-aside, including prior procurement history, market surveys, and on-site review by



Set-Aside Goals

In addition, each year the government sets a government-wide small business prime contracting goal. The initial government-wide goal for small business procurement, established in 1988, was set "at not less than 20 percent of the total value of all prime contract awards." In 1997, the goal was raised to 23%.

In 2013, the government achieved the 23% goal for the first time since 2005, prompting the Small Business Administration (SBA) to assert that "When we hit our small business procurement target, it's a win…small businesses get the revenue they need to grow and create jobs, and the federal government gets the chance to work with some of the most responsive, innovative and nimble companies in the U.S." (Harrison, 2014).

It should be noted that the goal was met even though spending on contracting with small business actually declined in 2013. The goal was met again in 2014 and 2015. The goal was again met in 2014 and 2015 despite, and likely because of, the continued decline in contracting with traditional firms (see Figure 2). That the government has met its target as of late does not, then, suggest that the overall health of small business has improved.

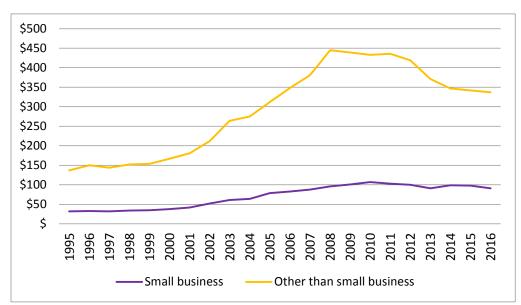


Figure 2. Federal contract spending, action obligations in then-year \$billions, 1995-2016 (analysis of FPDS data)



The government also establishes government-wide goals for small-disadvantaged businesses, and women-owned small businesses, historically-underutilized businesses zones (HUBZone) service-disabled veteran-owned small businesses. There is also a governmentwide small business subcontracting goal and subcontracting goals in each of the aforementioned categories. The 2015 set-aside goals and levels of achievement are shown in Table 1.

Category	Prime Contracting	Prime Contracting	Subcontracting Goal	Subcontracting Achievement
	Goal	Achievement	Guar	Achievement
Small Business	23.00%	25.75%	34.03%	31.30%
		(\$90.7B)		
Women Owned Small	5.00%	5.05%	5.00%	5.05%
Business		(17.8B)		
Small Disadvantaged	5.00%	10.06%	5.00%	10.06%
Business		(\$35.4B)		
Service Disabled Veteran	3.00%	3.93%	3.00%	3.93%
Owned Small Business		(\$13.8B)		
HUBZone	3.00%	1.82%	3.00%	1.82%
		(\$6.4B)		

Table 1. FY2015 Government-wide small business procurement goals and achievement (SBA, 2016)

Current law also requires that federal agencies, in collaboration with the SBA, establish their own goals biannually in each of the categories listed in Table 1. The goals vary widely by agency. Table 2 lists the 2015 goals of ten agencies in the small business prime contracting and subcontracting categories.

Prior to finalizing each agency's goals, the SBA determines whether the goals, in the aggregate, meet or exceed the government-wide statutorily mandated goals in each of the categories. The critic might question why agency goals are subordinated to government-wide goals, rather than used to inform, if not justify, the government-wide targets.



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE School of Policy University of Maryland

Agency	Prime Contracting	Subcontracting Goal
	Goal	
Department of Agriculture	53.00%	23.00%
Department of Defense	21.60%	36.00%
Department of Education	20.00%	33.00%
Department of Energy	6.00%	50.00%
Department of Homeland Security	32.00%	41.00%
Environmental Protection Agency	40.00%	55.00%
General Services Administration	32.00%	29.00%
NASA	17.00%	36.00%
Office of Personnel Management	25.00%	55.00%
Small Business Administration	69.00%	7.00%

Table 2. Select agencies FY 2015 small business procurement goals (SBA, 2016)

Although the DoD has had trouble meeting its small business goals in the past, it met and exceeded its departmental goals for small business contracting for the first time in FY 2014 (Figure 3 compares the small business contracting goals for the DoD to the actual awards). This achievement is attributed to the increased focus placed on small business contracting with the Better Buying Power Initiatives (Roulo, 2014). Also, since 2011, small business goal achievement has been included in SES performance appraisals, for all functions related to acquisitions. It is not clear if these explain this recent surge, but it is clear that a great deal of emphasis has been placed on meeting the small business contracting goals.

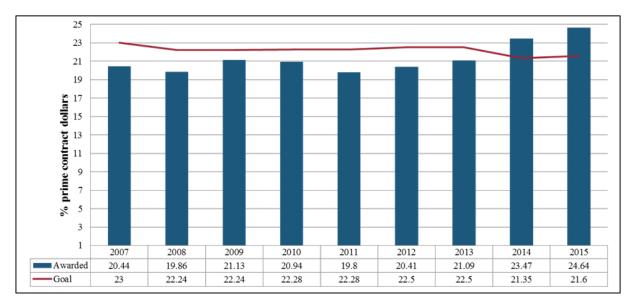


Figure 3. DoD Small Business Goals and Achievement



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE SCHOOL OF POLICY UNIVERSITY OF MARYLAND The SBA provides each agency with an annual performance scorecard that lists achievement in each category along with an overall grade, using a methodology that heavily weights prime contracting achievement. An agency's grade is composed of three quantitative measures: prime contracts (80%), subcontracts (10%), and its "progress plan" for meeting future goals (10%; SBA, 2016). Accordingly, comparing their letter grades cannot reveal which agencies relied more heavily on small business to meet their procurement needs. Below is the DoD's 2016 small business procurement scorecard.

Department of Defense FY2015 Small Business Procurement Scorecard			A 106.34%
FPDS-NG Prime Contracting Data as of Feb. 20, 2016 eSRS Subcontracting Data as of Mar. 14, 2016			
Prime Contracting Achievement:			88.02%
	2014 Achievement	2015 Goal	2015 Achievement
Small Business	23.47%	21.60%	24.64% (\$52.4 B)
Women Owned Small Business	3.97%	5.00%	4.43% (\$9.4 B)
Small Disadvantaged Business	8.95%	5.00%	9.53% (\$20.2 B)
Service Disabled Veteran Owned Small Business	3.04%	3.00%	3.45% (\$7.3 B)
HUBZone	1.93%	3.00%	1.87% (\$4.0 B)
Subcontracting Achievement:			8.46%
	2014 Achievement	2015 Goal	2015 Achievement
Small Business	33.20%	36.00%	32.30%
Women Owned Small Business	5.70%	5.00%	5.30%
Small Disadvantaged Business	4.60%	5.00%	4.40%
Service Disabled Veteran Owned Small Business	2.10%	3.00%	2.00%
HUBZone	1.50%	3.00%	1.40%

Table 3. DoD's 2016 small business procurement scorecard

To summarize, small business participation is governed by two sets of policies that some consider to be redundant—the government's qualitative ("Rule of Two") and quantitative objectives (numerical set-aside goals). As indicated previously, agencies are already required to rely on small business to the "maximum extent practicable," and any decision to *not* set aside a particular acquisition must rely on "objective fact." However, the numerical goals incentivize federal agencies to look for additional opportunities for small business.



SBA Size Standards

Interpreting the significance of small business procurement goals is further complicated by the fact that the very definition of small business (specifically, industry size standards) vary by industry and change periodically.

For instance, analysis of data from the Federal Procurement Data System (FPDS) reveals that in FY 2011, well over 250 small engineering services firms "graduated" from the small business ranks upon exceeding the relevant size standard of \$4.5 million in annual revenue. In FY 2012, the SBA revised the standard to \$14 million (one of thirty such revisions implemented in 2012).

In January 2014, *Civil and Structural Engineer* published an article entitled "Congratulations! You're 'small' again!" Echoing observers' comments in other affected industries, the article noted that the increases were good news for many firms "that until recently were too big to be small, but not big enough to compete with truly large firms for federal procurements." The increase in the thresholds, however, "is generally not good news for firms that are still slightly too large to qualify under the new thresholds because many of their somewhat small competitors will now have competitive advantages that the federal government bestows on small firms." For larger businesses, the new thresholds can appear somewhat arbitrary and unfair.

The SBA devises size standards which are expressed as the average number of employees over the past 12 months *or* average annual receipts over the past three years. The size standard varies by NAICS industry and is dependent on an SBA methodology that analyzes five primary factors within each industry: average firm size, degree of competition within an industry, startup costs and entry barriers, distribution of firms by size, and small business share in federal contracts.

NAICS Codes

The North American Industry Classification System (NAICS) is the standard used by federal statistical agencies, including the SBA, in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. NAICS recognizes 20 industry sectors, which are separated into 99 subsectors, 312 industry groups, and over 1000 industries, each of which is assigned a six-digit code.



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE School of Policy University of Maryland Contracting officers classify each and every solicitation by an industry-level NAICS code that, by their determination, describes the principal purpose of the product or service. Accordingly, a business that qualifies as "small" under one or more NAICS codes may not qualify under others. As one might imagine, the procuring agency must carefully consider each NAICS code designation. Erroneously assigned codes constitute valid ground for bid protests, which can be costly for the government.

However, NAICS code selection can be a subjective endeavor. McVay (2009) provides an example which would be comical in its banality if not for its real-world implications. He writes that "if a contracting officer decides to set aside a contract for paperboard boxes, should he categorize the boxes as 'Setup Paperboard Boxes' (NAICS code 322213), which has a size standard of 500 employees, or as 'Folding Paperboard Boxes' (NAICS code 322212), which has a size standard of 750 employees?" (p. 185). The most prevalent size standard for manufacturing industries is 500 employees; for service industries, it is \$7 million in average annual revenue over the previous three fiscal years. Table 4 shows the size standard used within six industries where federal contracting is highly concentrated.

Industry	Employees	Receipts
Commercial and Institutional Construction	N/A	\$36.5M
Computer-related services	N/A	\$27.5M
Engineering Services	N/A	\$15.0M
Petroleum Refineries	1,500	N/A
R&D in the Sciences	1,000	N/A
Precious Metal Wholesalers	100	N/A

Table 4. SBA size standards in select industries (SBA, 2016)

McVay (2016) writes that "while a business with 500 employees or 7.0 million in gross revenue may not seem small, the purpose of setting the size standard at these levels is to allow small businesses to grow into thriving 'medium' businesses before losing the benefits of their small business size status" (p. 185). Though well-intentioned, one might question whether a small defense engineering firm, upon exceeding the \$35 million size standard, is adequately positioned to compete with the likes of General Dynamics, Raytheon, Boeing, or Lockheed Martin whose annual revenues exceeded \$12 billion, \$13 billion, \$19 billion, and \$35 billion respectively.



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE School of Policy University of Maryland As one might expect, the top small business recipients of federal contracting dollars operate, at least partially, in industries for which the size standard is expressed as number of employees. Typically, these industries manufacture, or otherwise provide, relatively expensive products. Table 5 lists the top small business recipients of federal contracting dollars in FY 2016.

Small Business	Location	Primary Industry	FY2016 Set- Asides
Atlantic Diving Supply, Inc.	Bridgewater, VA	Service establishment wholesalers	\$1.07B
Coins 'N Things, Inc.	Virginia Beach, VA	Precious metal wholesalers	\$860M
Sunshine Minting, Inc.	Coeur D'Alene, ID	Precious metal wholesalers	\$708M
Precious A-Mark Metals, Inc.	Santa Monica, CA	Precious metal wholesalers	\$576M
Mythics, Inc.	Virginia Beach, VA	Computer and software stores	\$415M
Carahsoft Technology	Reston, VA	Software publishers	\$304M
Iron Bow Technologies	Chantilly, VA	Electronic computer related services	\$304M
Torch Technologies, Inc.	Huntsville, AL	R&D in the sciences	\$261M
Alvarez & Associates, LLC	Tysons Corner, VA	Other computer related services	\$256M
Red River Computer	Claremont, NH	Other computer related services	\$250M

Table 5. Top ten small business recipients of federal contracting dollars in FY 2016 (analysis of FPDS data)

Subcontracting Rules

Current law requires that when a small firm teams with a large firm to bid on larger contracts, the former is required to perform a certain percentage of the work. This law is in place to prevent small business from acting as a pass-through for larger firms seeking to exploit set-aside regulations.



Limitations on Subcontracting

FAR 52 states that small businesses agree, as a condition to contracting, that for **Services** at least 50% of the cost of performance will be expended for employees of the concern; for

Supplies, at least 50% of the cost of manufacturing the supplies, excluding the cost of materials, will be performed by the concern; and that for

General construction, at least 15% of the cost of the contract, excluding the cost of materials, will be performed by its own employees.

In June of 2016, the SBA implemented a new rule whereby a small business prime contractor can "take credit" for work performed by "similarly-situated" subcontractors. According to the SBA, a similarly-situated subcontractor is "a small business subcontractor that is a participant of the same small business program that the prime contractor is a certified participant" (e.g. woman-owned, HUBZone, etc.) and "which qualifies the prime contractor to receive the award." This new rule allows small business prime contractors to perform less than the mandated performance percentages, provided that the subcontractor(s) are "similarly-situated."



III. Small Business Representation in Federal Contracting

NAICS recognizes 20 industry sectors, listed in Table 6; Figure 4, below, depicts FY 2015 federal contract obligations by industry sector. The first thing to notice is that federal procurement is highly concentrated by sector, with manufacturing; professional, scientific, and technical services; construction; and administrative support accounting for more than 80% of procurement.

Agriculture, Forestry, Fishing and Hunting	Real Estate and Rental and Leasing
Mining, Quarrying, and Oil & Gas Extraction	Professional, Scientific and Technical Services
Utilities	Management of Companies and Enterprises
Construction	Administrative and Support
Manufacturing	Waste Management and Remediation Services
Wholesale Trade	Educational Services
Retail Trade	Health Care and Social Assistance
Transportation and Warehousing	Arts, Entertainment and Recreation
Information	Accommodation and Food Services
Finance and Insurance	Other Services

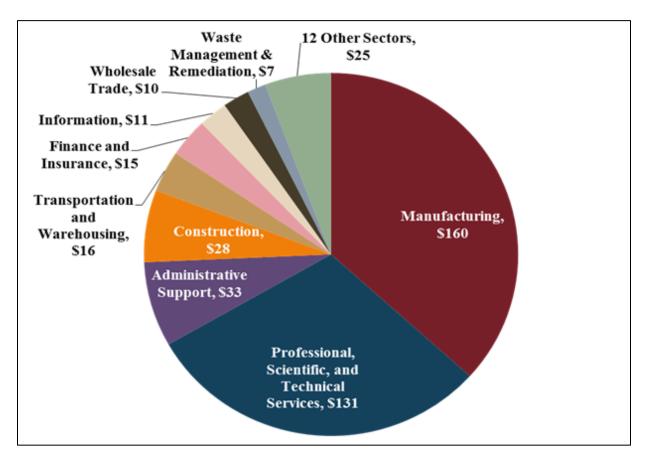


Table 6. 20 NAICS Industry Sectors

Figure 4. FY 2015 Total federal contract obligations by industry sector (analysis of FPDS data)



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE School of Policy University of Maryland

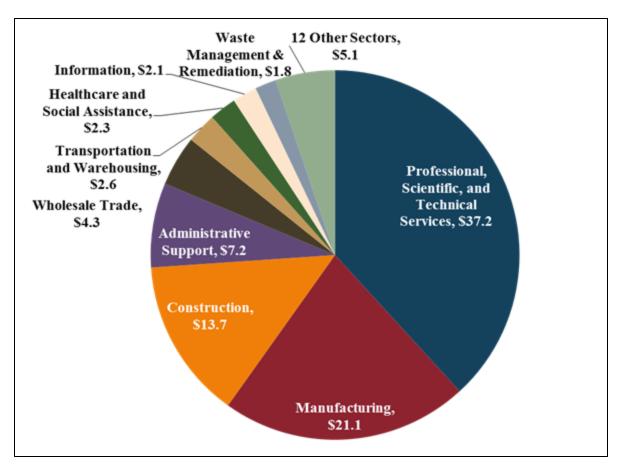


Figure 5. FY 2015 Small business federal contract obligations by industry sector (analysis of FPDS data)

Figure 5 depicts small business federal contract obligations by industry sector. Though the same four sectors dominate, their relative sizes differ significantly. Two sectors, construction and professional, scientific, and technical services account for relatively larger pieces of the small business pie; manufacturing accounts for a noticeably smaller piece. Figure 6 compares the relative sizes of the four major sectors in each of the two procurement spaces (i.e. small business and "other than small business").



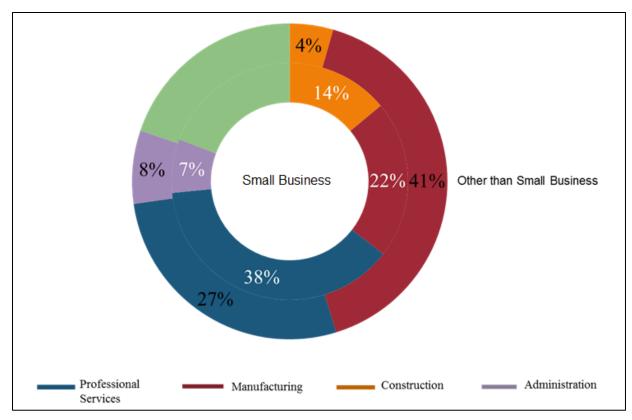


Figure 6. Sectoral composition, small business vs. other than small business, percentage of FY 2015 action obligations (analysis of FPDS data)

The Small Business Potential

Small businesses are represented in virtually every industry sector. Indeed, over 99% of U.S. firms are small businesses (SBA, 2015). However, they tend to thrive in industry sectors that require low levels of capital investment. The mismatch between small business capabilities and government requirements represents a growing, albeit long-standing problem. In 1961, Frederic Suss, discussing the technological developments of the "fast moving space age," summed it up as follows.

As the area in which the small business can compete—commonly termed the small business potential—receives a smaller share of the procurement dollar, small concerns must receive a larger share of the potential in order to maintain that share of the entire "pie." Yet since there is a limit to the portion of the small business potential which small firms can capture, they have received less and less of the entire "pie." (Suss, 1961, p. 360)

As Suss indicates, within the government a great deal of the "spend" is often not suitable for small businesses. For example, the federal government contracted close to \$35 billion for



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE School of Policy University of Maryland aircraft manufacturing in FY 2015. Only \$718 million, or two percent, was awarded to small businesses (analysis of FPDS data, 2015).

Table 7 depicts the relationship between total federal procurement within each sector and the small business share within that sector. The table shows, for example, that four percent of all federal contract obligations fall within the transportation and warehousing sector. Of that four percent, or \$16 billion, in total federal contract obligations, 17%, or \$2.6 billion, is obligated to small business.

Sector	Total	Small
	contract	business
	obligations	share
Manufacturing	37%	13%
Professional, Scientific, and Tech	30%	29%
Services		
Administrative Support	8%	23%
Construction	7%	47%
Transportation and Warehousing	4%	17%
Information	3%	23%
Finance and Insurance	3%	3%
Wholesale Trade	2%	42%
Waste Management and Remediation	1%	26%
Healthcare and Social Assistance	<1%	37%
Education Services	<1%	24%
Retail Trade	<1%	37%
Other Services	<1%	27%
Real Estate and Rental and Leasing	<1%	43%
Agriculture, Forestry, Fishing, & Hunting	<1%	76%
Accommodation and Food Services	<1%	20%
Utilities	<1%	9%
Mining, Quarrying, Oil and Gas Extraction	<1%	58%
Arts, Entertainment, and Recreation	<1%	67%

 Table 7. Federal procurement by sector and the small business share, FY 2015 (analysis of FPDS data)



Increasing the small business opportunities within the ten sectors where federal procurement is below one percent of the total will have minimal impact on the overall small business share, especially given that in eight of these "minor" sectors, small business is already well represented. In terms of federal procurement, small business dominates the agricultural sector, with 76% of all dollars (in FY 2015) awarded to small business, but this figure translates to only \$318 million, or less than 1% of the government's procurement spending.

The table makes it clear that any effort to increase the small business share of federal contracting dollars must be directed within the first four or five sectors, where the overall level of federal procurement is relatively high. However, there are challenges in this regard. In the construction sector, for example, nearly half—47%— of all contracting dollars already flow to small business, a figure well above SBA's government-wide small business contracting goal of 23%. As for manufacturing, recent statistics confirm that the oft-politicized decline in domestic manufacturing is particularly acute within the small business ranks (see Table 8).

	2007	2014	Percent Change	Change in Numbers
Total Firms	286,701	251,901	-12.14	-34,800
Less than 20 Workers	213,074	188,361	-11.60	-24,713
Less than 100 Workers	268,677	235,802	-12.24	-32,875
Less than 500 Workers	282,622	248,152	-12.20	-34,470
500 or More Workers	4,079	3,749	-8.09	-330

Table 8. Change in number of manufacturing firms by employment level (Small Business and
Entrepreneurship Council, 2016)

Moreover, the federal government spends the bulk of its contracting for manufacturing dollars in highly-specialized industries such as aerospace and weapon systems manufacturing. These industries require extensive capital investment, a large operating footprint, and far-reaching logistics networks. Accordingly, small business is not well represented in these industries. Table 9 shows the ten manufacturing industries in which FY 2016 federal procurement spending was greatest. Together, these ten industries account for over 70% (\$129



billion) of all procurement spending in the manufacturing sector; yet less than half of one percent was obligated to small business.

Industry	Total Contact Obligations, (\$ billions)	Small Business Share (\$ billions)
Aircraft manufacturing	\$45	\$.75
Ship building and repairing	\$16	\$1.3
Guided missile and space vehicle manufacturing	\$14	\$.02
Other aircraft parts and auxiliary equipment manufacturing	\$13	\$1.3
Research, detection, navigation, guidance, aeronautical, and nautical systems	\$12	\$.51
Pharmaceutical preparation manufacturing	\$10	\$.22
Aircraft engine and engine parts manufacturing	\$6	\$.18
Petroleum Refineries	\$5	\$.98
Military Armored Vehicle, Tank, and Tank component manufacturing	\$4	\$.37
Ammunition (except small arms) manufacturing	\$4	\$.40

 Table 9. The ten manufacturing industries in which FY 2016 federal procurement spending was greatest

 (analysis of FPDS data)



Growth of Small Business in the Professional Services Sector

It seems, then, that the potential for greater small business procurement lies primarily in the professional services sectors and, to a (far) lesser extent, the administrative support and transportation and warehousing sectors. Figure 7 depicts small business trends in the four major sectors over that last decade.

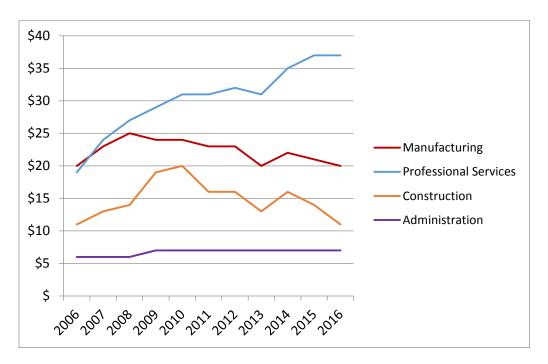


Figure 7. Small business share (action obligations in then-year \$billions) of federal contract dollars in the four major sectors (analysis of FPDS data)

In terms of small business representation, the graph indicates steady growth within the professional services sector. It is of note that these trends are not necessarily representative of federal procurement in general. Figure 8 shows trends in federal contracting, excluding small business, in the same four sectors. Even as total spending on professional services has decreased approximately 25% from its high, the small business share in that sector has increased approximately 20% during that same period.



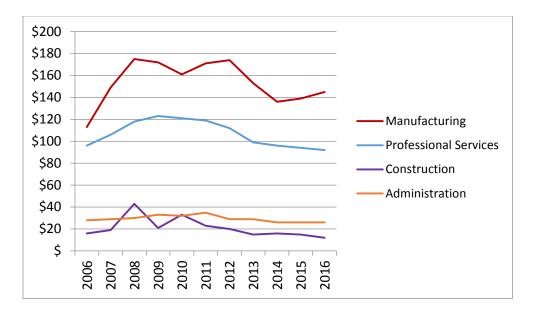


Figure 8. Federal contracting (action obligations in then-year \$billions) in the four major sectors, excluding small business (analysis of FPDS data)

It is clear that small business has lost ground in the construction and manufacturing sectors, but has gained steadily in the professional, scientific, and technical services sector. Figure 9 shows the growth of the small business share of federal contracting dollars in the professional services sector over the last decade, from 15% in 2006 to 29% in 2016.

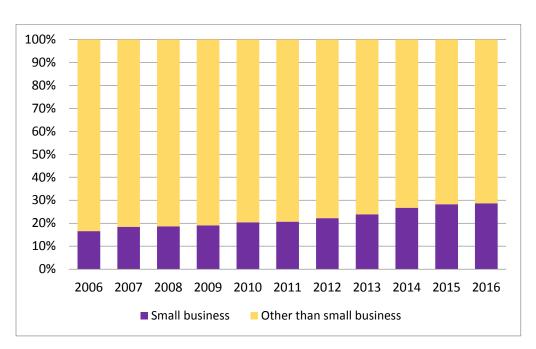


Figure 9. Small business participation in federal contracting, professional services sector, percentage of action obligations (analysis of FPDS data)



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE SCHOOL OF POLICY UNIVERSITY OF MARYLAND As Table 5 indicated, within the context of federal contracting, there are very few industry sectors capable of absorbing new small businesses. Accordingly, and as recent trends suggest, SBA set-aside policy will have the effect of concentrating more federal contract spending into the growing professional services sector. In the next section we explore the potential unintended consequences of SBA policy, relating individual small businesses' perspectives to the data that has been presented.



THIS PAGE INTENTIONALLY LEFT BLANK



IV. Unintended Consequences

In the previous section, it was demonstrated that SBA set-aside policy has the effect of concentrating spending into the professional services sector. In this section, we highlight the unintended consequences that result from this concentration, as well as from SBA policies generally. For small firms, these can include uneven and unsustainable growth and significant barriers to entry; for government, unintended consequences can take the form of contracting and economic inefficiency.

In an effort to contextualize our findings, we present the perspectives of professional services providers (small and mid-size) as well as government officials. In both cases, their identities have been anonymized in order to solicit candid responses.

It should be noted upfront that all of the participants conveyed a favorable view of the *concept* of small business set asides. One small firm remarked that its view of set asides was

Absolutely positive...It allows us to compete on a more level playing field. I think it's been a great program. You look at the numbers of small businesses in the United States, [and] you hear time and time again that so much of the income and GDP comes from small businesses.

Another noted *that "if you didn't have set asides, then you wouldn't be able to seed companies.*" However, when it came to the specific content of set-aside policy and its implementation, perspectives were more nuanced.

Uneven and unsustainable growth

Set-asides may enable the small business to grow more rapidly than it otherwise would. This growth may be uneven and unsustainable. Because the small business may have difficulty developing adequate depth in the provision of capabilities and other necessary business functions in such short order, large contracts have the potential to overwhelm its infrastructure and capacity. This is an increasingly likely outcome given that small businesses are also being awarded both a higher number and greater percentage of large contracts in the professional services sector (see Figure 10), a trend that is not seen in small business procurement generally. In 2006, small business received approximately five percent of contracts over \$25 million; by 2016, the figure increased to over 16%, a 3 fold increase.



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE School of Policy University of Maryland

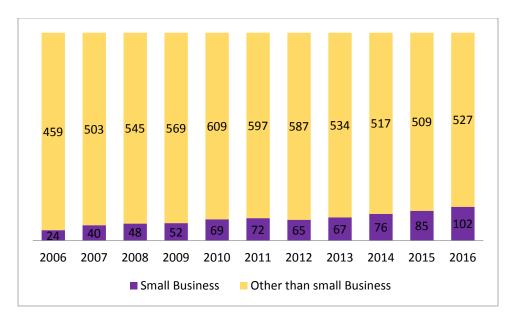


Figure 10. Number of large contracts (> \$25 million) awarded annually in the professional services sector (analysis of FPDS data)

One mid-size business with whom we spoke offered the following perspective:

Right now, [government agencies] are just managing against numbers. They're managing against quotas and objectives. I think that what's needed is a healthy step back to try to understand what it is we're trying to accomplish. I don't mind having small businesses get a priority for some prime contracts, but having a small business award that is a hundred million or two hundred million a year is just ludicrous. It's totally ludicrous.

As successful small businesses increase their annual revenues, graduating from certain NAICS codes, they must look to compete for government set-asides in other categories, often those whose size standards are expressed in number of employees. There are three NAICS codes in the professional services with size standards expressed in number of employees: research and development in biotechnology (1,000); research and development in the physical, engineering, and life sciences; and information technology value added resellers (1,000).

However, this transition may require that the small business reorient its business model, relinquishing the sought-after capabilities that made it successful in the first place. Clearly, this outcome represents a loss to both the firm and the government.



One small firm, whose yearly revenues recently began to exceed the 27.5 million size standard, had this to say:

[In areas such as] software development, cybersecurity, [and] IT networking, we have to look to basically be a sub. We can't really compete for that work any longer, even [with regard to] our prime contract today...we can't re-compete for our own work there because of the NAICS code [size standards].

Indeed, this same firm decided to reorient its business model in order to pursue contracts in other NAICS codes:

We're focusing now on other parts of our business where we do engineering services work, [which has] a higher NAICS code and [and] research and development programs. [But] these potential prime opportunities...require a business shift for us as far as the talent that we have on board. All IT people aren't necessarily R&D people.

Another option, of course, is to compete in the full and open category alongside established mid-size firms and defense industry giants. Often, graduating small businesses are not well positioned to succeed in this environment. According to Rep. Gerald Connolly (D-VA): "Innovative, high performing small businesses are becoming victims of their own success – graduating from small business programs only to find themselves in the untenable position of facing off against multi-billion dollar firms" (Weigelt, 2013).

For instance, Deepak Hathiramani, founder of Vistronix Inc., a Reston, Virginia, technology support services company, was so unprepared for the challenges of a mid-tier contractor that his company stumbled after growing to \$30 million in annual revenue. Vistronix had only 15 employees when it landed its first government contract in 1994. For nearly a decade later, it thrived on winning small business set-aside contracts providing computer systems integration for civilian agencies. By 2003, it was competing against much larger corporations for government work. Vistronix was unable to successfully transition into its mid-tier status and lost work to its larger rivals. Its annual revenue dropped from \$30 million in 2002 to only \$13.5 million in 2004. Additionally, its work force declined to fewer than 200 employees, from 400. When small firms become mid-size, they suddenly face a broader range of challenges without any type of government assistance. The challenges



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE SCHOOL OF POLICY UNIVERSITY OF MARYLAND include inadequate access to sufficient capital, and international competition (Maltby, 2011). A former senior OSD official captured an all-too-common scenario:

If, as a rule, losing one contract or losing two contracts will bankrupt a company, then that's not a healthy situation...The basis ought to be what helps the US to have more businesses that are healthy enough to survive without special benefits. That's a problem [graduating] because businesses need to grow more slowly. I've seen lots of small businesses grow too much too fast, and not be able to digest it; then either become a not very good company or quickly become other than small basically before they're ready.

Small businesses are exempt from having comprehensive management information tools and infrastructure as part of their business operations. Thus, small businesses may only have basic financial management tools to manage their cost accounting. When they graduate, government contracts often require more comprehensive financial and management systems, and the people to operate these systems. All these requirements generally add to overhead costs, which graduating small businesses have not previously included.

Some small businesses may pursue yet another option: choose to limit growth and remain small to avoid disqualifying themselves for small business set-aside contracts. Rather than pursue growth and diversification so as to become independent and financially robust, they remain dependent on subsidized federal contracts to survive. These "permanent small businesses" may become quite adept in this environment over time. According to one small business executive:

I met with another small business owner...and you won't believe this. He said "I'm in it for the nine years. I'm a retired army guy and I've also got a background so that I can be a [small disadvantaged business]. My intent is to grow it for nine years, make all the money I can and then let it die."

Needless to say, this outcome is antithetical to the SBA set-aside program's primary goal to encourage small businesses to hire more employees and grow.

Barriers to entry

As discussed, SBA polices create market distortions by, in effect, mandating that federal agencies look increasingly to small business to fulfill their professional services requirements in order to meet SBA targets. Complicating matters further is DoD's shortage of experienced



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE School of Policy University of Maryland acquisition professionals. A retired senior Air Force contracting official summarized his perspective on acquisition personnel as follows:

There is an obvious challenge when you take people who do not possess the depth of experience and you rush them into positions commensurate with elders who have held 15 years' worth of experience before they came into the same position. There are some obvious challenges with experience level, education and training. There are institutions out there that are trying to tackle those challenges, but textbooks and classroom training can simply not replace repetition and experience.

In an effort to circumvent the lengthy solicitation process, government agencies have turned increasingly to multiple-award indefinite delivery / indefinite quantity contracts (MA/IDIQ), often in the form of Government-wide Acquisition Contracts (e.g. the GSA's OASIS and Alliant contracts) or single-agency multiple award contracts (e.g. the Air Force's NETCENTS). Total procurement obligations under multiple-award contracts exceeded \$80 billion in 2011, double the amount in 2006 (Robinson, 2013).

Another reason that the government has turned to MA/IDIQs is to avoid bid protests i.e. a challenge to the award of a contract, typically lodged by a competitor—which have increased significantly over the last decade from 1,352 to 2,561 in 2014 (GAO, 2015). In fact, the number of annual bid protests ticked up by five percent alone in 2014, an increase that is not insignificant, considering the overall decrease in procurement spending (Burton, 2015).

Often, agencies rely on two variants of a contract, one that is reserved exclusively for small business participation and one that is "unrestricted." Small businesses that are awarded MA/IDIQ contracts compete against other small businesses for individual task orders placed by government customers. These customers often view MA/IDIQ contracts as "one stop shops" that enable them to quickly and easily meet both their professional services needs and their SBA-negotiated small business goals.



OASIS and Contracts Consolidation

In 2013, the GSA launched its One Acquisition Solution for Integrated Services (OASIS) in response to federal agencies' requests for a more efficient process by which to hire professional services contractors... OASIS is a family of seven separate Government-wide, MA/IDIQ task order contracts spanning 28 NAICS codes and six exceptions. There are two versions of each of these contracts: one that is unrestricted and another that is reserved for small business. The contracts are referred to individually as "pools." Each of the seven small business pools is designated by a size standard. For instance, "Pool 1" consists of 21 NAICS codes that share the \$15 million size standard; Pool 4 consists of two NAICS codes, both in R&D, that share the 1,000 employee size standard When issuing an RFP under the OASIS Program, only one contract version (OASIS unrestricted or OASIS Small Business) and only one pool can be solicited.

Because OASIS has no program ceiling and a relatively long period of performance— a fiveyear base and one five-year option—the vehicle allows government customers to make long term plans to meet their program requirements. Moreover, agencies can reserve task orders for exclusive competition among small business categories (e.g. woman-owned, HUBZone) in order to meet their SBA goals.

In small business circles, however, OASIS has been the cause of much controversy and consternation. Over the last three years, over \$1.3 billion in DoD contracts alone has been transferred to OASIS, causing the abrupt displacement of numerous small businesses whose contracts are now performed by a relatively small group of 136 OASIS SB awardees.

But because MA/IDIQs tend to have relatively long periods of performance, often up to five years, and few "on ramps," the contracts tend to limit participation. A government contract officer with whom we spoke asserted that "SBSAs are giving small businesses work, but you have to be among the select few; there are some winners but there will be a lot of losers."

According to one small defense firm:

There are 80,000 small businesses [capable of] supporting DoD and you've got [only] 129 of them on OASIS. And the Army, Navy, and Air Force have decided all of their services work is going to OASIS. How does that support the small business industrial base? It kills it. That to me, I think, is tied to the number of protests and I think it's tied to shortages in contracting officers and agencies that are so tired of dealing with all the regulations that they're looking for an easy way out.

Ironically, firms that win these coveted MA/IDIQs may not view them all that favorably because they are required to, in effect, bid twice—once for the contract and again for



subsequent task orders—a process that can be onerous and expensive, especially for a small business.

One small firm executive categorized MA/IDIQ contracts as a "serious money drain," and stated that

We shy away from those [MA/IDIQ contracts] tremendously. Multiple reasons. One reason is that it runs up B&P [bid and proposal] costs. You're in proposal mode constantly. Also, we've seen most of those contracts go back to the incumbents time and time again. [And with] MA/IDIQs, there's no protest. It's not a friendly place for us to play.

Some firms assert that MA/IDIQ contracts are not structured to facilitate their growth. One firm with whom we spoke used to provide customized IT solutions through the Alliant GWAC. The firm noted that it had been "very successful on that contract." However, by the end of the contract's period of performance, the company had exceeded the \$27.5 million size standard. According to the firm:

We were no longer able to use that vehicle with which we were very successful. And there was no alternative. They didn't allow you on to what you might call the unrestricted, or the large business contract. They just said you're out, as if you had never won...

This firm's vice president noted that its revenues in FY 2014 and FY 2015 stood at \$82 and \$84 million, respectively. He stated that "this year we will close at \$50; next year we will probably close below that."

To be sure, MA/IDIQ contracts can offer benefits to small business awardees that traditional contracts cannot. According to 13 CFR 121.404 "If a business is small at the time of offer for the Multiple Award Contract, it is small for each order issued against the contract." Moreover, where a concern grows to be other than small, the procuring agency may exercise options and still count the award as an award to a small business. Accordingly, a small business that exceeds the relevant size standard upon winning one or two task orders can continue to compete throughout the life of the contract, which may span five, or even ten, years.

Take, for example, Amyx, a small business founded in 1999. The firm averaged approximately \$10 million per year in federal contracts between 2010 and 2013. The firm was one of the first awardees of the OASIS Small Business contract (Pool 1) when it was launched



in 2013. In January of 2017, Amyx was awarded its fifth task order under Oasis valued at \$189 million over five years (Peck, 2017). During the same time, Amyx was awarded other large, high-profile, contracts by the DLA. Despite having exceeded the relevant size standard, Amyx will continue to be able to compete for task orders in Pool 1 (\$14 million size standard) over the course of the next seven years.

To some, this is seen as patently unfair—as evidence that MA/IDIQs in particular, and SBA policy generally, favor a small cadre of successful firms at the expense of a much larger group that feels "shut out" from some of the federal government's most lucrative contracts. However, permitting these "mid-sized" firms to compete for small business task orders under MA-IDIQs might be viewed as an apt retort to the criticism that MA/IDIQs fail to facilitate firms' growth. What is clear, however, is that the consolidation of contracts into MA/IDIQs, especially GWACs, has widened the gulf between the haves and have-nots, the winners and the losers.



Figure 11. Number of pages of federal regulations (Mclaughlin, 2013)

In addition to the barriers to entry posed by increased reliance on MA/IDIQs, small businesses must grapple with an increasing number of federal regulations (see Figure 11). The total number of pages in the Code of Federal Regulations continues to climb, requiring



additional administrative attention by both the contractors and the federal acquisition workforce. In 2014, Congresswoman Eshoo asserted that the "thousands of pages of procurement regulations discourage small innovative businesses from even attempting to navigate the rules" (Eshoo Press Release, 2014). One small firm with whom we spoke expressed similar sentiments:

If you're in the business, you're used to it [navigating federal regulations]. But I pity a new business trying to break into the DoD marketplace with the tremendous amount of regulations and the low profit margins. It's a challenge...It seems like DoD seems to be a target for every new pet regulation. All of that ends up costing the taxpayer money. It's a challenge.

This firm also noted that

Just putting together a proposal, getting a clearance, a facility clearance, so that you can bid on something that may require access to classified information. These are almost insurmountable hurdles for companies that are small businesses.

According to another small business executive:

Brand new small businesses often have no experience with the federal government need to learn all of those regulatory hurdles. [This is] a very difficult, very challenging area for people who do not know it. And you see them violating the rules—not on purpose— and then being penalized. They have the [Federal Acquisition Regulations], but I don't know anyone beside the contracting officer who's actually gone through all of it.

The SBA Office of Advocacy has studied the impact of regulation on small businesses since 1995. In September 2010, the office released the study, which "demonstrated that small businesses bear a larger burden from regulations than large businesses" (Crain & Crain 2010). To date, little has been done to reduce the burden on small businesses.

Contracting and economic inefficiency

Critics have asserted that the timing of small business awards—concentrated at the end of the fiscal year—represents agencies' attempts to meet their annual contracting goals and/or obligate remaining agency funds (see Figure 12). By taking advantage of set-aside policy to bypass lengthy sourcing, agencies are able to obligate their remaining funds quickly. One small business with whom we spoke provided the following perspective:



You know that the fiscal year ends for the government in September 30. You also know that the federal government is not a business where they earn profit or a return on investment—their goal is to spend all of their money as fast as they can, so that they can continue to get the same level of funding. So when they get to around the August timeframe, they realize how much money they have left. If there are some things that they are interested in and a small business is able to bring that value to them, they can quickly put a sole source out and get rid of that money.

Needless to say, efforts made to spend funds quickly likely fail to maximize taxpayer value, representing yet another unintended outcome of set-aside policy.

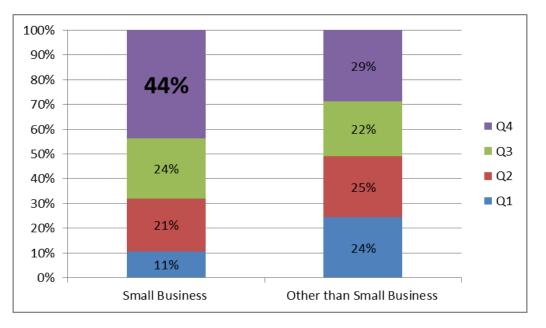


Figure 12. Timing of contract awards (\$), 10-year average, 2007-2016 (analysis of FPDS data)

NAICS code selection can be another source of inefficiency. With the increasing pressure to meet the small business set-aside goals, agencies, on occasion, use an inappropriate NAICS code.

For example, in July of 2012 the Small Business Administration Office of Hearings and Appeals (SBA OHA) published a decision in favor of Delphi Research, Inc., declaring NAICS code 541712—R&D in the physical, engineering, and life science—inappropriate for the subject procurement. Delphi alleged that NASA erred in assigning this NAICS code (size standard of 1,500 employees) because "the procurement here . . . does not call for the contractor to create new processes or products, and thus cannot properly be characterized as



research and development" (Koprince, 2012). SBA OHA ruled that NASA should have selected NAICS code 541513: Computer Facilities Management Services, (size standard \$25.5 million in average annual revenue; SBA OHA, 2012) because it accounted for the greatest percentage of the contract's value. Following the SBA decision, Delphi (which presumably had less than \$25.5 in average annual receipts), was able to compete against similarly-sized small businesses.

This is not an isolated example. In fact, the term "code shopping" has emerged to describe agencies' attempts to use NAICS codes with larger size standards, ostensibly in an effort to attract better, perhaps more experienced, professional services providers, yet still meet their small business contracting goals. Because NAICS codes within the professional services sector tend to be more open to subjective interpretation than codes in other sectors, and because professional services firms often provide diverse and varied services under a single contract, there is greater potential for code shopping within the growing professional services sector.

Set-aside policy also creates the potential for significant economic inefficiency within the professional services sector. As one mid-sized business executive observes:

The government is always prone, when it hears about any inequities, to create more categories, more numbers, more demographic barriers, or segments. We continue to see the proliferation of size standards and demographic categories. At some point you have to ask, does the creation of these categories become counterproductive? By segmenting the industry space, do you force turbulence? Do you force unnecessary churn in the market?

Under SBA set-aside policy, midsize and large professional services providers are declining as a share of the total, which can lead to higher prices as a result of less competition among established firms.

A Center for Strategic and International Studies (CSIS) study concluded that midsize firms (these were defined as firms which are too large to be categorized as small but had less than \$3 billion in total annual revenue) were being "squeezed" out of DoD contracts by both large and small contractors. CSIS found that from 1999 to 2009, the share of DoD contracts awarded to small businesses increased (from 17.0% to 17.4%) and to large firms increased



(from 47.0% to 53.7%), while the share awarded to these midsize firms decreased (from 36.0% to 28.9%; CSIS 2012).

Regarding the concentration of small firms in the professional services sector, a midsized defense firm with whom we spoke offered the following perspective:

It doesn't make sense to have all of our services business go to small business, because quite candidly, I'm not sure what that really does for the nation. To all of a sudden have these body shops that are now small businesses...well, these businesses often struggle.

The firm commented that its defense customers began to turn to small businesses in 2012 and 2013, when the government placed renewed emphasis on meeting set-aside goals. The firm noted that

As our contracts came up for re-compete, our customers were very up front about it. They said, 'hey, we don't want to go small business, we don't think it makes any sense. But we are being forced to go small business.' So we saw a very significant squeeze. A contract may have had 20 or 30 of our people and now it's up for re-compete; all of a sudden, it's going to be a small business contract.

There is currently renewed support for government assistance for mid-tier firms. Groups such as the Mid-Tier Advocacy (MTA), which describes itself as a non-partisan organization made up of the country's top veteran-owned, services disabled, hub-zone certified, minority-owned and woman-owned businesses are pushing the government to help small firms service the next phase of their business when they face off against the major federal contractors.

MTA lobbies for the recognition of mid-tier businesses as an industry-size category between large and small businesses. However, critics argue that additional legislation to protect mid-sized firms would provide a "permanent crutch," merely extending subsidies for small firms that have graduated but remain incapable of building their own infrastructure.

As discussed previously, when small firms serve as primes on large contracts, they can often face a disadvantage with their limited "reach-back" capabilities; the firm may not have the resources to contact other experts to answer questions, or help identify solutions. Consequently, larger firms may be better suited for some professional services contracts



CENTER FOR PUBLIC POLICY AND PRIVATE ENTERPRISE SCHOOL OF POLICY UNIVERSITY OF MARYLAND because they are more heavily capitalized with in-house test capabilities and services. According to one retired senior Air Force contracting official:

I do not believe, in many cases, that these small firms [have the reach back capability]. When I look at the magnitude of some of these efforts that have been put on to the backs of small businesses, I don't believe they have the full capability of performing it. In many cases, they don't have the financial wherewithal; they're not capitalized sufficiently to provide certain types of capabilities that the government has qualified as services.

When the small prime lacks the infrastructure and capabilities to perform the contracted effort, it may turn to a large, experienced firm for the subcontracted effort (limited by law to 49% of the contract). This puts the large firm in a rather awkward position, as it is now being "managed" by the small firm, even though it likely possesses more expertise and depth. Some argue that this arrangement increases costs to the government by effectively increasing the overhead rate that it pays (Hillmer, 2012). The intent of the small business set-aside programs is to grow small, and, in many cases, disadvantaged businesses to become competitors for additional contracts. When these companies exist simply as shells or as "pass-throughs," they fail to meet the objectives of the SBSA program. According to a senior defense official:

Anytime the small business is working in name only, this causes the DoD to simply pay a mark-up fee of 2% to 8%. This is detrimental and unfair to the taxpayer when we blindly give work to smalls...and that's when you get the shell companies to emerge.

Until recently, such a heavy reliance on a large teammate also diminished the opportunity space for other small firms to participate in that the small firm was required to perform 51% of the work; on the other hand, a large prime contractor could spread a greater percentage of subcontracted work among a greater number of small firms. As discussed previously, the SBA implemented a new rule whereby a small business prime contractor can "take credit" for work performed by "similarly-situated" subcontractors thereby allowing small business prime contractor(s) are "similarly-situated" small firms. This rule is a step in the right direction.



The SBA's subcontracting goals for prime contractors may also generate inefficiency. One firm, a mid-sized firm, describes a situation in which it was subcontracted to support a major defense contractor. However, in an effort to meet its subcontracting goals, the defense contractor encouraged the firm to partner with a small business who would lead the effort. Unfortunately, the firm came to find that "the small business just didn't have that heritage, so they couldn't hire the people" The small business told the firm that "your people will have to switch badges and come to us or else we're going to lose the contract." According to the firm, "It was just a constant battle trying to help them [the small business] be successful, and yet their primary objective was to take as many of our people as they could." For mid-sized firms who are already feeling "squeezed," this is an unfortunate outcome.

There are other reasons why small business may not provide government with the best value:

- *Higher regulatory cost:* An SBA study shows that businesses with 20 employees or fewer pay 36 percent more per employee on fixed regulatory costs than large business counterparts (Crain, 2010).
- *Reduced buying power*: Small businesses do not have the benefits of a large businesses' "buying power," and this contributes to higher overhead and fringe benefits costs
- *Fewer employees*: Small businesses are often "top heavy", and have much fewer direct-charge employees against which to spread government regulatory costs (noted above)
- *Difficulty obtaining financing*: Small businesses have more difficulty securing low-cost financing, which can increase contract start-up costs.



V. Findings and Recommendations

Within the DoD, small business procurement is not evenly distributed across industry sectors; rather it is increasingly concentrated in a few sectors, including, most notably, the professional services sectors. Consequently, small business set-aside policy, in its current implementation, can result in unintended consequences for small business and for government. The following is a summary of our findings:

- Although DoD has generally had difficulty achieving its small business goals, the department has exceeded its goal for the past two years in a climate when spending has generally been decreasing. One can only hope the goal isn't being achieved at the expense of mission performance.
- Since much of the DoD's spending in unsuitable for small business, agencies' meet their small business contracting goals by increasing their spending in the professional services sector. This results in decreasing the demand for established, and often better qualified, mid-sized and large firms, as well as graduating small businesses.
- The burden imposed by a large and increasing number of federal regulations often places a greater toll on small businesses.
- Some small professional services providers are receiving larger contracts, hastening their growth trajectory such that they are no longer eligible for set-asides; often, these providers lack the capability to compete under free and open competition.
- This trend also means that in many cases small business must subcontract with a large business that will perform work in areas where the small business has limited capabilities. In some instances, the small business acts as "a pass-through" that offers limited or even negative value to government.
- The proliferation of small firms in the professional services sector, combined with a declining acquisition workforce, has fueled increased reliance on multiple award contracts. This then often favors a select small group of small firms, but shuts out many others.
- Government agencies, on occasion, have resorted to the practice of "code shopping" in an effort to obtain the best of both worlds: the services of a larger, more qualified, "small" business *and* credit towards their small business contracting goals. This offers the benefits of the SBSA program to unintended recipients.
- The majority of small business contracts are awarded in the 4th quarter of the fiscal year. The reasons for this are unclear. However, when government agencies obligate funds quickly, the result may not be in the best value to the government.
- The complex regulatory environment, especially within the DoD, SBA size standards (revenue or number of employees) for small business that vary across more than one thousand industries, in addition to goals for prime and subcontracting that differ by agency and type of small business (e.g. minority-owned, women-owned, etc.) create a



complex environment that requires a dedicated bureaucracy and increases transaction costs.

• SBA policies have clearly facilitated some small firms' growth, however uneven or unsustainable. But does the growth of today's small businesses come at the expense of tomorrow's? Because current revenues form the basis of future size standard determinations, many growing industries within the professional services sector may be subjected to upward revisions, thereby limiting new entrants' access, perhaps hindering innovation.

Based on our analysis of FPDS data and our examination of the unintended consequences that derive from set-aside policy, we offer the following recommendations.

Set reasonable set-aside goals.

At present, the government-wide small business contracting targets (overall small business, minority-owned, HUBzone, etc.) have little empirical basis. As for individual agency goals, consideration should be given to the development of a goal that includes both prime and subcontract dollars. At present, agencies must develop separate prime contracting goals and subcontracting goals. As discussed, the prime contracting goals are weighted much more heavily than the subcontracting goals in agency scorecards. This methodology underrepresents small business participation in federal contracting. An agency may rely extensively on small business via major supplier subcontracting, yet earn a low grade. This makes little sense. By combining goals, government agencies have increased flexibility to meet changing mission requirements, without limiting small business participation.

Preserve the "Similarly-Situated Entities" Rule.

In terms of improving flexibility, the SBA's "Similarly-Situated Entities" Final Rule is a step in the right direction. Rather than attempt to perform 51% of the contract on its own or, worse, serve merely as a pass-through for a large firm, the rule encourages a small prime contractor with limited capabilities to team with other small firms in the delivery of a product or service, thereby reducing the risk to government while encouraging increased small business participation in federal contracting.



Evaluate the impact of set-asides on the industrial base.

Ensure that there are enough free and open opportunities so that best graduating small businesses and mid-sized firms are afforded an opportunity to continue thrive within the federal contracting space.

Review NAICS code descriptions.

The SBA has defined these size standards for groups of industry. When these groups are too broad, the codes can provide enough ambiguity so that an inappropriate code (and, as a result, size standards) can be used. Consequently, an inappropriate set of firms are subsidized to the exclusion of the intended recipients. These definitions and thresholds must be clear and unambiguous.

Use set-asides for acquisitions only when small business can handle them.

When given the appropriate contracts, small businesses can successfully perform as, or more, efficiently than a large business. The key is selecting the suitable opportunities that are within the scope and scale of the small business, so that selecting a small business prime does not create a risk of poor performance. Small business set-asides are suitable when they enable a firm to grow, but do not overwhelm its infrastructure or capabilities. Awarding a contract to a firm that is beyond its capacity will cause the company to have difficulty with that work, and may cause it to fail. Agencies should refrain from awarding large contracts that approach or exceed the industry size standard. Large contracts have the potential to overwhelm small firms' infrastructure and capabilities. Moreover, these contracts prematurely hasten a small firm's growth trajectory, often to a point where the firm is no longer eligible to receive set-asides.

Cap eligibility for set-asides.

At the same time, the SBA should encourage the best firms to grow and discourage firms that have no inclination to grow beyond the relevant industry size standards. Small firms should be made eligible for set-asides for a predetermined (perhaps industry-specific) number of years, after which they would be required to compete under free and open competition. Such a policy would encourage innovation by creating greater opportunities and reducing barriers to entry for new entrants into the defense contracting space.



Review the use of MA/IDIQs and GWACs.

Reliance on IDIQ vehicles as convenient tools for flexible contracting has helped reduce the transaction costs associated with many programs. However, IDIQ contracts have the potential to limit overall competition since potential vendors are preselected for extended periods. Small businesses that are not awarded IDIQs in their industry are effectively "shut out" of some of the federal government's most lucrative opportunities. Additionally, those fortunate enough to be awarded IDIQs face high bid and proposal costs (relative to traditional contract solicitations), in that they must bid on the initial contract and then again for each individual task order placed under that contract. These costs increase the firm's indirect costs, which are borne by the government and can make the firm less competitive.

Strengthen the government acquisition workforce.

Shortfalls within the government acquisition workforce are partially responsible for agencies' increasing reliance on GWAC and other MA/IDIQ contract vehicles.

Reduce the Regulatory Burden.

The increasing number of federal regulations poses a significant burden on small businesses, which have limited means to carry out and ensure compliance. In order to take advantage of innovative offerings from small business, the government—and, in particular, the DoD—must provide a business-friendly environment so as to attract the best innovative small businesses, especially those that also have commercial opportunities.

Conclusion

As Milton Friedman once remarked, "One of the great mistakes is to judge policies and programs by their intentions rather than their results." Current federal policy with respect to small business set-asides was formed, and is implemented, with the best of intentions. However, as with many policy initiatives there can be unintended consequences. The government must strike a balance that encourages the growth of innovative small businesses while ensuring that its contracting needs are met in way that is responsible, effective, and efficient. Small business set-aside policy, in its current implementation, does not strike the optimal balance.



References

- Alexander, D. (2014, Jan.). Congratulations! You're small again! *Civil and Structural Engineer*. Retrieved from http://csengineermag.com/article/congratulations-youre-small-again/
- Burton, R. (2015). Annual review of government contracting. *Bloomberg Government*. Retrieved from http://www.ncmahq.org/docs/default-source/default-document-library/pdfs/exec15---ncma-annual-review-of-government-contracting-2015-edition
- Crain, N. and Crain, M. (2010, Sept.). The impact of regulatory costs on small firms. Small Business Administration Office of Advocacy. Retrieved from http://www.sba.gov/sites/default/files/advocacy/The%20Impact%20of%20Regulatory%20 Costs%20on%20Small%20Firms%20%28Full%29_0.pdf.
- CSIS (2012). Defense contract trends: U.S. Department of Defense contract spending and the supporting industrial base. Washington, DC.
- Ellinport, J. (2014, Aug.). The Illusion of Small Business Set-Asides in Information Technology Procurement. *Contract Management*, pp 27-35.
- Eshoo Press Release. (2014 Jan.). Reps. Eshoo & Connolly unveil draft federal IT procurement reform bill. Retrieved from http://eshoo.house.gov/press-releases/reps-eshoo-connolly-unveil-draft-federal-it-procurement-reform-bill/.
- FAR 19.201. Small business programs, general policy. Retrieved from https://www.acquisition.gov/far/html/FARTOCP19.html
- FAR 19.502. Setting aside acquisitions. Retrieved from https://www.acquisition.gov/far/html/Subpart%2019_5.html
- GAO. (2015). GAO bid protest annual report to Congress for Fiscal Year 2015. Retrieved from http://www.gao.gov/assets/680/674134.pdf
- Harrison. J. (2014, Aug.). Government hits small business contracting goal for first time since 2005, officials say. *The Washington Post*. Retrieved from https://www.washingtonpost.com/business/on-small-business/government-hits-small-business-contracting-goal-for-first-time-since-2005-officials-say/2014/08/01/3b3382a4-198e-11e4-9e3b-7f2f110c6265_story.html?utm_term=.8cc61dd34b50
- Hillmer, L. (2012). Testimony to House Armed Services Committee Panel on Business Challenges within the Defense Industry. Hearing: Doing Business with DoD: Unique Challenges Faced by Small and Mid-Sized Businesses.
- Hoover, M. (2013, Jan.). 7 small businesses win \$1.4B DISA network contract: work could last over the next five years. *Washington Technology*. Retrieved from http://washingtontechnology.com/articles/2013/01/03/8-disa-wins.aspx.
- Koprince, S. (2012, July) From 1,500 employees to \$25.5 million: Successful NAICS code appeal shakes up competition. Retrieved from http://smallgovcon.com/sbaohadecisions/naics-code-appeal-shakes-up-competitio/#sthash.L6B39arJ.dpuf



- Maltby, E. (2011). Contractors Find Gains Hard to Hold: Federal Professional-Services Suppliers Run Into Trouble After Out-Growing Small Business Status. *The Wall Street Journal*. November 3, 2011. Retrieved from http://www.midtier.org/NOVEMBER%203%20WSJ%20Article%20on%20MTAv2.pdf
- Mclaughlin, P. On The Human Costs Of The Us Regulatory System: Should Congress Pressure Agencies to Make Rules Faster? August 1, 2013
- McVay, B. (2009). Getting Started in Federal Contracting. Chapter 11: Set-Asides and Preference Programs. Retrieved from http://www.fedgovcontracts.com/chap11.pdf.
- Obama, B. (2014, May). National Small Business Week, 2014. Presidential Proclamation. Office of the Press Secretary, The White House. Retrieved from https://obamawhitehouse.archives.gov/the-press-office/2014/05/09/presidentialproclamation-national-small-business-week-2014
- Peck, M. (2017). Amyx awarded \$189M JIDO contract. Retrieved from http://www.c4isrnet.com/articles/amyx-awarded-189m-jido-contract
- Robinson, B. (2013, July). Unraveling the facts about GWACs. *FCW*. Retrieved from https://fcw.com/articles/2013/06/07/feature-gwac-facts.aspx
- Rosiak, L. (2013, April). Executives pay balloons for federal contractors; small businesses add up to big gap. *The Washington Times*. Retrieved from http://www.washingtontimes.com/news/2013/apr/22/executive-pay-balloons-for-federal-contractors/?page=all.
- Roulo, C. (2014, Oct.). Small-business Contracting on the Rise, Official Says. DoD News. Retrieved from http://www.defense.gov/new/newsarticle.aspx?id=123411.
- SBA. (2015). Qualifying as a small business. Retrieved from https://www.sba.gov/contracting/getting-started-contractor/qualifying-small-business
- SBA. (2015). Size standard methodology. https://www.sba.gov/contracting/getting-startedcontractor/make-sure-you-meet-sba-size-standards/size-standards-methodology
- SBA. (2016). Goaling. Retrieved from https://www.sba.gov/contracting/contracting-officials/goaling
- Small Business Act of 1953. 15 U.S.C. 631 (1953).
- Small Business & Entrepreneurship Council (2016, Oct.). Lost manufacturing, lost small manufacturers. Retrieved from http://sbecouncil.org/2016/10/18/lost-manufacturing-lost-small-manufacturers/
- Suss, F. (1961). Small Business and Government Procurement 1961. *Mercer Law Review*, 13, 356-369.
- Weigelt, M. (2013). Set-aside for mid-tier companies still possible. *FCW*. February 19, 2013. Retrieved from http://fcw.com/articles/2013/02/19/mid-tier-set-aside.aspx.



