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# **Executive Summary**

In federal government contracting, small businesses benefit from set asides and other programs offered by the United States Small Business Administration. Those suppliers that use these benefits to grow beyond federal size standards for small businesses encounter a "benefit cliff." Suppliers anticipating the transition from small to mid-sized often face a disincentive to grow because they will enter a federal procurement market dominated by large firms with extensive past performance and operational scale. This study tracked nearly 1,000 federal suppliers and their contracts over a decade and illustrates the potential impact of small business policies on supplier competitiveness, program participation, and growth. The descriptive analysis shows that suppliers participated in small business set aside procurements, but relied less on them over time. Suppliers grew in terms of the number of agencies with which they contract and the product and services they provided. Yet many suppliers left the federal procurement market or had intermittent contract activity. Supplementary exploration suggests that less than 5% of small businesses grew to mid-sized while remaining an active supplier to federal agencies.



## Research Objectives

Currently, federal acquisition policy distinguishes suppliers as either "small" or "other than small." Small businesses in the U.S. benefit from the set asides offered by the Small Business Administration (SBA). Mid-sized suppliers¹ are too big to qualify for set asides, yet often do not have the resources to compete with large suppliers, which have significant resources, capabilities, and demonstrated past performance. Mid-sized suppliers can face structural barriers to growth and competition in federal procurement markets. This study assesses the potential impact of small business policies on supplier competitiveness, program participation, and growth for small and mid-sized federal suppliers.

## Set Aside Policies in Federal Acquisition

There are several policy goals targeting small businesses in federal acquisition. Through iterations of the Small Business Act, Congress created a competitive marketplace for small businesses to participate in federal acquisition and win government awards through set aside contracts. The SBA establishes size standards to qualify as a small business<sup>2</sup>. Federal agencies are also required to allocate a percentage of awards to small businesses, and government-wide, 23% of the contract value of prime contracts is set aside for small businesses awards. The SBA also establishes acquisition goals for federal agencies that encourage diversity in small business contracts including women-owned businesses, minority-owned businesses, among others. One of the other key policy objectives of the Small Business Act is to promote small business in order to foster economic growth. Yet as small business suppliers grow towards their NAICS thresholds, they encounter a "benefit cliff," which disincentivizes growth and is counter to this goal.

#### Data & Method

Data for this descriptive study was drawn from the Federal Procurement Data System-Next Generation (FPDS-NG). FPDS-NG is a repository of all non-classified prime contract activity. This study was based on a randomly selected sample of nearly 1,000 suppliers with a set aside contract action in 2005. The sample was stratified with 60% of contracts selected from among Department of Defense (DOD) contracts to mirror federal spending; the remaining 40% of contracts were selected from all other federal agencies. The sample included suppliers with contracts for products and services varying in complexity from simple product procurements to more complex services contracts. Suppliers were followed from 2005 to 2014 to understand their contracts and the operating environment for small and mid-sized suppliers. Data on supplier attributes was procured from Dun & Bradstreet. The unit of analysis in the study was supplier-year and contracts data from FPDS-NG was aggregated to capture contract activity for each fiscal year. We also conducted content analysis and cross-referenced data with the System for Award Management (SAM), Dynamic Small Business Search (DSBS) database, and open source material.

<sup>&</sup>lt;sup>1</sup> The National Center for the Middle Market defines the middle market as firms with revenue between \$10M - \$1B. There is no definition in The Federal Acquisition Regulation of mid-sized or large businesses.

<sup>&</sup>lt;sup>2</sup> The primary criteria for determining firm size are the 12-month average number of employees and three-year average receipts. The Code of Federal Regulations requires the SBA to calculate these size standards for each line of business specified in the North American Industry Classification System (NAICS). For example, according to the current size standards, an iron and steel forging company (NAICS 332111) may be considered small if they have an average of 750 employees or less. A management consulting firm (NAICS 541611) may be classified as small if they have a 3-year average of no greater than \$15 million in revenue.

## Descriptive Analysis

This descriptive study presents analysis on 977 federal suppliers over a 10-year period from 2005-2014. Data analysis reveals contracting patterns over time and supplier activity broken out by industry. Supplemental qualitative analysis was conducted to assess supplier growth.

### Contracting patterns

As shown in table 1, about one-third of suppliers consistently maintained contracts with federal clients in every year studied. The remaining firms had irregular activity (e.g., contract actions 2005-2006, no contract actions 2007-2009, and contract actions 2010-2014). In some cases, suppliers were only inactive for one year. In other cases, suppliers had two or more continuous years of inactivity, which indicates the firm discontinued serving federal customers, did not survive, or served solely as a subcontractor.

Table 1: Suppliers in the federal procurement market (FY 2005-2014)

Description of supplier activity	Number of suppliers
Prime contract activity for all years	303
One year with no prime contract activity	71
Two or more continuous years with no prime contract activity	312
Irregular prime contract activity	291
Total	977

Only about half of the firms with federal contracts in 2005 had contracts in 2014, as shown in table 2. For those that remained, they had nearly twice as much contract activity in 2014 than 2005. Suppliers that remained active in the federal procurement market relied less on set aside contracts over time. They expanded the number of product and services codes (PSCs) they operated in, and increased the number of agencies with which they contracted with. Taken together, this is indicative of growth among this subset of suppliers. Of the 424 suppliers with contract actions in 2014, 108 had no small business set aside contract actions in 2014. However, this does not mean that they were no longer small businesses.

Table 2: Supplier contract attributes<sup>2</sup>

Attributes	Value in 2005	Value in 2014
Firms with contract action	914	424
Number of contract actions (mean)	21	40
Percent of set aside contract actions (mean)	68%	44%
Diversity in number of PSCs (mean)	2.32	2.96
Diversity in number of agency customers (mean)	1.67	2.78

<sup>&</sup>lt;sup>2</sup> A note on missing data: In some cases, contract actions reported in FPDS-NG were missing key data elements. We dropped contract actions from the analysis if they were missing the following information: contract pricing type, product or service code, principal NAICS code, or contracting agency. This is why there are 977 suppliers in the data set but only 914 firms appear in 2005– the 63 firms appear in at least one other year in the dataset.

### Supplier activity by industry

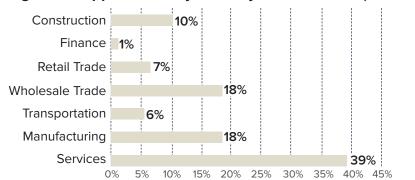
Figure 1 provides the supplier industry classification of the suppliers in the sample. About one-third of the suppliers designated Services as their primary industry. Manufacturing and Wholesale Trade were the second and third most common, respectively. Given the low number of suppliers in the sample designating Finance as its primary industry, any results regarding the finance industry should be taken with caution.

Figures 2-5 report mean values of suppliers' contract attributes in 2005 and 2014 as illustrated in table 2, categorized by industry.

Over time, suppliers increased the number of agencies with which they contracted, indicating increased breadth. As figure 2 illustrates, this is true across every industry. The largest increases were in retail trade and services. For this analysis, agencies were captured at the enterprise level (e.g., Agriculture, Defense, etc.).

Suppliers expanded the number of PSCs they operated in signifying that across industries, suppliers grew in their lines of business and offerings to federal clients. Figure 3 shows that retail trade and wholesale trade had the largest gains. For this analysis, PSCs were captured at a high level (e.g., "W" Lease/Rental of Equipment or "51" Hand Tools).

Figure 1: Supplier Primary Industry Classification (FY2015)



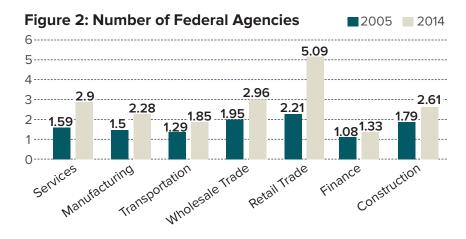
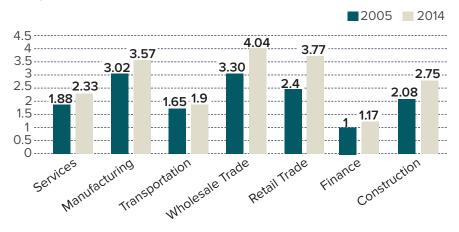


Figure 3: Number of Product and Services Codes (PSCs)



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Small businesses also relied less on set aside contracts as they continued to win federal contracts. Figure 4 illustrates the industry breakdown of the percent of contract actions associated with small business set asides from 2005 to 2014.

Suppliers had more contract activity over time. Figure 5 shows the number of contract actions by industry from 2005 to 2014. The biggest increases were in services, manufacturing and retail trade.

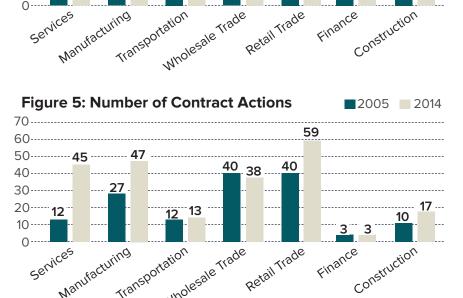
### Supplier growth

The intent of the study is to determine supplier growth into the middle market; however, it was not possible to derive this information from the

0.74 ..... 0.74 ..... ----- 0.75-----0.61 0.6 ----0.41 0.40 0.36... 0.4 ----0.33-0.2 --

Construction

Figure 4: Percent Small Business Set Asides ■2005 ■2014



dataset and so an alternative approach was pursued. An estimate of firm size was created by manually searching supplier records in the SAM. It is important to note that historical data of suppliers' representations and certifications is not available. Thus, FY 2018 data is used to provide an estimate of supplier growth. Open source records were also searched to determine acquisition and other activity.

Figure 6 shows the present size status of the suppliers in the sample. The inquiry shows that approximately 4% of suppliers are other than small. Of those suppliers, half grew due to acquisition (i.e. they were acquired or acquired another firm). This number is likely underestimated because supplier size is only captured if the business continues to supply the federal government and completes their vendor registration in SAM. Approximately 43% are confirmed small. A significant number of

firms – over half in the study – are not currently active in SAM, implying they are not supplying the government. A subset of these firms may be out of business, while others remain in business but have stopped supplying the federal government, and open source searches were inconclusive. Approximately 3% are confirmed closed.





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Trevor L. Brown is Professor and Dean of the John Glenn College of Public Affairs at The Ohio State University. Professor Brown's research on public procurement and contract management has been published in a variety of peer-reviewed academic outlets (e.g., Cambridge University Press, *Journal of Policy Analysis and Management*). He has also produced numerous consulting and project reports for the U.S. Navy, the Pew Center on the States, and the IBM Center for the Business of Government. Professor Brown served for 20 years in a variety of contract management capacities for a technical assistance contract with the U.S. Agency for International Development.

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The findings, conclusions, and recommendations expressed in this report are the product of research conducted by the authors and do not represent the views of either the John Glenn College of Public Affairs or The Ohio State University.