Examining the Effects of Set Aside Policies on Competition and Growth for Small and Mid-Sized Suppliers

TREVOR L. BROWN & AMANDA M. GIRTH

PREPARED FOR PRESENTATION AT THE 14TH ANNUAL ACQUISITION RESEARCH SYMPOSIUM

APRIL 27, 2017



The Ohio State University

JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

Research Motivation

2

- Supply-side of federal acquisition
- Small business and *not* small business
- "Benefit cliff" for small businesses growing to the middle market

Industry Attention



NATIONAL CENTER FOR THE MIDDLE MARKET

CENTER FOR STRATEGIC & INTERNATIONAL STUDIES





GTSC

THE LION'S DEN

Project Research Questions

- Is there a small business set aside "benefit cliff"?
- What explains firm behavior around the cliff?
- What policy tools optimize the balance between securing value and equal opportunity?

Research Frame

- "Policy ambivalent" preferences aspirational, goal-oriented policies (Kidalov & Snider 2011; Snider, et al. 2013)
 - Federal agencies: 23% prime contracts to small business
- Competitiveness of public service markets
 - Balance different, and sometimes competing, purchasing goals
 - Narrows pool of suppliers and limits the range of cost, quality, and delivery options

• Small and mid-sized business growth

- Firm lifecycle and entrepreneurship
- Credit, external financing, firm age, size, state subsidies, managerial factors (Barbero, et al. 2011; Becchetti & Trovato 2002)

Project Research Design

- 1. Track the performance of 1,025 suppliers over a 10-year period (FY2005-FY2014)
 - Random selection of firms with SB set aside contract action in 2005
 - Stratified 60% w/DOD
 - Mix of products and services

2. Interviews

- Small businesses
- Mid-sized suppliers
- Federal procurement officials

• Data

- Sources: FPDS-NG and Dun & Bradstreet
- Unit of analysis: Supplier/year
- Aggregate FPDS-NG data
- D&B annually reported

Study Data & Method

Sample Data

- Small businesses in 2005
 - 721 small businesses that stayed small through 2014
 - 46 small business that grew to mid-sized
 - 55 small businesses that grew to mid-sized and returned to small

• Exploratory

Method

- What are the differences between groups?
 - **1**. Stayed small
 - 2. Grew to mid-sized
 - 3. Grew to mid-sized, returned to small
- Pairwise comparison of means of firm attributes and federal contracting portfolios

Data Attributes

Firm Characteristics

• Credit rating

- Minority ownership
- Woman ownership
- Firm age (log)
- Lines of business
- No. DUNS family (log)
- No. of employees (log)
- Annual sales (log)
- Efficiency

Contract Portfolio

- Agency diversity
- NAICS diversity
- PSC diversity
- Contract actions (log)
- Contract actions IDV (log)
- Ave. number offers (log)
- Pct. not set aside
- Pct. full and open

Preliminary Findings

Independent Variable	Pairwise comparison		
	Mid vs Small	Returned small vs Small	Returned small vs Mid
Credit rating	\downarrow	V	Intu
Minority ownership			
Woman ownership	\downarrow	\downarrow	\uparrow
Firm age (log)			\uparrow
Lines of business		\uparrow	\uparrow
No. DUNS family (log)	\uparrow	\uparrow	\downarrow
No. of employees (log)	\uparrow	\uparrow	
Annual sales (log)		\checkmark	\checkmark
Efficiency	\checkmark	\checkmark	\downarrow
Agency diversity	\uparrow	\uparrow	\checkmark
NAICS diversity	\uparrow	\uparrow	\uparrow
PSC diversity	\uparrow	\uparrow	\uparrow
Contract actions (log)	\uparrow	\uparrow	\uparrow
Contract actions – IDV (log)	\uparrow	\uparrow	\downarrow
Ave. number offers (log)		\uparrow	
Pct. not set aside	\uparrow	\uparrow	
Pct. full and open	\uparrow	\uparrow	

Preliminary Findings

Transition to middle market

- Corporate relationships
- Woman-ownership
- Credit
- Efficiency
- Diversity agency, product
- Competition f/o, set aside, but also IDV

Lasting transition?

- Fewer woman-owned
- Younger
- More corporate relationships
- Fewer set aside contracts
- Mid-range/tipping point?
 - Diversity- agency, product
 - Efficiency

Emerging Interview Patterns

- Strategic decision to stay small or jump into the middle market
- Firms that jump tend to be focused on profit growth
- Firms surviving in the middle market....
 - Diversity of agencies (+ attendant relationships)
 - Diversity of products/services (pre-jump)
 - Trusted partnerships
 - Made significant internal infrastructure investments before jump in

Next Steps

12

• Conduct multivariate analysis

- Patterns
- Determine appropriate methods
- Additional interviews, integrate
- Assess policy implications/options

Acknowledgement of Support

- 1. Girth and Brown are Fellows of the National Center for the Middle Market at the Fisher College of Business, OSU, and acknowledge the Center's support for this research.
- 2. This material is based upon work supported by the Naval Postgraduate School Acquisition Research Program under Grant No. N00244-16-1-0049. 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.