



NAVAL  
POSTGRADUATE  
SCHOOL

# The Defense Acquisition Workforce Growth Initiative

Ira Lewis

Graduate School of Business and Public  
Policy



- From 1990s through 2010, value of DoN contracting increased by more than 50% while acquisition workforce (AWF) declined by more than 50%.
- DoN set objective to in-source 3500 positions to AWF and hire an additional 1590 personnel
- Result was an 8% increase in the size of the DoN AWF from 2010 to present



- What has been the impact of the increase in the size of the DoN AWF?
- How is acquisition different now than before the increase in personnel, i.e. are there measurable benefits?
  - Answering these questions is not straightforward due to size and complexity of both acquisition workforce and workload
  - Common baseline of personnel resources is difficult to measure (Gates et al 2013; Powell 2017)



- March and Sutton (1997) suggested seeking data about broad organizational performance is not realistic, nor is performance an appropriate unitary, dependent variable
- Gates (2009) emphasized that defense acquisition was a process operation and asked what concrete outcomes the workforce could be expected to influence
- DOD (2015) stated that performance data was a “crude indicator” of the effectiveness of officials’ decision-making



- Gates (2009) suggested shift toward more service contracting, increasing diversity in the nature of transactions, and move toward best-value approaches complicated measurement
- GAO (2012) found Federal Procurement Data System data were limited in “utility, accuracy and comprehensiveness”
- Schwartz et al (2016) located significant limitations in acquisition related data, particularly reliability and comprehensiveness



- Compare DoN AWF headcounts before and after increase with output variables such as:
  - Program management: number, dollar amount, and program categories (ACAT) under management
  - Contract management: number, dollar value of contracts, processing time, some measure of contract complexity
- During the period of growth, the composition of the AWF changed significantly; many new hires with either limited or significant acquisition experience
  - Desirable to characterize workforce demographics in before-and-after analyses



# Statistical and analytical modeling

- Statistical significance comparing before-and-after effects (T and F tests, ANOVA, MANOVA)
- Linear and nonlinear correlation matrices
- Nonlinear econometric models to identify critical independent variables
- Creating additional metrics beyond those mentioned previously by collapsing multiple variables into composite measures—can provide a more comprehensive indication of impact of the growth of the AWF
- Simulations to determine impact of changed manning



- Begin with before-and-after analysis of the contracting workforce (GS-1102 and related series) as compared to the level of contracting activity, using multiple measures
- Based on lessons learned, extend work to the 12 other acquisition career fields
- Will incorporate consideration of demographic changes to the contracting career field as contributing factors during growth period