

Promoting Defense Industry Competition for National Security’s— Not Competition’s— Sake

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KEY TAKEAWAYS

Competition in the defense industry can lead to better products at lower prices, but federal efforts to artificially create competition may create more problems than they solve.

The Pentagon must operate in ways that ensure suppliers can provide an uninterrupted supply of materials to fulfill defense needs.

Pursuit of defense industry competition should be balanced with other important considerations, such as time and cost.

In order to effectively compete with China or prepare for a protracted conflict, the United States needs both a strong national defense and a strong defense industrial base. A strong industrial base includes healthy and innovative prime contractors, as well as a robust ecosystem of subcontractors and lower-tier suppliers to design and manufacture defense end items and their components at a reasonable cost to their customer, the U.S. Department of Defense (DOD). Like any customer, the DOD seeks the highest quality items—in their case, the most technically advanced and capable weapons systems—at the lowest cost. Recent events, however, have raised questions regarding competition in the defense industrial base—and the proper role of government in regulating, or even artificially creating, that competition. Getting this balance right will ensure that America gets the most value from every precious dollar committed to its defense.

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What conditions allow the defense industrial base to produce the highest quality items at the lowest cost? Free-market economics would indicate that competition leads to greater innovation and lower prices. This theory holds true in practice in the defense industry. For example, the Army recompeted the Family of Medium Tactical Vehicles contract in 2009, and BAE Systems (the incumbent) and Oshkosh both submitted bids below the previous purchase price. Oshkosh, whose bid was reportedly 33 percent below the previous price, won the competition.¹ The DOD was able to buy an already successful platform at a lower cost, thanks to competition.

However, the defense industry is not a “classically” free market. There is only one customer—the DOD—and this customer, with its constitutional mandate to defend the country, must operate under the constant imperative to make sure companies in that market can provide an uninterrupted supply of the materiel the DOD needs. Especially in some sectors of the defense industry, such as submarine construction, high initial capital investment costs (billions of dollars for a shipyard with the necessary facilities and equipment) represent a substantial barrier to entry for potential new competitors. Other barriers include extraordinarily high compliance costs and a deep level of expertise in the labyrinthine defense contracting bureaucracy.

Recent efforts by the Biden Administration raise concerns about the proper role of government in defense competition. A proposed merger between Lockheed Martin and Aerojet Rocketdyne was canceled this past February after the Federal Trade Commission (FTC) sued to block the deal, citing antitrust concerns. That same month, the DOD also released a report, “State of Competition within the Defense Industrial Base,” which, while containing some useful information, largely focused on a new misguided effort by the Biden Administration to artificially intervene in the defense industrial base—and the rest of the economy—in the name of promoting competition.²

Competition matters in the defense industry: It often allows for higher-quality weapons systems to be delivered to the warfighter at a lower price. However, perfect free-market competition is not a realistic goal for the defense industry. Furthermore, assumptions about competition—namely, that it always leads to lower costs and/or better products to the government—are overstated, yet they still serve as the basis for acquisition policies. The DOD can and should encourage more competition by improving its own acquisition practices, which would encourage more firms to enter the defense market, but it should be wary of overregulating or artificially creating competition in programs and areas where it does not occur organically. The goal is to supply the military with the best platforms manufactured by a reliable industrial base at a reasonable price. Competition should not be an end but rather the means to achieving that end.

The State of Competition in the Defense Industry

Competition in the defense industry has decreased in the past 30 years, as indicated by the numbers of both prime contractors and lower-tier suppliers. During the Cold War, defense spending decisions were based on preparations for war with a near-peer competitor, the Soviet Union. The industrial base was large and consisted of many firms during this period of relatively high defense spending. In 1953, at the height of the Korean War, the United States spent over 11 percent of its gross domestic product on defense.³ When the Cold War ended, the Pentagon explicitly directed prime defense contractors to consolidate in order to survive, because defense spending was (in theory) going to shrink dramatically.⁴

Prime contractors consolidated from 15 major defense primes down to five, and certain sectors that previously had several firms competing for contracts now had only one or two.⁵ For example, General Dynamics is now the only U.S. prime contractor for tracked combat vehicles; in 1990, there were three.⁶ Prime contractors for military aircraft went from eight to three since 1990 and from eight to two for surface ships in that same period.⁷

The supplier base also atrophied during this period. Today, there are far more single- and sole-source suppliers for key components in major defense programs, such as large metal castings for shipbuilding. The most recent *Industrial Capabilities Report to Congress* notes, “This represents a significant deterioration from just a decade ago when three-to-five [sic] suppliers existed for the same component, let alone several decades ago, when the U.S. military generally enjoyed dozens of suppliers for each such item.”⁸

The result of these trends is reduced amounts of competition from the highest tiers down to the lowest tiers of the supplier base. The largest six prime defense contractors (Lockheed Martin, Boeing, Northrop Grumman, Raytheon Technologies, General Dynamics, and BAE Systems) represent 32 percent of all DOD prime obligations in 2019.⁹ Many of these companies are the product of significant mergers, such as that of Lockheed and Martin Marietta in 1995 or the more recent merger between Raytheon and United Technologies in 2020.

Not all mergers and acquisitions (M&A) among defense companies are permitted to take place, however. For example, as mentioned above, Lockheed Martin terminated its agreement to acquire Aerojet Rocketdyne after the FTC filed a lawsuit to block the proposed acquisition.¹⁰ The FTC’s complaint was on antitrust grounds: “The acquisition would have eliminated the country’s last independent supplier of key missile propulsion inputs and given Lockheed the ability to cut off its competitors’ access to these critical

components.” According to the government press release, “the deal would have resulted in higher prices and diminished quality and innovation for programs that are critical to national security.”¹¹

The case of Lockheed and Aerojet Rocketdyne is all the more interesting because in 2018 the U.S. government gave the green light to Northrup Grumman’s acquisition of Orbital ATK, the other major player in the solid rocket motor business.¹² That merger had similar implications for that sector of the defense industry; the key difference was simply that the merger took place during the Trump Administration, when the FTC was seemingly more favorable to M&A activity.

In the absence of competition, the DOD has fewer options and pays higher—sometimes exorbitant—prices for necessary defense items and components. The case of TransDigm is illustrative: The firm was summoned to appear before a House Oversight Committee hearing because the prices it charged for certain aircraft components were orders of magnitude larger than the cost of the materials needed to produce the components. In the end, however, TransDigm never broke any laws and could not be forced to refund any of the cost of the items. The high costs were in part because of the DOD’s own bad contracting practices, such as buying just a few of the components at a time.¹³ It stands to reason, though, that TransDigm could not have charged such high prices for those components if it had been forced to compete with another company for the contract.

Guiding Principles of Defense Industrial Base Competition

Given the state of competition in the defense industry, this paper proposes the following premises and guiding principles:

Premises

- Competition normally results in better products, at lower prices, delivered faster.
- The federal government has a unique relationship to the defense industry. It exerts greater influence over the industry because the government is often the industry’s only customer for many products,¹⁴ and the government has a responsibility to maintain a healthy defense industrial base because of its constitutional mandate to provide for the common defense.

- The defense industry features unique, inherent barriers to entry, such as large capital investment requirements and complex government contracting regulations. Because of these barriers, increases in defense spending may not necessarily lead to more entrants or increased competition, even though decreases in defense spending have resulted in consolidation in the past.

Guiding Principles

- Because of the federal government's unique relationship to the defense industry, it has both the natural ability (as a near-monopsonist) and the constitutional obligation (as provider for the common defense) to make the defense industry resilient and effective (best products, at lowest prices, delivered fastest). One way to do so is to encourage competitiveness in the industry.
- Competition, however, is valuable only if it promotes resilience, lower cost, and effectiveness. Competition-encouraging measures often add more administrative burden to already complicated DOD contracting processes, creating one more barrier to entry for the defense industrial base. Additional competitors in major programs increase costs due to the need to carry multiple entrants through phases of acquisition. Pursuit of competition should therefore be balanced with other important considerations, such as time and cost.
- M&A should be narrowly evaluated based on their implications for defense industry resilience and stability overall.
- Facilitating new entrants to the defense industrial base should not come at the expense of quality or performance.

Promoting Competition: Effective and Ineffective Methods

With the framework of these guiding principles, one can begin to evaluate the adequacy and effectiveness of the DOD's current processes for promoting competition.

Federal law requires the DOD to promote and ensure competition among its suppliers. Though these processes are in some instances effective, they also create yet another administrative hurdle in the DOD's already burdensome contracting practices.

Firstly, the DOD encourages competition by building it into its own contracting processes. The Federal Acquisition Regulation (FAR) outlines these procedures, such as public solicitations and sealed bidding. These are designed to maximize the number of firms able to compete for particular government contracts. The procedures are required by law, specifically by the 1984 Competition in Contracting Act (CICA).¹⁵

There are exceptions made in cases where only one responsible source exists to fill a requirement, cases of “unusual and compelling urgency,” or some other specific circumstances described in FAR Section 6.302.¹⁶ In these cases, the contracting officer must complete a Justification and Approval (J&A), an exhaustive document that must then be approved by a more senior procurement official. Even though the purpose of the J&A may have been to save time, its approval process is often time-consuming and can slow down acquisitions unnecessarily. Further, senior acquisition officials, fearing outside scrutiny, are often reluctant to approve such exceptions.

In an effort to broaden the defense industrial base, public law and the DOD deliberately encourage small business participation in defense contracting. The Small Business Act established mandatory small business contracting goals and small business programs for all federal contracting.¹⁷ Within the DOD’s Office of Small Business Programs, programs such as the Defense Innovation Unit and the Small Business Innovation Research fund facilitate relationships between small business and the DOD and give grants to start-ups and small companies with promising defense-applicable new technologies. By encouraging new entrants to the defense market, these programs can increase competition within the defense industry. However, these programs (like all efforts to artificially create or encourage competition) carry real costs, both in direct spending on grants and administration and in time and inconvenience as the government is forced to incorporate small business quotas into its contracting.

The underlying assumption of DOD small business policies is that small business participation in defense contracts is always good. The evidence for such an assertion is lacking. Encouraging small business participation in defense contracts is only a means to the end of supplying the military with the best platforms manufactured by a reliable industrial base at a reasonable price. The measure of success for DOD small business programs should not be how many small businesses participate in contracts but rather the degree to which their participation leads to better platforms, lower prices, and/or greater resilience of the industrial base.

The federal government also uses antitrust actions to regulate competition in the defense industrial base. The FTC blocks M&A that “are likely

to reduce competition and lead to higher prices, lower quality goods or services, or less innovation.”¹⁸ However, blocking mergers is not always an effective way to encourage competition in the defense industry. The nature of defense contracting favors large, well-established firms, as they possess the highly specialized knowledge required to produce defense end items, and they are large and diversified enough to survive the unpredictable feast-and-famine cycles of congressional spending legislation. While seemingly contrary to the idea of fostering competition, allowing them to consolidate may actually keep these firms in business.

The Biden Administration’s February report, “State of Competition within the Defense Industrial Base,” highlighted some of these different tools the federal government can use to encourage competition in the defense industry. The report also included some good, if overly broad, recommendations, such as increasing new entrants to the defense industry by reducing barriers to entry, in part by streamlining acquisition processes through alternative contracting channels such as “other transaction” authorities.¹⁹ But the report fails to analyze the costs associated with using tools such as FTC merger oversight authorities or requirements for small business participation. It is unclear whether the aim is to encourage competition for the sake of national defense or just for competition’s own sake.

Forcing Competition Where None Exists

Absence of competition creates problems in the defense industry, but so does artificially created competition. When the federal government tries to create competition where none already exists or tries to prevent M&A, it can easily make things worse by raising costs or making defense firms less resilient.

Full and open competitions take time and money. Take, for example, the Army’s Optionally Manned Fighting Vehicle (OMFV). One prime contractor had submitted an entry by the Army’s deadline in October 2019, but because the Army desired more vendors, it cancelled the competition, thereby setting the program back by at least two to three years.²⁰ It has also opened the competition up to foreign vendors. Efforts to secure competition for the OMFV program has thus come with significant costs both in time and potentially in business for domestic firms.

The Army’s Armored Multi-Purpose Vehicle program is a similar case. The program started in 2012, and it uses the Bradley Fighting Vehicle as its base to create new platforms. Rather than contract with the firm BAE, the original manufacturer of the Bradley, the Army chose to conduct a full and

open competition, in the end ultimately selecting BAE. This probably cost the Army at least one to two years.²¹

Conversely, the Ground-Based Strategic Deterrent program (the replacement program for the Minuteman III missile) demonstrates both the benefits and problems with a single-vendor program. The Air Force declared that it was fine with having only one vendor (Northrop Grumman) in the program after Boeing withdrew.²² Having only one vendor likely saved the Air Force at least a year of development and hundreds of millions of dollars. However, one reason that has been cited for Boeing dropping out of the competition was that it depended on Orbital ATK (now a subsidiary of Northrop Grumman after their 2018 merger) to make the rocket motor for its missile proposal.²³ This suggests that allowing the 2018 Northrop Grumman–Orbital ATK merger reduced competition in the defense industrial base. It remains to be seen whether having only one vendor for the program will raise costs, impact timely delivery, or make the industrial base more fragile.

Recommendations

In order to maximize the resilience and effectiveness of the defense industrial base—and make judicious decisions about encouraging competition in the industry—Congress and the DOD should implement the following recommendations:

Moderate Expectations for Competition Within the Defense Industrial Base. The number of prime contractors shrank as a result of defense spending contraction, and the United States is not going to return to a time when there were 15 major prime contractors. The barriers to entry are too high. Some of these barriers, such as excessive acquisition regulatory burdens, can be lowered. But others—such as massive capital investment requirements (think dry docks and cranes in shipyards)—are inherent to the industry. Firms enter markets and compete only when they see a potential profit. These companies have a fiduciary duty to their shareholders to enter competitions only when there is a reasonable chance they may win a profitable contract.

Assess M&A on the Basis of More than Just Competition. M&A can reduce competition in the defense industry, but they can also ensure that firms remain viable through unpredictable federal defense spending. M&A activity in the defense industrial base should be regulated with this big picture in mind. Regulators should consider whether a merger makes the DOD's access to the relevant defense end items more or less secure.

Balance the Desire for Competition with the Anticipated Cost in Time and Money. Competition typically leads to lower prices and higher-quality products delivered faster. Encouraging competition in the defense industry, however, can have the opposite effect by artificially imposing administrative costs on contractors and lengthening program timelines. The monetary cost goes to both the government (in the form of keeping more than one company in the acquisition process for multiple phases, contracting with them for prototypes, etc.) and to the contractor (which pays to keep its program management shop operational for the entire competition phase). Regulations stemming from CICA should be reevaluated on the basis of defense industrial base stability and performance rather than simply maximizing competition.

One particular regulation that should change is the threshold for the J&A process. Currently, a J&A is required for cases when a contract is worth more than \$100,000. In terms of defense contracting, this is a small amount, meaning that formal J&As have to be completed for many contracts. Raising that threshold would allow contracting officers to do their jobs more efficiently without great risk of harming the defense industrial base.

Increase Competition by Making the DOD a Better Customer. There would be more competition in the defense industry if it were easier to do business with the DOD. Congress and the DOD would make the greatest difference by making defense program funding more stable and predictable. The DOD should use alternative contracting pathways, such as “other transaction” authorities, that allow firms in certain cases to sidestep much of the burdensome regulation that applies to government contracts.

Conclusion

Competition in the defense industry can lead to better products delivered faster and at lower prices. However, promoting or artificially creating competition—whether through blocking mergers, imposing small business requirements, or competing contracts—costs time and money. Policies regulating competition in defense contracting should be evaluated on the degree to which they make the defense industrial base stronger.

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