

UP FRONT

STEVE GRUNDMAN



THE SO-CALLED HEALTH OF THE defense industrial base is receiving a lot of worried attention these days. Dour diagnoses are regularly torn from head-

lines reporting supply chain disruptions, the sector's middling performance on Wall Street or the missed milestone of an acquisition program. At the same time, quarterly earnings calls are mostly upbeat, and technical achievements continue to astound. So is the patient diseased and disabled or fit and flourishing?

To figure it out, first shift the metaphor from personal medicine to habitat management. The focus on diseased trees, so to speak, may be obscuring our appreciation of the forest, which is far more verdant than barren.

Even more comprehensive assessments tend mostly to amplify anxiety that our industry is in decline. See, for instance, the Pentagon's annual Industrial Capabilities Report to Congress, the Reagan Institute's recent report of its Task Force on National Security and U.S. Manufacturing Competitiveness and Vital Signs, an annual report of the National Defense Industrial Association (NDIA) on the Health and Readiness of the Defense Industrial Base. NDIA advised in January that its forthcoming report for 2022 will show "soberingly low marks." More than half the attributes it measures—including productive capacity and propensity to innovate—now rate a failing grade.

NDIA's amassing of data that enables trend-analysis of important indicators is commendable, but a careful consideration of its report shows that making a proper diagnosis from that data is fraught. To begin with, there is no consensus about what constitutes the industry's "health." Customary measures tend to reflect the preoccupation of one or another industry stakeholder whose perspectives are often in tension. Are returns on invested capital that exceed risk—a metric of cardinal importance to investors—a mark of vitality or an indicator of economic rents that a professorial senator may regard as sapping the industry's productive potential?

On top of that, the metrics themselves are problematic. As always, input measures of indeterminate significance abound—factory floor space, employment levels, contract obligations—while output measures of undisputed merit—like quality, performance and even cost—are elusive. Harder still is the integration of these disparate measures into a summary "grade," which would require a sophisticated model of their

relationships. Vital Signs, for instance, calculates its summary score by taking a simple average of the index values it assigns to eight attributes, but it is easy to imagine how another weighting scheme could generate substantially different results.

What matters most to the health of any industry, in my view, is its propensity to attract talent, raise capital and apply technology. The markets for these three factors are hotly competitive for all industries, and as the needs of

the defense sector increasingly converge with those of nondefense industries, it is not surprising that defense is feeling the heat.

While defense companies are having to adapt, they are in fact holding their own quite well in these competitive areas:

■ **Talent.** In a 2021 survey by the brand research firm Universum of a quarter-million students attending university in the world's 10 largest economies, aerospace and defense was found by engineering students to be their most preferred industry—No. 1 of 20!

■ **Capital.** Over the past five years, the SPADE

Defense Index, a fund of more than 50 stocks in publicly traded companies addressing defense and homeland security, has increased in value by 80%.

■ **Technology.** The most recent of the U.S. government's Business Enterprise Research and Development Survey of nearly 50,000 companies shows the R&D intensity—R&D costs compared to sales—of the aerospace industry group exceeds all but two other manufacturing industries and remains well above the average for all industries.

While these few citations in themselves are hardly conclusive, other observations compound my optimism about the health of the defense sector. Especially heartening are the many entrants—from the biggest and most diversified, Amazon and General Motors, to the entrepreneurial, like Anduril and Redwire—now competing to win business in defense, each bringing with it that combination of talent, capital and technology that are a trifecta of good industrial hygiene.

These more positive indicators notwithstanding, to fulfill what national strategy requires, the defense sector needs still better habitat. But greening that habitat is the work of ordinary cultivation, not reclamation. ☛

Passing Grade

The U.S. defense industrial base is more fit than frail



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Contributing columnist Steve Grundman is the principal of Grundman Advisory and a former deputy undersecretary of defense for industrial affairs.