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Estimating Potential Savings in Department of Defense Activities

The U.S. Department of Defense (DoD) continues to seek savings in its operations, often by learning lessons from and making comparisons with the private sector, but also by considering how it could change the ways it conducts specific aspects of its operations to make them more efficient and effective. These are worthy objectives to support needed increases in military capabilities and reduce the burden on taxpayers. Leadership and offices throughout DoD have employed both approaches with varying degrees of success. One means that DoD uses to obtain the perspectives and advice of the private sector is to commission studies by the Defense Business Board (DBB).¹ On October 15, 2014, then–Deputy Secretary of Defense Robert Work transmitted to the chair of the DBB terms of reference for a study addressing “Transforming Department of Defense Core Business Practices for Revolutionary Change,”² and the briefing explaining the results of that study was presented to the board on January 22, 2015.³

The DBB study indicated that labor productivity increases ranging from 4 percent to 8 percent annually have been common in the private sector and that such increases are a realistic goal for DoD to achieve in its operations.⁴ Specifically, the study indicated that “[p]rivate sector industries commonly show similar gains [i.e., 4 percent to 8 percent annually] as part of ‘business as usual.’”⁵ The study then estimated DoD could achieve \$125 billion in aggregate savings between 2016 and 2020. In particular, the briefing applied these productivity gains to six lines of business that DoD conducts: human resources management, health care management, financial flow management, supply chain and logistics, acquisition and procurement, and real property management. Annual expenses for these six lines of business are estimated to amount to \$134 billion per year from 2016

through 2020—the same nominal expenditure as in fiscal year 2014. Productivity gains of 7 percent annually applied across the board to these activities, neglecting the effects of inflation, would imply \$125 billion in cumulative savings for the period spanning 2016 to 2020.⁶ Similarly, a March 10, 2015, briefing prepared

KEY FINDINGS

- Neither labor productivity nor multifactor productivity can be used to estimate aggregate potential savings.
- High levels of annual growth in private-sector productivity have not been common; the productivity growth of the best-performing U.S. industries is not consistent with the experience of the broad range of U.S. industries, including those with analogs in defense.
- Productivity-based estimates of savings in DoD operations should account for the investments generally needed to increase labor productivity and for the differences between DoD and the private sector in absolute levels of multifactor productivity for analogous activities.

While these studies contain several ideas that could yield savings for DoD, we found that the productivity assumptions on which their estimates were based do not account for a number of important effects.

by the staff of the DoD Deputy Chief Management Officer (DCMO) presented to the Defense Business Council estimated that labor productivity gains ranging from 3.7 percent to 5.2 percent annually are broadly consistent with those realized in the private sector, implying \$62 billion to \$84 billion in savings by 2020 for DoD.⁷

While these studies contain several ideas that could yield savings for DoD, we found that the productivity assumptions on which their estimates were based do not account for a number of important effects. We recognize that calculating accurate

savings estimates for DoD is no easy task, and there are inherent challenges associated with developing such estimates. In this report, we consider alternative approaches that could produce more-achievable estimates of savings in defense operations. To do this, we consulted with experts in economics and obtained U.S. Bureau of Labor Statistics (BLS) data spanning the period from 2000 to the present for labor productivity and multifactor productivity (MFP) changes experienced by the broad set of U.S. industries. BLS tracked and analyzed those data to determine the extent to which average annual productivity gains ranging from 4 percent to 8 percent were common.⁸

We identify several considerations regarding productivity-based savings estimates that DoD should incorporate:

- Both labor productivity and offsetting investments should be considered when estimating savings. Labor productivity can rise and often does so because of investments, such as in information technology. But investment entails costs that must be offset against projected savings. MFP attempts to account for those investments.
- Current differences between DoD and the commercial sector in absolute levels of MFP for strictly analogous activities could, in theory, be used to estimate the potential for savings, assuming DoD MFP was lower than for the analogous commercial-sector activities. However, MFP data for DoD do not exist, and, even if they did, many DoD activities (e.g., transport of air cargo, maintenance of weapons), must account for needed wartime capacity and capability, which limits the number of analogies to commercial activities that could be compared and analyzed appropriately.
- Differences in rates of productivity growth between DoD and the commercial sector could be used to estimate savings, but only if the absolute levels of productivity were equal and only for strictly analogous activities. U.S. Bureau of Labor Statistics data indicate that the productivity experience of the top

Abbreviations	
BLS	Bureau of Labor Statistics
DBB	Defense Business Board
DBC	Defense Business Council
DeCA	Defense Commissary Agency
DHP	Defense Health Program
DLA	Defense Logistics Agency
DCMO	Deputy Chief Management Officer
DoD	U.S. Department of Defense
MFP	multifactor productivity
NAICS	North American Industry Classification System

U.S. industries is not representative of the performance of the vast majority of industries in the U.S. economy during the period from 2000 through 2010 or more recently from 2011 through 2016. U.S. industries demonstrate widely varying and overall generally lower annual changes in both labor productivity and MFP. And, in particular, a number of private-sector industries that have analogs in DoD—such as warehousing, grocery stores, hospitals, and automotive repair—experienced substantially lower growth in both labor productivity and MFP than the best-performing industries.

Thus, savings estimates based at the outset on identifying and removing specific barriers to increase efficiency and effectiveness in specific aspects of DoD operations are likely to be more achievable for DoD than productivity-based estimates.

Neither Labor Productivity nor Multifactor Productivity Can Be Used to Estimate Aggregate Potential Savings

An attempt to estimate potential savings associated with increases in productivity should account for the costs of the investments generally required to increase output per hour of labor. Labor productivity alone does not account for those investments. A possible method of determining if savings in DoD activities could be achieved and what their magnitude might be would be through examining differences between the private sector and DoD in absolute levels of MFP, which does capture investments, for strictly comparable activities. In particular, if the absolute levels of MFP were, in fact, now lower in DoD than in the private sector for strictly comparable activities, DoD could realize a much greater increase in MFP for those activities and associated savings in their conduct than historical annual rates of change for MFP in the private sector suggest, provided that DoD could identify and remove the barriers that had kept its MFP relatively low.

An attempt to estimate potential savings associated with increases in productivity should account for the costs of the investments generally required to increase output per hour of labor.

In practice, however, an approach that attempts to use MFP in this manner to estimate savings is not feasible. Authoritative data that would enable absolute levels of MFP for specific DoD activities to be compared with MFP for activities in the private sector do not exist. Moreover, DoD must account for wartime demands, which can be substantially greater than peacetime demands, when deciding how to conduct many of its activities. For example, in setting prices for peacetime air transportation, DoD does not account for the full costs of acquiring and operating the air cargo fleet needed to surge forces and equipment overseas in the event of a war.⁹ And, because DoD maintains more air cargo capacity than needed for peacetime activities, DoD's peacetime per-aircraft rates of usage of its cargo aircraft will be lower than the per-aircraft usage rates of commercial enterprises, such as Federal Express. Thus, if the data existed to enable a comparison of the current absolute levels of MFP for air cargo transportation between DoD and the commercial sector, DoD's MFP would likely be lower than the commercial sector's. But, that difference would exist, in part, because of DoD's wartime needs, which are a barrier to increasing DoD's MFP that cannot be simply

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removed. In other cases, barriers to increasing DoD's productivity could exist that are associated with legal constraints not applicable to the commercial sector. Such barriers could be removed by changing the law, but their removal would require revisiting the political and other considerations that gave rise to the laws mandating the constraints. Thus, there would be numerous instances in which barriers that lower DoD's MFP in comparison with the commercial sector could not be removed at all or could not be removed easily.

Even for cases in which DoD activities are strictly comparable with commercial activities and barriers to greater productivity could be removed, no data on DoD levels of MFP exist that would permit savings to be credibly estimated based only on differences in productivity between DoD and the commercial sector. Therefore, savings estimates are most credibly built from the bottom up—that is, by identifying specific barriers preventing greater efficiency and effectiveness in specific DoD activities that can actually be removed, and then estimating the savings associated with the specific actions needed to remove those barriers. The total savings achieved will depend on the numbers and specifics of the barriers identified and removed.

High Levels of Annual Growth in Private-Sector Productivity Have Not Been Common

We examined the productivity experience of the top 20 U.S. industries (about 10 percent of the total number of the 208-industry BLS data set for which data are available) with the greatest annual average increases in labor productivity during the period spanning 2000 to 2010. These data are drawn from those compiled by the BLS. The version of those data available in July 2017 indicate that the annual average labor productivity gain of the top 20 industries with unique four-digit (and some six-digit) North American Industry Classification System (NAICS) codes spans 17.7 percent (wireless telecommunications carriers [except satellite]) to 6.1 percent (photofinishing) during that period.¹⁰ The median annual gain in labor productivity experienced by the top 20 industries during 2000 to 2010 is 7.7 percent, and the average is 8.9 percent. Annual gains in labor productivity for the top 20 industries have declined more recently, however. During the period spanning 2011 to 2016, the annual gain in labor productivity for the top 20 ranged from 17.3 percent (again, wireless telecommunications carriers [except satellite]) to 4.8 percent (radio and television broadcasting), with a median of 6.3 percent and an average of 7.5 percent. This trend for the top 20 is indicative of the trend in annual changes in labor productivity overall for the U.S. economy since the Great Recession. As BLS states,

after 2010, productivity growth stagnated and a substantial deficit relative to historical trends developed over the next 5 years. By the third quarter of 2016, labor productivity in the current business cycle had grown at an average rate of just 1.1 percent, well below the long-term average rate of 2.3 percent from 1947 to 2007 and even further behind the 2.7-percent average rate over the cycle from 2001 to 2007.¹¹

The labor productivity gains of the top 20 industries are not common in that they do not reflect the median or average experience of U.S. industries. The BLS data reveal that the annual labor productivity gain for the 208 industries in the United

TABLE 1

Summary of Annual Labor Productivity Changes Achieved by U.S. Industries

	Maximum (Annual Average over Period)	Minimum (Annual Average over Period)	Median (Annual Average over Period)	Overall Annual Average
Top 20 U.S. industries 2000–2010	17.7%	6.1%	7.7%	8.9%
All U.S. industries 2000–2010	17.7%	-7.4%	2.0%	2.3%
Top 20 U.S. industries 2011–2016	17.3%	4.8%	6.3%	7.5%
All U.S. industries 2011–2016	17.3%	-7.6%	0.7%	0.9%

States with unique four-digit (and some six-digit) NAICS codes in the BLS database averaged 2.3 percent during 2000 to 2010; it averaged 0.9 percent during the more-recent period from 2011 to 2016 (see Table 1). These averages indicate that the labor productivity gains of the top 20 industries are not representative of the economy as a whole. Other statistics indicating this is the case include the following:

- Average annual labor productivity changes among all 208 industries span a wide range: 17.7 percent (as discussed earlier) to -7.4 percent (cut and sew apparel) during 2000

through 2010; 17.3 percent (as discussed earlier) to -7.6 percent (apparel accessories and other apparel manufacturing) during 2011 through 2016.

- Only about 5 percent of annual average changes in labor productivities were 7 percent or greater during 2000 to 2010; about 20 percent were 3.7 percent or greater (see Figure 1). Similarly, only about 3 percent of annual average changes in labor productivities were 7 percent or greater during 2011 to 2016;

FIGURE 1
Cumulative Distribution of Average Annual Change in U.S. Labor Productivity, 2000–2010 (208 Categories of U.S. Industries)

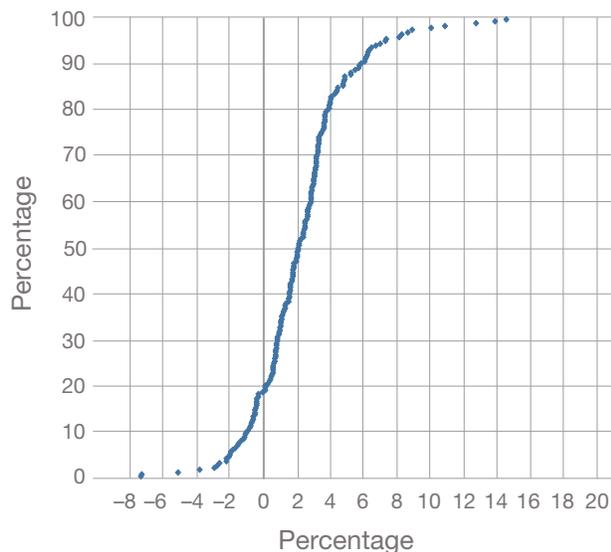
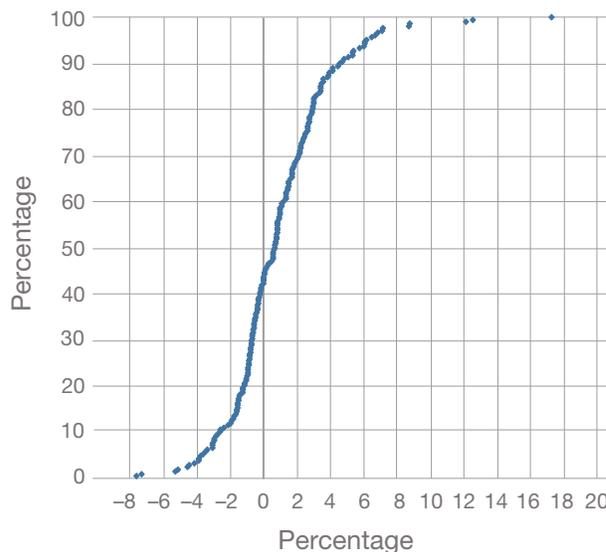


FIGURE 2
Cumulative Distribution of Average Annual Change in U.S. Labor Productivity, 2011–2016 (208 Categories of U.S. Industries)



about 14 percent were 3.7 percent or greater (see Figure 2).

- The median annual change in labor productivity of the top 20 U.S. industries (about 10 percent of the 208-industry BLS data set) is substantially greater than the median annual change in labor productivity of the remaining 90 percent—by about 6 percentage points during both of the time periods (2000–2010 and 2011–2016).

There are cases in which annual labor productivity gains have remained high since 2000 (e.g., wireless telecommunications carriers) or low (e.g., wholesale trade in chemicals, 0.7 percent to 0.8 percent). Nonetheless, there are numerous cases in which annual changes in labor productivity for the same industries varies substantially between the two periods (2000–2010 versus 2011–2016). For example, average annual change in labor productivity for manufacturing of computer and peripheral equipment fell from 14.5 percent between 2000 and 2010 to –0.1 percent between 2011 and 2016; for semiconductors and other electronic components, it fell from 10.0 percent to –5.2 percent; and for oil and gas extraction, it rose from –1.5 percent to 6.9 percent. Thus, productivity observed during a given period for a particular industry (or set of industries) is not necessarily predictive of performance in another period.

The data displayed above indicate that the annual labor productivity gains of the top 20 U.S. industries during the two periods of interest are substantially higher than the gains experienced by the full range of U.S. industries that BLS tracks.¹² For all industries, annual labor productivity gains vary widely, spanning a range of about 25 percentage points in either of the time periods (2000–2010 or 2011–2016) considered. The average annual change in labor productivity experienced by particular industries in one period is generally not an indicator of productivity in another period. Additionally, annual labor productivity change has generally been lower more recently than in the past. Given that market forces reward cost-effective gains in labor productivity, the fact that many industries have nonetheless been experiencing low labor productivity growth suggests that there may be cases at any given time in which there are simply limited gains possible or that the investments needed to raise labor productivity are not cost-effective.

Thus, it is not likely that any particular private-sector industry will, or can be made to, experience high labor productivity growth because the growth of the best-performing industries has been high. Similarly, it is not likely that labor productivity growth will be high or can be made to be high across the board for DoD activities or for any particular DoD activity. For example, DoD engages in a number of activities with analogs in the private sector that

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The use of only labor productivity to estimate savings does not account for the costs of the investments generally needed to increase labor output.

have experienced labor productivity growth lower than the top 20 industries, including (but not limited to) the following:

- Warehouses: Average annual labor productivity changes for warehousing and storage averaged 1.7 percent (2000–2010) and –2.9 percent (2011–2016).¹³
- Commissaries and base exchanges: Average annual labor productivity gains for grocery stores averaged 1.7 percent (2000–2010) and 0.1 percent (2011–2016). Average annual labor productivity changes for department stores averaged –1.0 percent (2000–2010) and 3.9 percent (2011–2016).¹⁴
- Hospitals: Average annual labor productivity gains for hospitals averaged –0.5 percent (2000–2010) and 0.60 percent (2011–2016).¹⁵
- Repair activities: Focusing on just one analogy in the general economy, average annual labor productivity changes for automotive repair and maintenance averaged –0.6 percent (2000–2010) and –0.2 percent (2011–2016).¹⁶

- Engineering services: Average annual labor productivity changes for private sector engineering services averaged 2.2 percent (2000–2010) and –1.1 percent (2011–2016).

These examples, while not exhaustive, provide additional justification for concluding that the highest average annual rate of change in labor productivity achieved in the private sector is not a realistic indicator of what could be expected across the broad range of DoD activities (see Table 2).¹⁷

The use of only labor productivity to estimate savings does not account for the costs of the investments generally needed to increase labor output. Nonetheless, similar to the experience with labor productivity, growth in MFP has spanned a wide range during the period from 2000 to 2010, as well as more recently from 2011 to 2015, and has been generally modest.¹⁸ Median annual growth in MFP for these two periods was 0.7 percent and –0.2 percent, respectively; 80th percentile annual growth was about 1.6 percent and 0.9 percent respectively (see Figures 3 and 4). And, as noted by

TABLE 2
Average Annual Changes in Labor Productivity for Selected Categories of U.S. Industries with DoD Analogs

Average Annual Change	2000–2010	2011–2016
Warehousing and storage	1.7%	–2.9%
Grocery stores	1.7%	0.1%
Department stores	–1.0%	3.9%
Hospitals	–0.5%	0.6%
Automotive repair	–0.6%	–0.2%
Engineering services	2.2%	–1.1%

SOURCE: U.S. Bureau of Labor Statistics, 2017.

FIGURE 3
Cumulative Distribution of Annual Average Change in U.S. Multifactor Productivity, 2000–2010 (62 Categories of U.S. Industries)

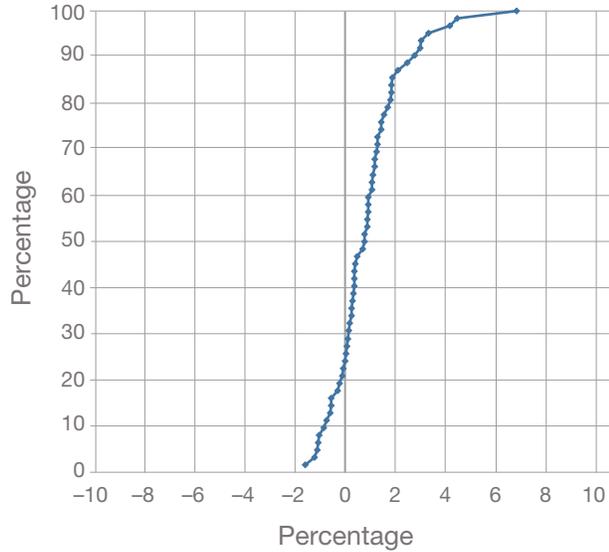
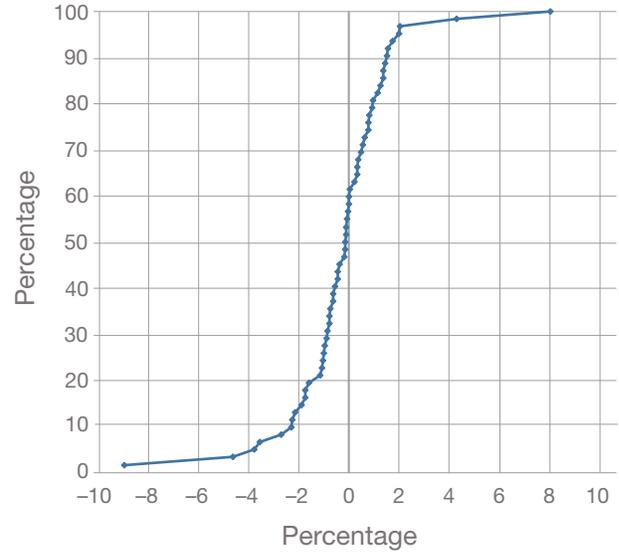


FIGURE 4
Cumulative Distribution of Annual Average Change in U.S. Multifactor Productivity, 2011–2015 (62 Categories of U.S. Industries)



BLS, most recently, overall manufacturing-sector MFP decreased at a 2.8-percent annual rate in 2015, the largest decrease since 2012.¹⁹

Conclusion

DoD is inherently complex and unique because its mission-driven needs require an effective balance of wartime and peacetime demands. These characteristics pose challenges for developing savings estimates that are based on assumptions about private-sector performance. This report presented a review of recent efforts to develop savings estimates and proposed alternatives that might produce more-realistic savings estimates. We find that productivity-based estimates of savings in DoD operations should account for the investments generally needed to

increase labor productivity and for the differences between DoD and the private sector in absolute levels of MFP for analogous activities. If data enabling such analysis were available, taking this approach would indicate how much DoD productivity might increase relative to analogous historical commercial experience and yield savings. The data needed to conduct such an analysis do not appear to be available, however, and even if they were, reaping the estimated savings would still require that the specific barriers to increased MFP associated with specific aspects of DoD operations be identified and removed. Therefore, we propose to identify those specific barriers at the outset, together with the actions required to remove them, and the savings that would accrue because the actions were taken.

Notes

¹The duties of the DBB are to “examine and advise [the Secretary and Deputy Secretary of Defense] on DoD management, business processes, and governance from a private sector perspective.” The board is established in accordance with the Federal Advisory Committee Act of 1972 (United States Code, Title 5, Government Organization and Employees, Appendix, Federal Advisory Committee Act, October 6, 1972). See also DDB, “Defense Business Board Charter,” webpage, July 3, 2018. As of August 16, 2018: <https://dbb.defense.gov/Charter>

²Deputy Secretary of Defense, “Memorandum for Chairman, Defense Business Board, Subject: Terms of Reference—‘Transforming Department of Defense Core Business Processes for Revolutionary Change,’” October 15, 2014. As of August 16, 2018: <https://dbb.defense.gov/Portals/35/Documents/Meetings/2014/2014-10/TOR%20-%20Core%20Business%20Processes.pdf>

³DBB, “Transforming DoD’s Core Business Processes for Revolutionary Change,” slide presentation, January 22, 2015. As of August 16, 2018: https://dbb.defense.gov/Portals/35/Documents/Meetings/2015/2015-01/CBP%20Task%20Group%20Out-brief%20Slides_FINAL.pdf

⁴Labor productivity is the ratio of the output of goods and services to the labor hours devoted to the production of that output. While the DBB briefing does not provide a definitive explanation about why annual labor productivity gains of 4 to 8 percent are realistic, the briefing’s characterization of that range as being commonly achieved in the private sector, in conjunction with the briefing’s display of the top-20 “Industry ‘Best Practices’ Productivity Gains” on the immediately previous slide (DBB, 2015, slide 8), make it plausible to conclude that the experience of the best performers in the private sector is the basis for the DBB’s estimate of potential savings.

⁵DBB, 2015, slide 9.

⁶The DBB briefing shows cumulative savings ranging from \$60 billion to \$180 billion, consistent with annual productivity gains ranging from 3 to 10 percent. However, the briefing subsequently focuses on the case yielding \$125 billion in cumulative savings associated with 7 percent annual gains in productivity across the board. Although the briefing first associates \$125 billion in cumulative savings with 7-percent annual productivity growth applied across the board to all six lines of business, the briefing also applies another set of annual percentage productivity gains to the personnel-, information technology-, and contract-related activities that make up the six lines of business, to arrive at the same \$125 billion in cumulative savings.

⁷The Defense Business Council is an internal DoD body co-chaired by DoD’s Deputy Chief Management Officer and Chief Information Officer. Among a number of responsibilities, the council vets issues related to management and improvement of defense business operations. See U.S. Department of Defense, Chief Management Officer, “Defense Business Council and Investment Management,” webpage, undated. As of August 16, 2018: <https://cmo.defense.gov/Governance/Defense-Business-Council/>

U.S. Department of Defense, Deputy Chief Management Officer, “Productivity Objectives Approach for DoD,” presentation to the Defense Business Council provided to RAND, March 10, 2015, not available to the public. DCMO uses a weighting scheme whose details are not fully defined in the briefing to associate 3.7 percent to 5.2 percent annual labor productivity gains with \$62 billion to \$84 billion in cumulative savings by 2020, not accounting for inflation. Sustained average annual productivity gains of 3.2 percent and 4.4 percent, respectively, across all DoD lines of business would be needed to realize \$62 billion or \$84 billion in cumulative five-year savings relative to baseline annual costs of \$134 billion. While less than the DBB estimate, these sustained gains are still above those realized for labor productivity alone by the broad set of U.S. industries, as will be shown.

⁸According to the BLS, “[m]ultifactor productivity (MFP), also known as total factor productivity (TFP), is a measure of economic performance that compares the amount of goods and services produced (output) to the amount of combined inputs used to produce those goods and services. Inputs can include labor, capital, energy, materials, and purchased services. The BLS also publishes measures of labor productivity. See BLS, “Multifactor Productivity,” webpage, undated-a. As of August 16, 2018: <https://www.bls.gov/mfp>

Regarding nonmanufacturing MFP, the BLS indicates “output and the corresponding inputs for nonmanufacturing industries are often difficult to measure and can produce productivity measures of inconsistent quality. Customers should be cautious when interpreting the data” (BLS, undated-a).

⁹Nancy Young Moore, Mary E. Chenoweth, Elaine Reardon, Clifford A. Grammich, Arthur M. Bullock, Judith D. Mele, Aaron Kofner, and Eric J. Unger, *Estimating DoD Transportation Spending: Analyses of Contract and Payment Transactions*, Santa Monica, Calif.: RAND Corporation, DB-516T-TRANSCOM, 2007. As of August 16, 2018: https://www.rand.org/pubs/documented_briefings/DB516.html

¹⁰U.S. Bureau of Labor Statistics, “LPC Tables and Charts,” website, various dates. As of August 16, 2018: <https://www.bls.gov/lpc/#tables>

Executive Office of the President, Office of Management and Budget, *North American Industry Classification System, United States, 2017*, 2017. As of August 16, 2018: https://www.census.gov/eos/www/naics/2017NAICS/2017_NAICS_Manual.pdf

Average annual productivity rates spanning years $t - n$ to t for a given industry are calculated as $(V_t/V_{t-n})^{1/n} - 1$, where V is the level of productivity in a given year relative to 2007 = 100.

¹¹Shawn Sprague, “Below Trend: The U.S. Productivity Slowdown Since the Great Recession,” *Productivity*, Vol. 6, No. 2, January 2017. As of August 16, 2018: <https://www.bls.gov/opub/btn/volume-6/below-trend-the-us-productivity-slowdown-since-the-great-recession.htm>

¹²Considering either the difference in medians or averages associated with the time periods of 2000–2010 or 2011–2016.

¹³For example, the Defense Logistics Agency (DLA) operates 17 distribution centers in the continental United States (CONUS) and seven distributions centers outside CONUS. Each site handles a wide variety of items and commodities. The Albany,

Georgia, center stocks and distributes items, including ready-to-eat meals, electronic components, weapon parts, and nuclear-biological-chemical personal protective equipment. See DLA, “DLA Distribution,” webpage, undated. As of August 16, 2018: <http://www.dla.mil/Distribution.aspx>

In 2017, the DLA anticipates its operations will produce \$21.7 billion in revenue (orders for material from the military services).

¹⁴The Defense Commissary Agency (DeCA) operates 245 commissaries around the world, selling groceries and household goods to active-duty military members—5.4 million households. DeCA employs about 16,000 personnel, has about \$5.6 billion in annual sales, and about \$1.2 billion in annual operating expenses. See Defense Commissary Agency, *Fiscal Year (FY) 2017 President’s Budget*, February 2016.

¹⁵The Defense Health Program (DHP) operates military treatment facilities and purchases health care from the private sector for active-duty military family members, as well as for retired members and their families. The DHP 2017 budget request totals \$33.8 billion. DHP personnel consist of about 84,000 military servicemembers and 65,000 civilians. The worldwide defense health care system includes 50 military hospitals and more than 600 clinics. See DHP, *Fiscal Year (FY) 2017 President’s Budget*, February 2016. As of August 16, 2018: https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2017/budget_justification/pdfs/06_Defense_Working_Capital_Fund/DeCA_FY2017_PB.pdf

U.S. Department of Defense, “Fact Sheet: Overview of the Department of Defense’s Military Health System,” 2014. As of August 16, 2018:

http://archive.defense.gov/home/features/2014/0614_healthreview/docs/Fact_Sheet_Overview.PDF

¹⁶As of December 2015, there were 26 locations where maintenance activities for defense systems were conducted at depots, shipyards, arsenals, and centers of industrial and technical excellence. Maintenance spending during fiscal year 2014 totaled about \$73 billion and maintenance personnel numbered 618,000. See “DoD Maintenance: 2015 Fact Card,” undated. As of August 16, 2018:

https://www.acq.osd.mil/log/mpp/factcard.html/DoDMaintCARD_12115_2.pdf

¹⁷Note that the budgets and costs of DLA, DeCA, DHP, and defense maintenance make up about 20 percent of current annual defense spending.

¹⁸The most-recent comprehensive BLS data for MFP extend through 2015 and are provided for industries associated with 62 NAICS codes. See BLS, “Multifactor Productivity: Download Tables of Multifactor Productivity Measures for Major Sectors and Manufacturing,” webpage, undated-b. As of August 16, 2018: <https://www.bls.gov/mfp/mprload.htm>

¹⁹BLS, “Multifactor Productivity Trends in Manufacturing—2016,” press release, USDL-18-0785, May 16, 2018. As of August 16, 2018:

<https://www.bls.gov/news.release/pdf/prod5.pdf>

About This Report

The U.S. Department of Defense (DoD) continues to seek savings in its operations, often by seeking lessons from and making comparisons to the private sector, but also by considering how it could change the ways it conducts specific aspects of its operations to make them more efficient and effective. Leadership and offices throughout DoD have employed both approaches with varying degrees of success partly because of DoD's inherent complexity, mission-driven needs requiring a balance between wartime and peacetime demands, and the challenge of finding analogous comparisons with the private sector. Two recent studies commissioned by DoD use experience with the growth rates of private-sector labor productivity in the top 20 best-performing U.S. industries to argue that substantially increased productivity can be achieved in the conduct of defense activities. This increased productivity would yield savings totaling as much as \$125 billion spanning five years. Productivity-based estimates of potential savings need to account for investments to increase labor output, which entail costs offsetting potential savings. As it applies to DoD, such estimates would incorporate differences between DoD and the commercial sector that could exist in absolute levels of multifactor productivity, which incorporates both investments and labor. This report presents a discussion of alternatives that try to account for the complexity and uniqueness of DoD, which could yield more-realistic estimates.

This report should be of interest to senior decisionmakers and acquisition professionals across DoD.

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