US Defense Budget Reform Historical Perspectives (1940s–2020s)

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Introduction

In recent months, politicians and other policy makers have stepped up their criticisms of the US defense budgeting system. Many commentators have suggested that just when US strategy is turning to a long-run competition with China, the entire national security enterprise, including the defense budget process, is insufficiently agile. Some of these critics, who include business leaders, elected officials, and defense acquisition specialists, have further suggested that the defense budget system is a lumbering relic of the Cold War "industrial era" wedded to Stalinist "central planning," totally unsuitable for translating today's post-industrial technologies into military capabilities.¹ Summing up this critique, one recent study concluded that the current system is unacceptable. "Given the accelerated modernization of advanced peer rival militaries, rapid technology refresh, and other critical factors," a MITRE study team declared in 2022, "[the Department of Defense] cannot afford to continue the current budgeting processes."²

Some of today's reformers focus on the limitations of the Pentagon's decades-old planning, programming, budgeting, and execution sequence, now known as PPBES, which was launched in 1961.³ Informed by the recent critiques of the Pentagon's lack of agility, Congress used the FY2022 defense authorization act to establish a new legislative commission dedicated to PPBE reform. In theory, the work of this body could lead to major changes in the workings of the annual ritual of defense budgeting, at least on the side of the Department of Defense (DoD), which in recent years has employed an estimated twenty-five thousand people on budgeting work.⁴

The views expressed in this chapter are solely those of the individual author and do not necessarily reflect the views of any organization with which they are, or have been, affiliated. Other reformers insist that much of the blame for slow acquisitions and other dysfunctions rests with Congress. Indeed, recent Pentagon leaders have been blunt about their contempt for legislators when it comes to the work of the defense budget. Robert Gates (secretary of defense from 2006 to 2011) regarded Congress's repeated failures to pass defense budgets on time as an "outrageous dereliction of duty" by a legislative body that has become overwhelmingly "uncivil, incompetent, . . . micromanagerial, hypocritical, [and] egotistical."⁵ One of Gates's successors, the late Ash Carter (secretary of defense from 2015 to 2017), expressed similar disgust, calling Congress's annual defense authorization bills as "mostly meaningless" gestures, failing to provide the military with prompt appropriations while creating "a preposterous level of micromanagement."⁶

Given the widespread worries that today's US defense budgeting system is inadequate for twenty-first-century needs and has become more dysfunctional over time, it is worth reviewing some relevant history. This paper surveys the history of successful and failed efforts to reform the US defense budget since World War II. It is organized chronologically, as it reviews a series of episodes or moments from the beginning of the Cold War through the 2010s and early 2020s. These individual episodes may serve as reminders of the origins of key elements of today's systems—such as the Pentagon's PPBES or Congress's current practice of having the line-item details of each budget scrutinized annually by both authorizers and appropriators. Understanding when and why these specific institutions were born and in what context may be helpful to today's would-be reformers.

At the same time, the historical episodes covered in this paper may also be read as cases of certain varieties of reform efforts, which have echoed across time. In most of these episodes, reformers pursued one or more of four broad goals: coherence, adequacy, stability, and agility. Most would-be reformers today prioritize agility, as they worry about equipping the US military and its allies with fast-changing technologies in the context of a great-power competition with China. Some of today's reformers are also concerned about sheer adequacy—whether the budget's size may be significantly too small (or too big). Such concerns about agility and adequacy also troubled reformers in the past, starting with the early Cold War years of the late 1940s and early 1950s.

Past policy makers have also often been concerned with budget stability, which frequently proved elusive, not only because of waves of higher and lower defense spending but also because of Congress's annual line-item interventions, hard budget caps and sequestrations, and failure to provide timely appropriations. Finally, past reformers have repeatedly been concerned with the budget's coherence, especially whether it was organized rationally in a way that could overcome parochial concerns and promote the national interest, along with a good understanding of actual costs.

An overview of the relevant history calls attention to important past cases and can also illuminate longer-run structural transformations. A long-run perspective on modern US defense budget reform seems to offer plenty of support for those who contend that the current system is overdue for a major overhaul. Indeed, most of the elements of today's system were developed during the 1950s–1970s period. Many of the weaknesses of the system being decried now, and many of the proposed solutions being suggested today, were already widely discussed by the 1980s. It is certainly possible to imagine that the time has finally come for a major reconstruction of the half-century-old budgeting system as the United States moves ahead with what would appear to be an expensive new long-run great-power competition.

On the other hand, the impressive endurance of the old defense budgeting system, now several decades beyond the Cold War, may suggest that the most likely outcome in the coming years will not be a radical revision but additional minor modifications. Since the 1980s, we have witnessed the end of the Cold War; the September 11 attacks; wars in Afghanistan and Iraq; a supposed revolution in military technologies; and the recent strategic pivot to focus on Russia and China. All or any of these developments might be considered disruptive enough to inspire a major restructuring of the defense budgeting enterprise, such as the one realized during the early Cold War. But that never occurred. Instead, Congress and the Pentagon have made do with a variety of more modest shifts in acquisition and budgeting practices, which, together with world-beating levels of defense expenditures, might be understood as having delivered good-enough levels of security. It seems quite possible that in the absence of a truly large new global security shock or unanticipated shift in domestic politics, the US defense budgeting system may continue to stumble forward for many years to come, using supplements and workarounds, as it has done since the end of the Cold War, rather than achieving comprehensive reform.

Regardless of the specific lessons it might appear to offer about the best or most likely paths forward, a review of the relevant history may inspire today's reformers in the direction of more open-minded curiosity as well as humility. Time and again, past reformers on various sides have described existing defense budgets as woefully inadequate or tragically excessive; some have insisted that the budgeting and acquisition system needed to become far more agile and decentralized, while others demanded that it was more important for the system to become more coordinated and stable. In retrospect, a sizable fraction of the calls for major reform over the past seven decades looks to have been based on overestimates of external threats or exaggerations of the budgeting system's flaws. Even if today's reformers fail in the coming months to correct what they understand as the most serious weaknesses of our Cold War–vintage budgeting system, we may take some solace in knowing that in the face of so many profound uncertainties about the future security environment, a radically overhauled system might not end up being preferable to one that continued business as usual, with minor adjustments.

Foundational Reforms, the Late 1940s-Early 1980s

Policy makers in the 2020s are working with a US defense budget process developed during the Cold War. The period between the late 1940s and the early 1980s saw a series of fundamental reforms, encompassing huge changes in the size and organization of the defense budget and the budget process for the Pentagon and Congress. Most major elements of the current systems, and awareness of the weaknesses of those systems and ideas for reform, were already in place by the 1980s, about four decades ago.

Dawn of the Cold War: Redefining Budget Categories and Reassessing Adequacy, 1948–60

At the start of the 1950s, the US defense budget was overhauled from two directions. On the one hand, the Defense Department, established in 1947, worked to consolidate the budget and make it more coherent by replacing a decades-old system of hundreds of legacy appropriation line items with a smaller number of functional categories. At the same time, the sheer size of the base defense budget was seeing a massive expansion in response to the intensification of the Cold War, including the start of the Korean War in 1950. By the end of President Dwight Eisenhower's first year in office (1953–54), the US defense budget radically differed from just five years earlier. Although there were powerful pressures to increase the budget further during the second half of the 1950s, Eisenhower mostly resisted those new attacks on adequacy. The size and shape of the budget, and the budget process, would not see major changes until the new administration's arrival in 1961.

One part of this story, the near-tripling of the base defense budget in the early years of the Cold War, has long been familiar to historians, political scientists, and policy makers. In the late 1940s, the Truman administration and most members of Congress agreed that the nation, which was starting to pay down its giant World War II debt, could afford an annual DoD budget of only around \$12 to \$15 billion, or about 5 to 6 percent of GDP. By the mid-1950s, after the United States had demobilized from the Korean War emergency, and despite President Eisenhower's fiscal conservatism and his embrace of a relatively cheap "New Look" strategy relying heavily on nuclear weapons, the new base DoD budget was settling in at \$35 to \$40 billion, or roughly 10 percent of GDP. Remarkably, the United States had embraced the neartripling of the defense budget that had been called for by Cold War hawks such as Paul Nitze in the United States Objectives and Programs for National Security (better known as NSC-68) report, completed before the start of the Korean War. This larger defense budget, which allowed for a global military superpower, has persisted in real dollar terms over the long run, even as defense spending as a fraction of GDP has declined (see figs. 16.1 and 16.2).



Figure 16.1 National Defense Spending as a Percentage of GDP, 1947–2022

Notes: Shaded areas indicate US recessions. Includes defense-related spending by non-DoD agencies.

Source: US Bureau of Economic Analysis, via Federal Reserve Economic Data, Federal Reserve Bank of St. Louis (FRED), http://fred.stlouisfed.org.



Figure 16.2 US Department of Defense Outlays, FY1948–FY2022 (in 2022 dollars)

Source: US Department of Defense, Office of the Under Secretary of Defense (Comptroller), National Defense Budget Estimates for FY 2022 (Green Book), August 2021, Table 6-12, pages 151–57.

The story of NSC-68 and the jump in the US defense budget in the early Cold War has been described at length by countless scholars, so it need not be reviewed in detail here. For our purposes, it may be enough to briefly address what caused such a remarkable change in consensus about the adequacy of the size of the base defense budget. After all, the 2020s' equivalent of an NSC-68 would be recommending that the US defense budget be hiked to \$2 trillion. The short answer is that policy makers and voters had their sensibilities altered by a remarkable series of global events between 1948 and 1950, including the coup in Czechoslovakia, the first Soviet atomic bomb test, the birth of the People's Republic of China, Kim Il-Sung's invasion of southern Korea, and—perhaps most important of all—developments in the opening weeks of the Korean War, including President Harry Truman's decision to take the US and its allies to war, and China's intervention in the conflict.⁷

The record of the Truman years seemed to suggest that evidence of growing external threats caused fundamental reassessments of the adequacy of the US defense budget. However, the Eisenhower years showed that warnings of dire inadequacies were sometimes overblown and could be resisted. As countless scholars have noted, the President's fiscal conservatism informed the Eisenhower administration's New Look strategy, which relied on nuclear weapons rather than expensive large conventional sources. Soon after taking office, Eisenhower told his National Security Council they would seek "more security for less dollars." In Eisenhower's mind, as Secretary of Defense Robert S. McNamara would later explain, "fiscal security was the true foundation of military security." Using the New Look, the Eisenhower administration lowered the defense budget to about \$36 billion.⁸

From 1956 through the end of his second term, Eisenhower resisted intense pressures, from the Joint Chiefs of Staff, expert commissions, and leading members of Congress, for another big jump in the size of the defense budget. Before and after the news of Sputnik (October 1957), congressional investigations claimed that the US was falling behind the Soviet Union in the quality and quantity of bomber aircraft and missiles. In 1958, Senator John F. Kennedy blamed President Eisenhower for putting "fiscal security ahead of national security."9 From 1958 to 1960, a Democratic Party-controlled Congress did force the Eisenhower administration to spend a few more billion dollars on these systems, including the Atlas and Titan ICBMs, Polaris submarines and missiles, and the B-70 bomber. But Eisenhower (whose deficit hawk instincts were supplemented with knowledge from intelligence reports that the alleged "bomber gap" and "missile gap" were myths) refused to condone large budget increases. He refused to implement the recommendations of new NSC-68-style calls for large new expenditures, including those of the Gaither Report and Rockefeller Brothers Fund report of 1958, which called for the defense budget to be raised immediately by around 20 or 25 percent.¹⁰

These struggles over adequacy in the post–World War II defense budget, which ended with large increases in the Korean War years but no second big jump in the late 1950s, were inseparable from tax policy. In 1948, Congress overrode President Truman's veto to provide a substantial tax cut. During the Korean War, taxes were hiked back up, close to the levels of World War II. During the Eisenhower years, the new defense budget level of \$35 billion or more meant that Congress could not restore tax rates to where they had been in the late 1940s. Instead, high World War II–style rates prevailed for over a decade until the Kennedy-Johnson cuts of the early 1960s (see fig. 16.3). When his critics called for higher defense spending in the late 1950s, Eisenhower, in effect, challenged them to raise taxes even higher, to pay for a new buildup. Congress proved unwilling to go that far.¹¹

Although the unprecedented jump in the size of the base defense budget stands as the most remarkable budget "reform" of the early Cold War years, it is also worth remembering that this same period saw an overhaul of the composition of the defense budget, as it was formulated by the DoD and presented to Congress. This was the transition away from the huge number of decades-old appropriations lines largely tied to the military services' technical bureaus in favor of using a smaller number of broader "functional" categories. This radical





reform, in favor of consolidation and greater DoD discretion, was undertaken in 1949–51, concurrent with the massive increase in the budget's size.

The consolidation of defense budget lines of the early 1950s was demanded by Section 4 of the National Security Act of 1949, which called for "performance budgeting" while providing the Pentagon with a comptroller. This reform followed the recent recommendations of the Hoover Commission, which concluded that the Pentagon should create "a budget based upon functions, activities, and projects." In the late 1940s, there were still hundreds of separate appropriations lines, including small ones for newspapers and water coolers or individual claims, as well as giant ones such as those covering pay and subsistence for entire services. Individual installations, such as the National Naval Medical Center in Bethesda, Maryland, relied on dozens of budget lines from a dozen major appropriation titles. As the Pentagon's first comptroller recalled, it took "269 pots of money" to run a single hospital. The Hoover Commission recommended that all these could be consolidated under a single appropriation, perhaps labeled medical care.¹² Embracing the Hoover Commission report, and empowered by the 1949 legislation, Pentagon comptroller Wilfred McNeil crafted a new kind of defense budget, emphasizing broad "functional" categories. By the eve of the Korean War, in May 1950, McNeil and his team had already drafted a budget comprising major appropriations titles, including personnel, military construction, research and development, procurement, and operation and maintenance. It was a historical shift, which has endured to the present day, in how the budget was organized and understood by the Pentagon and Congress. It was part of a broader reorganization of power in the military services, away from the old technical bureaus, in favor of the general staff. Although this consolidation of budget categories took years to accomplish and never achieved true "performance" budgeting (in which results and costs could be visualized), it was nonetheless a major, lasting reform.¹³

The 1950 move to a more "functional" defense budget with consolidated appropriations lines meant that Congress further delegated authority to the DoD. The change to the new functional categories confused some legislators, who already felt incapable of matching the expertise of military officers and executive branch officials.¹⁴ McNeil, the Pentagon comptroller, would recall that the use of large functional categories only worked because he had a strong relationship with congressional appropriations committees, which were willing to trust his active management of the budget.¹⁵

Congress was relatively deferential and generous to the Pentagon in the 1950s, a decade that saw some spectacularly successful development and production of weapons systems, such as the F-100 fighter and Polaris submarines and missiles. However, we should be wary of imagining the 1950s—an era before the rise of PPBS and congressional micromanagement—as a time when defense budgeting and acquisition were fantastically agile. Defense policy makers of the 1950s still faced the annual appropriations cycle; they dealt with massive uncertainties about future external threats and technological change and struggled to balance the benefits and costs of sequential and concurrent acquisition methods.¹⁶ As McNeil recalled, "With the Middle East blowing up, with the vacuum in Greece, and the British pulling out of Lebanon and Palestine, and so forth—with changes like that occurring, I was bothered very much by the time it took between developing a force plan and actually getting the money to implement it. It was just impossible."¹⁷ As one careful study of 1950s defense acquisition noted, "the units administering weapons programs must submit their financial requirements some three to five years in advance of expected expenditure dates, despite all the technological and strategic uncertainties to which they are subject."¹⁸ Ultra-rapid major weapons development stories such as the F-100 and Polaris, which saw the systems fielded three years after the start of design work, are cited by some wouldbe reformers in our day as models for twenty-first-century acquisition but even in the 1950s, they were the exception, not the rule.¹⁹ Average acquisition cycles were closer to a full decade long, which caused widespread fears in the 1950s that the United States and its allies would fall behind the Soviet Union, which allegedly could field new weapons in half the time.²⁰

Overhauling DoD Processes: The Creation and Modification of PPBS, 1961–70

The US defense budget was overhauled again in 1961 by a new Pentagon team led by the forty-four-year-old secretary of defense, Robert S. McNamara. The Pentagon's new way of budgeting was organized around PPBS, which took a step toward functional-performance budgeting by grouping expenditures by entire cross-service military missions. It also used five-year plans as part of an effort to measure the long-run costs of defense investments better. Under McNamara, PPBS involved a major shift in power away from the individual military services and toward civilian analysts. In 1969–70, the PPBS system was modified by Secretary of Defense Melvin Laird and his deputy, David Packard, in ways that restored some budgeting power to the military services. Although there have been various efforts since 1970 to reform the PPBS (now called PPBE), today's system is not much different from the one in place a half century ago.

McNamara entered office in 1961 intent on making major disruptions to routine Pentagon practices, using quantitative analysis to challenge existing routines, just as he and his fellow "whiz kids" had done at the Ford Motor Co. in the years after World War II. When he looked at the existing defense budget, McNamara saw a system in which the air force, navy, and army had been awarded slices of the expenditure pie and allowed to develop their own budget requests without much concern for the broader military mission and the national interest. "The results," McNamara recalled, "could be described fairly as chaotic. . . . Our new form of budget for the first time grouped together for planning purposes units which must fight together in the event of war."²¹ Parochial budgeting by the services caused overlapping and potentially redundant programs in areas such as ballistic missiles and also systematic underinvestment in some important areas, such as antisubmarine warfare, ammunition, spare parts, and tactical air support. To help him create a more rational budget, McNamara recruited a new comptroller, Charles Hitch. As chief of the economics division at the RAND Corporation, Hitch had already been working for years on ways to have the defense budget better comprehend long-term "total system costs" and become organized more by military "outputs," or missions.²²

In 1961–62, McNamara and Hitch and their team installed PPBS, which set up new budgeting processes and categories in the Pentagon without doing much to alter the structure of the defense budget used by Congress. The newest element in PPBS was the "programming" phase, which was needed in part because McNamara and Hitch decided it would be too difficult to present Congress with a budget that abandoned the five large functional categories (such as personnel or procurement), organized by service, that had been established by McNeil just one decade earlier. As Hitch explained it, with regard to the document the administration sent to Congress at the beginning of the calendar year, "We decided to leave the budget structure undisturbed."23 However, within the Pentagon, the "programming" phase of PPBS saw the military's various activities grouped under "major programs" (originally nine in number), including strategic systems, general purpose forces, airlift and sealift, and research and development. The broad programs comprised nearly one thousand smaller "program elements," such as individual tactical air wings.²⁴ The size, cost, and personnel requirements of the programs and program elements were estimated for five to eight years into the future to create a Five-Year Defense Plan. According to the McNamara-Hitch team, PPBS and the Five-Year Defense Plan allowed them to make rational decisions about the best use of defense dollars by examining strategic priorities and long-range cost-effectiveness simultaneously.²⁵

The PPBS clearly created more work for the services and the Office of the Secretary of Defense but did not radically increase the length of the budget cycle. As noted above, in the 1950s, observers were already complaining that expenditures lagged original plans by a matter of years. Under PPBS, the major planning documents, such as the Joint Strategic Objectives Plan created by the Joint Chiefs of Staff and the secretary of defense's "tentative force guidance" sent to the services, needed to be completed early in the calendar year—meaning that they were already starting to be compiled during the previous year. This allowed the programming phase to unfold from spring to fall. Under McNamara, much of the programming was crafted in "Draft Presidential Memorandums" composed by the civilian analysts, which circulated among the services and the Joint Chiefs of Staff for comment and revision. The preparation of the budget being sent to Congress was done at the end of the calendar year so the White House could send the whole proposed budget to the Hill in January. If Congress passed an appropriations bill on time, by the start of the fiscal year on July 1, the lag between the start of planning and the start of spending was around two years—or even close to three, if one considered the earliest planning stages.²⁶

The PPBS installed by McNamara's team in 1961 has endured to the present day. But it was revised meaningfully in 1969-70, under the leadership of Secretary of Defense Melvin Laird and his deputy, David Packard. They changed PPBS to give more power back to the military services, in a decentralization of budget-making authority that reduced the power of civilian analysts in the secretary's office. In fact, by the mid-1960s, the services had already begun to challenge the "McNamara Monarchy" by ramping up their own capacities to provide the kind of quantitative analysis needed to prevail in budget debates.²⁷ Laird and Packard gave the services more formal responsibility by restoring the 1950s practice of providing them in advance with guidance about dollar limits and allowing them to make their own choices about allocating resources. Now the key programming documents became Program Objective Memorandums (POMs) generated by the services instead of the draft presidential memorandums that McNamara's civilian analysts had crafted.²⁸ Since 1970, the balance of power between the services and civilians has altered slightly, back and forth.²⁹ In the 1980s, the Pentagon's budgeting effort was modified by Secretary of Defense Caspar Weinberger and his deputy, Frank Carlucci. They increased the influence of combatant commanders, as well as that of the Defense Resources Board, which included service secretaries and other top civilian officials, along with the chairman of the Joint Chiefs.³⁰ Despite these developments, however, today's PPBES looks very similar to its 1970 antecedent.³¹

The PPBE Reform Commission working today (in 2023) has the difficult task of trying to alter a complex, entrenched system that has already survived a couple of generations of critics. In the era of the Carter administration, military reform proponent Franklin C. Spinney was already describing the system as ossified and unacceptable. "The PPBS has become so cumbersome and infected by bureaucratic gaming," Spinney declared in a 1980 briefing, "that as we get nearer to the January budget deadline, we are responding more to the bureaucratic constraints imposed by the system rather than using the system as a tool to adjust to changing circumstances."³² When Spinney composed

those words, the PPBS had been in place for less than two decades. Now we are nearly forty-five years further down the road.

Empowering Congress: Increased Legislative Power and Its Consequences, 1959–85

Whereas the transformation of the DoD budget process occurred mostly in the 1950s and 1960s, Congress's handling of the defense budget was reshaped somewhat later, with many new procedures inaugurated in the 1970s. By that decade, it became clear that Congress was asserting more power over the defense budget than it had during the early Cold War. This shift occurred in the context of the failure of the US war in Vietnam and postwar defense budget cuts, along with economic distress and a broader rethinking of national priorities, the US role in the world, and the balance of power between the executive and legislative branches. By the early 1980s, when the defense budget was increasing again, legislative oversight had become so seemingly strong that Congress was routinely accused of "micromanagement."

As political scientists and historians have documented at length, the 1970s marked the end of a half-century era during which the White House took most of the initiative in the budget process and during which a handful of congressional committees and committee chairs dominated the legislative side of defense policy. Following the Budget and Accounting Act of 1921, which set up the Bureau of the Budget as an executive agency, there was a fifty-year period of "presidential dominance" in the budget process.³³ The same years are remembered as the "Committee Era" in the legislative branch, when a few committee chairs and senior members, who enjoyed great deference from their colleagues, controlled congressional oversight of defense budgeting and other defense policies.³⁴ The powerful committee chairs generally made few changes to the defense budgets submitted by the White House, and if executive branch officials did run into an obstacle or anticipated a problem, interfacing with Congress was simple and quick. As one former junior member of McNamara's Pentagon recalled, as late as the mid-1960s, "if you wanted to see if Congress was with you on an issue, you could go over and talk to four people."35

One key shift toward more congressional oversight—arguably reducing both agility and stability—was expanding the armed services committees' work on annual authorizations. In the 1950s, most defense spending other than military construction was done under broad, semipermanent authorizations such as those allowing the navy to procure fifteen thousand aircraft and 2.5 million tons' worth of shipbuilding. This changed at the end of the decade, with Congress's concerns about competing with the Soviet Union in the missile age. Responding to his colleagues' complaints about inadequate information provided by the DoD and evidence of redundancies in the military services' missile and air defense programs, Senator Richard Russell crafted an amendment to the Military Construction Authorization Act of 1959, which stated that starting in 1961, the armed services committees would need to authorize the procurement of missiles, aircraft, and ships. The Eisenhower and Kennedy administrations, the DoD, and the appropriations committees in Congress all opposed this new policy, warning that it would cause duplication of effort between authorizers and appropriators and would constrain the Pentagon's legitimate needs for agility.³⁶ As one observer claimed at the dawn of the new authorization regime, "it is clear that any attempt to authorize procurement in detail, which might simultaneously hinder reprogramming, carries heavy disadvantages in an era of exploding military technology."³⁷ Despite these concerns, the scope of the armed services committees' annual authorizations expanded steadily from the 1960s into the 1980s until they covered every corner of the defense budget, including research and development, operations and maintenance, personnel, and procurement and construction.38

Although the expansion of annual authorizations was well underway when McNamara left the Pentagon in 1968, the development of what critics would call congressional micromanagement of the defense budget did not occur until the 1970s. As late as 1968–70, the annual defense authorization bill was only about ten pages; it was normally passed on voice votes after less than a single day of debate.³⁹ Just one decade later, by the late 1970s and early 1980s, the annual defense authorization and appropriations bills were both hundreds of pages long; each year, both authorizers and appropriators were altering hundreds of individual line items—more than half of all line items in the budget submitted by the White House. From the Pentagon's perspective, the number of members of Congress and their staffers who had a hand in the defense budget had expanded dramatically in just a few years to dozens and dozens of people.⁴⁰

The remarkable 1970s expansion of congressional management of defense budgets was part of what has been called a broader "congressionalization of defense policy," involving a new willingness to challenge the executive branch and new budget processes, as well as a decentralization of power in the legislative branch.⁴¹ At the end of the 1960s and into the early 1970s, in the context of growing public discontent with the war in Vietnam, Congress started to hold lengthy debates on defense policy and imposed significantly larger cuts to the president's budget requests than it had done during the early Cold War. Meanwhile, a younger cohort of new members pushed Congress out of the "Committee Era" with new rules that gave more power to subcommittees and individual members.⁴² After clashing with President Richard Nixon over defense and domestic spending, Congress passed the 1974 Congressional Budget Impoundment and Control Act, the foundation of the current legislative budget process. The 1974 act created the budget committees responsible for crafting a budget resolution on spending and revenue, as well as the Congressional Budget Office. The start of the fiscal year shifted from July 1 to October 1 to allow more time for what was, in theory, a threestage sequential process requiring action from the budget committees, the authorizers, and the appropriators. The act expanded Congress's capacity to manage the budget, as did the rise in the number of staffers in the offices of individual members and the committees. Congressional staff doubled between the late 1960s and the end of the 1970s.⁴³

The new US defense budget regime created in the early 1970s operated for only a few years before encountering major criticisms from two different directions. First, hawks sounded loud alarms about the inadequacy of US defense spending in light of the threat of expanding Soviet nuclear and conventional forces. Starting in 1976, the CIA determined that Soviet defense outlays had been considerably higher in recent years than it had previously estimated. (A decade later, the CIA would determine that it overestimated Soviet defense spending in the late 1970s and early 1980s.)⁴⁴ Meanwhile, US defense budgets, now managed closely by a more dovish Congress in the context of a global economic recession and high inflation, had declined in real dollar terms by about a third from their 1968 wartime peak (see figs. 16.1 and 16.2).⁴⁵ In short order, the growing unease about US defense budget inadequacy caused major reforms in the realm of dollar quantity. The big defense budget increases that allowed the Reagan buildup of the early 1980s, popular with Congress and the public, were the most obvious manifestations of the shift. But the change in sensibilities about adequacy was underway much earlier, as suggested by President Jimmy Carter's abandonment of his 1976 campaign promise to cut the defense budget as early as his first year in office.⁴⁶

A second set of criticisms about the US defense budget in the late 1970s pointed to the dysfunctional aspects of the more heavily congressionally

managed budget process established just a few years earlier. Unlike the warnings about the inadequacy of the budget's size, these alarms about the problems with the budget process were never addressed with major reforms. Indeed, the same complaints about the high costs of congressional overmanagement of the defense budget have continued to echo into the 2010s and 2020s.

By the time of the Reagan buildup of the 1980s, it was widely observed—by scholars, journalists, executive branch officials, and legislators themselvesthat Congress was overmanaging the defense budget. In theory, the 1974 budget act and other increases in congressional capacity had provided a salutary dose of democratic accountability to the White House and the Pentagon, which had demonstrated in the 1960s that they could not be trusted to carry out wise, economical defense policies. But "in practice," as one expert observer put it, Congress's new process, involving the close scrutiny of the budget by multiple committees in each house over the better part of a year, "has proved to be a nightmare."⁴⁷ By the early 1980s, when every major defense budget category was subject to annual authorizations, it was clear that the armed services and appropriations committees largely duplicated one another's work, as they both manipulated hundreds of line items. "Three different committees in each house," lamented Senator Sam Nunn in the 1980s, "should not be doing essentially the same thing."48 Perhaps worse still, they were increasingly disregarding one another's actions, forcing the Pentagon to tiptoe around problems of unauthorized appropriations or unappropriated authorizations.⁴⁹ Meanwhile, the new legislative process launched in 1974 had failed to deliver the on-time passage of appropriations bills, despite the three-month extension of the start of the fiscal year.⁵⁰ These regular delays, combined with the annual interventions by authorizers and appropriators, caused what the Pentagon and its contractors regarded as excessive, wasteful instability.

By the time of the Carter-Reagan defense buildup in the late 1970s and early 1980s, a three-decade period of major reforms to the US defense budget system was coming to an end. In 1950, there was a major shift in the national consensus about budget adequacy. Policy makers created a much larger baseline defense budget to provide a global military superpower, a condition that persists. Meanwhile, in a two-step consolidation process, the DoD reorganized the budget. In the early 1950s, hundreds of decades-old accounts were consolidated into new broad appropriations titles, and in the early 1960s, the McNamara team grouped programs and their costs into major military missions as part of the new PPBS. Finally, in the 1970s, Congress began to assert more power over defense budgeting by doing more to challenge the president's budget, expanding authorizations, and decentralizing authority in ways that allowed ordinary members more power to influence defense spending. The system in place by the early 1980s, with its many evident problems, is not much different from today's. Since the 1980s, there have been several efforts at defense budget reform but most have either failed or had modest effects.

Business as Usual, Modified by Supplements and Workarounds, the 1980s–2010s

Since the 1980s, the US defense budgeting system has proven resistant to major reforms. Even reform efforts that were tried repeatedly and enjoyed wide support, such as multiyear budgeting, have floundered. Other proposed reforms suggested repeatedly since the 1980s, such as the consolidation of congressional authorization and appropriations committees, have proven to be nonstarters. Nevertheless, even if no foundational overhauls occurred, there were a few areas in which reformers could point to some success. The endless drive for defense acquisition reform created more agility in the system, starting in the 1990s, by moving a larger part of the defense budget into a more commercial orientation. During the post-9/11 wars in Afghanistan and Iraq, some of the inflexibilities of the normal budget system were reduced by huge supplemental appropriations and special acquisition authorities. And since the 2010s, further acquisition reform efforts have provided a few new tools that can serve as workarounds to provide more agility in at least a few small pockets of the defense enterprise. Would these various band-aids and workarounds, applied atop a foundational US defense budgeting system that had not changed much since the 1970s, continue to suffice, given that the sheer size of the US defense budget continued to dwarf its rivals? This is a key question for US policy makers looking ahead to the mid-twenty-first century.

The Failure of Multiyear Defense Budgeting and Related Reforms, the 1980s–2000s

Over the last half century, perhaps the single most energetic, widely endorsed plan to reform US defense budgeting was the effort to create a biennial or multiyear budget. Multiyear defense budgeting promised to reduce work for Congress and the DoD while adding stability to acquisition programs and other expenditures, which would reduce costs. This reform effort was partially tried in the 1980s and 2000s but never took hold. Its failure was partly attributable to Congress's obvious reluctance to reduce its power over budgeting. But the history of its failure also suggested that the benefits of adding longrun stability to defense budgets may be smaller than advertised because of the many uncertainties and unpredictable events that inevitably impinge on the work of security policy makers.

In the 1980s, would-be reformers frequently called for a shift to multiyear budgeting to cut down on the many thousands of person-hours of work for Congress and the DoD, reducing congressional overmanagement and adding cost-saving stabilities to the budget execution phase. "The time has come to simplify the budget process," former Congressional Budget Office director Alice Rivlin argued in the mid-1980s, as she made a case for multiyear budgeting (as well as consolidating budget line items and the authorizing and appropriations processes).⁵¹ Rivlin's call for multiyear defense budgeting was echoed by many other major would-be reformers in the 1980s, including the Grace Commission members, who suggested ways to reduce costs across the federal government. Jacques Gansler, a defense acquisition guru, argued strongly for multiyear budgeting, pointing out that the United States was exceptional in its use of annual bills.⁵² This then amplified the US legislative branch's uniquely large powers, relative to its counterparts in other nations, over budgeting and defense policy. 53 Biennial budgeting was also endorsed by the Packard Commission, which criticized Congress's elaborate, annual budget interventions as "excessive and harmful to the long-term defense of the country."54

In the 1980s, Congress took steps toward multiyear budgeting but refused to implement it. By the time of the Reagan buildup, the idea of multiyear budgeting enjoyed some support in Congress, where Rep. Leon Panetta (D-CA) had been sponsoring biennial budgeting bills since the late 1970s.⁵⁵ Congress held hearings on the issue in the early 1980s; some committees endorsed the idea, even as opponents complained that the legislature would give up too much oversight. Then, in the National Defense Authorization Act (NDAA) for FY1986, Congress required the executive branch to submit two-year budgets.⁵⁶ The Pentagon duly submitted biennial defense budgets starting in the late 1980s. But Congress—particularly the appropriations committees—never abandoned its traditional practice of crafting annual bills. By the 1990s, even as the Clinton administration's National Performance Review called for multiyear budgeting, the Pentagon was asking to be relieved of the task of drafting biennial budgets because legislators ignored them.⁵⁷

The idea of biennial budgeting was revived at the Pentagon in the early 2000s under Secretary of Defense Donald Rumsfeld. Calling the defense budget system "broken," Rumsfeld criticized the existing PPBS as "a relic of the Cold War." Rumsfeld and his team gave the system an updated label: the Planning, Programming, Budgeting, and Execution System (PPBES). They also attempted to make it more efficient and stable by having the secretary's main planning guidance document, along with the POMs prepared by the services, be prepared just once every two years instead of annually. But this new process failed. In practice, the services and the secretary's office made so many changes in the off-year that the process never managed to break away from de facto annual budgeting. By 2006, efforts to use biennial budgeting were already fading; the Pentagon formally announced a return to annual budgeting in 2010.⁵⁸

The failure of Congress and the Pentagon to adopt multiyear budgeting was not caused by a falling away of concerns about the inefficiencies and instabilities created by the annual process. Indeed, top policy makers and experts complained about those problems into the early twenty-first century, as they continued to voice support for multiyear budgeting. As the former Lockheed Martin chairman and CEO Norm Augustine observed in 2001, the "constant turmoil" of the annual defense budgeting process, unique to the United States, created huge increases in costs of major programs, such as the F-22, by forcing contractors to repeatedly reorganize their production plans, "due to budget changes."⁵⁹ According to Secretary of Defense Gates, Congress's continuing failures to pass defense bills on time, year after year, "played havoc with acquisition programs."⁶⁰ In the 2010s, many experts, including former DoD comptroller Dov Zakheim, were still recommending that the United States move to a biennial defense budgeting system.⁶¹

Given the strong support for multiyear defense budgeting voiced over the last half century, how can we explain the failure of this proposed reform? One obvious answer is that self-interested parties, especially on the key congressional committees, have little interest in losing influence. As Alice Rivlin noted in her mid-1980s call for reform, a shift away from annual authorizations and appropriations "threatens the existing power structure."⁶² Political scientist James Lindsay suggested that there seemed to be a lot of explanatory power in a quip attributed to then speaker of the house Tip O'Neill: "The name of the game is power, and the boys don't want to give it up."⁶³ Perhaps this was too crude of an explanation, given that Congress did sometimes act to give up its powers over the details of budgeting and defense policy. It arguably did so in the form of automatic budget caps and sequesters from the 1980s through the 2010s; its 1996 endorsement of the line-item veto (ruled unconstitutional in 1998); its creation of the Base Realignment and Closure (BRAC) commissions at the end of the Cold War; and earmark reform in the 2010s. Nevertheless, there is no getting around the conclusion that Congress's unwillingness to lose power is one important cause of both instability and lack of agility in defense. This has been the case not just with regard to proposals for multiyear budgeting but even more so for the suggestions by Rivlin and others that the work of the authorizers and appropriators should be consolidated.

Although the proposals for multiyear defense budgeting were surely stymied by Congress's reflexive reluctance to cede authority, they were also challenged by critics who raised sensible questions about a loss of agility. These critics pointed out that given the many uncertainties about future defense needs and economic conditions, under a multiyear budgeting system, Congress and the DoD might well find themselves making so many midcourse adjustments to out-year budgets that there would not end up being much less work or intervention than what was already being done in the formal annual process.⁶⁴ Given this problem and the apparent political reality that Congress was unlikely to embrace major reforms, some experts suggested that it made more sense to try more modest proposals, such as moving the beginning of the fiscal year to January 1.⁶⁵ In theory, such a change might at least increase the chances that Congress could pass on-time appropriations bills, reducing the costs faced by the DoD from operating for several weeks or months most years under continuing resolutions (or government shutdowns).

A half century after would-be reformers such as Alice Rivlin and Leon Panetta first suggested that Congress, the DoD, and other agencies would benefit from multiyear budgeting and consolidating duplicative efforts by authorizers and appropriators, the defense budgeting system of the 1970s still has not been changed in those directions. Rather, in many ways, the problems those proposed reforms aimed to cure, such as budget instability, overmanagement, waste, and lack of agility, seem to have worsened. In the early twenty-first century, the length of defense authorization and appropriations bills, associated reports, and numerous floor amendments continued to grow.⁶⁶ Between the 1980s and the late 2000s, there was also a dramatic rise in earmarks, which by the mid-2000s numbered more than two thousand items worth nearly \$10 billion in the annual defense appropriations bill alone.⁶⁷ In the early 2010s, Congress's failure to close a budget deal caused

across-the-board sequestration, which Secretary of Defense Leon Panetta decried as a "stunning" development, returning to the misguided crude cap and sequestration schemes of the 1980s, "guaranteed to damage America's military readiness."⁶⁸ Although sequestration was avoided after the mid-2010s, the DoD continued struggling with continuing resolutions at the start of each fiscal year. From the 1970s through the 2000s, the average time working under continuing resolutions had been about one month; in the 2010s, it was closer to four months.⁶⁹ All in all, the pathologies of the US defense budgeting system in the early twenty-first century closely resembled those decried in the 1980s; in the eyes of some veteran observers, it had become even worse, thanks to rising parochialism and polarization.⁷⁰

Defense Budget Reform via Supplements, Workarounds, and Acquisition Reform: From the Packard Commission to McCain-Thornberry, the 1980s–2010s

Thanks to the failure of multiyear budgeting and related efforts to alter the PPBS or curtail congressional overmanagement, the US defense budget system created in the early Cold War era has endured. However, over the past three decades, there have been meaningful changes in defense budgeting, defined broadly, in the form of direct or indirect effects of defense acquisition reform. Although cynics assert, with some reason, that defense acquisition reform is a never-ending process with much bark and little bite, there have been at least a few shifts in acquisition policy that have provided additional tools to those working under the traditional constraints imposed by Congress, the PPBES, and the defense bureaucracy. Meanwhile, in the 2000s and 2010s, the large supplemental appropriations for war and reconstruction in Afghanistan and Iraq provided the military establishment not just with historically large overall budgets but also some substantial funding not fully covered by normal processes and oversight. Those add-ons, together with acquisition reform, provided policy makers with band-aids and workarounds, offering additional stability or flexibility beyond what the traditional budget system provided.

The history of US defense acquisition and efforts to reform it is a complex, much-discussed subject.⁷¹ For this paper, it may suffice to review the multiple acquisition reforms aimed at promoting commercialization and speed in the 1990s and the 2010s. These reforms clearly affected how parts of the defense budget were executed, and so at least indirectly served as defense budget reform. In particular, the procommercialization reforms addressed widespread concerns about the traditional budgeting system's slowness and lack of flexibility by moving some defense spending into areas less constrained by the standard processes and regulations. In this sense, policy makers found partial workarounds to overcome some of the weaknesses of the budgeting system that had taken shape during the early Cold War.

One significant push in the direction of commercialization occurred in the 1990s, during the years of the Clinton administration, at the dawn of the post-Cold War era. In the 1980s, the Packard Commission and other wouldbe reformers had called for the Pentagon to buy more off-the-shelf products, using simpler, faster transactions. But the Pentagon was slow to take up the Packard Commission recommendations in the late 1980s; to some extent, the acquisition was becoming slower rather than faster, partly because of new regulations imposed by Congress in the wake of the recent scandals involving alleged fraud, waste, and abuse.⁷² Some steps toward commercialization were taken during the tenure of Secretary of Defense Dick Cheney (in office 1989–93), as the DoD revised its 5000-series acquisition guidance documents and pushed back against what Cheney regarded as congressional micromanagement.⁷³ But the most substantial procommercial reforms came during the Clinton years, during the post-Cold War drawdown when there was remarkable coordination of efforts by the White House, the Pentagon, and Congress. As the Clinton administration promoted "reinventing government" in ways that promised to reduce bureaucracy, Secretary of Defense Bill Perry-embracing recommendations of the Section 800 panel report issued in 1993—announced that the default approach to acquisition would be flipped to favor off-the-shelf items, rather than bespoke goods and services subject to elaborate and unique military specifications. At the same time, Congress passed the 1994 Federal Acquisition Streamlining Act (FASA) and, two years later, the Federal Acquisition Reform Act (FARA), as well as the Clinger-Cohen Act. Together, these laws and policies exempted more purchases from traditional acquisition rules, making it easier for the US military to buy things faster, particularly items not unique to defense, like paper or furniture, or dual-use technologies and items like computers and communications equipment.74

The acquisition initiatives of the 1990s and early 2000s, which emphasized commercialization and speed, served as a kind of de facto defense budget reform by offering workarounds to a traditional system that was viewed as too sclerotic. The net effects of this reform were mixed. On the one hand, there was no question that the Pentagon saved billions of dollars by using simpler transactions and specifications for many goods and services. (By the early beginning of the 2010s, commercial acquisition methods were used for around 20 percent of the dollar value of all DoD contracts.)⁷⁵ But the push for speed in acquiring complex major weapons systems, championed by Under Secretary of Defense Jacques Gansler in the late 1990s and Secretary Rumsfeld's team in the early 2000s, seems to have backfired.⁷⁶ At first glance, the effort to shorten the frustratingly long weapon acquisition cycles by decentralizing authority to the military services and the contractors seemed sensible enough. But in practice, the push for quick development and production was associated with major cost overruns (as with the F-35 and the Littoral Combat Ship) and total failures (as in the case of the army's Future Combat Systems). By the late 2000s, these troubles caused defense policy makers to reverse course. In Congress, Senator Carl Levin championed the 2009 Weapon Systems Acquisition Reform Act, which called for more methodical acquisitions with more thorough cost estimates by Pentagon civilian analysts.77

The wars in Afghanistan and Iraq caused some de facto defense budget reform, in the 2000s and 2010s, mainly by providing the Pentagon with more generous and flexible funding. As one former top policy maker recalled, starting in the early 2000s, "the normal discipline of five-year plans and budget control totals for budgeting purposes was thrown out the window."78 Wartime supplemental appropriations approved by Congress for the fiscal years 2003 to 2007 were 20 to 40 percent above the base defense budget, which was increasing. These supplementals were not subject to the same level of review that Congress devoted to the base budget. Over time, it became clear that the Pentagon was using some of the supplemental funding-which came to use the label Overseas Contingency Operations (OCO)-to pay for items not associated directly with actions in Afghanistan and Iraq, such as the V-22 and F-35 programs. (Congress also used the supplementals as an opportunity to insert even more earmarks—a practice Secretary Gates denounced as "political bullshit.")⁷⁹ The OCO appropriations blunted the impact of the spending caps imposed by the 2011 Budget Control Act (and the sequestration crisis of 2013) because OCO was exempt from the caps. Thanks in part to a total of \$2 trillion in supplementals, the Bush, Obama, and Trump administrations all enjoyed relatively generous defense budgets, larger in real dollar terms than those that Congress had provided at the height of the Reagan buildup (see fig. 16.2).⁸⁰

The last decade has seen another wave of defense acquisition reform, emphasizing commercial solutions and agility, comparable to the 1990s and

early 2000s. This new effort appeared to offer some de facto budget reform, via new acquisition vehicles and workarounds, at least in some small pockets of the defense enterprise. The latest push for speed occurred in the context of growing concerns about the rise of China and a refocus in US defense policy on the competition with near-peer great powers. The Pentagon's "Third Offset Strategy," announced in 2014, aimed at maintaining US military superiority over its rivals via investment in cutting-edge technologies such as cyber warfare, robotics, and artificial intelligence. To tap these technologies, most defense policy makers of the 2010s believed, the DoD would need to do more with commercial firms, including some that had not previously filled defense contracts. Since the election of President Donald Trump in 2016 and continuing into the Joe Biden presidency, the national conversation about great-power competition has become more hawkish. By 2018, for example, the National Defense Strategy Commission warned of a "grave crisis of national security and national defense," the most serious crisis in decades, which demanded that the United States and its allies move with "extraordinary urgency" to improve their military capabilities.⁸¹

Informed by this new concern for quick action in the face of a rising China and more belligerent Russia, Congress and the DoD moved in the late 2010s toward acquisition reforms intended to provide new ways of getting around the traditional slow-moving budgeting and purchasing system. Secretary of Defense Ash Carter created the Defense Innovation Unit, Experimental (DIUx), which aimed to get funds into the hands of promising companies within one or two months. To pay for research and prototypes, the DIUx and other defense entities increasingly used "other transaction authority" (OTA) mechanisms, which Congress encouraged by providing permanent authorization, starting with the NDAA for FY2016. By the end of the 2010s, OTA awards were starting to be used more heavily, especially by the army, to the tune of several billion dollars per year.⁸² The same NDAA for FY2016, which reflected the acquisition reform efforts of armed services committee chairs Senator John McCain and Representative Mac Thornberry, also funded "middle tier of acquisition" (MTA) pathways. The MTA mechanisms, which avoided some of the constraints of the traditional contracting system, were intended to allow program managers to field new equipment within just two to five years—a speedier acquisition cycle that some proponents believed had not been achieved since the 1950s.83 By 2020, the MTA pathways were increasingly used, including by the Special Operations Command.⁸⁴ Meanwhile, McCain and Thornberry used the NDAA for FY2017 to push for additional acquisition reform by giving the military services more authority and separating the under-secretary-level oversight of acquisition and research into two jobs that had previously been joined.⁸⁵

As of 2022, it was still too soon to tell whether these various reforms by the DoD and Congress, including the increasing use of MTA and OTA pathways and heightened efforts to engage with commercial firms, would deliver on their promise.⁸⁶ However, it was clear that an accumulation of acquisition reforms, supplementals, and workarounds had provided at least some partial relief from the burdens of the much-derided Cold War–era defense budgeting system. Various new rapid acquisition mechanisms provided more flexibility and agility in small but significant parts of the defense enterprise. So too, probably, did the substantial growth in the size of the classified portion of the budget since the end of the Cold War, which had been under 5 percent of defense spending in the early 1980s but more recently has been closer to 10 percent. Additional workarounds and pockets of higher agility were provided by the rise of "fourth estate" agencies, such as the Special Operations Command, smaller and ostensibly nimbler than the traditional services.⁸⁷

Conclusions

The post-World War II history of US defense budget reform shows that there have been remarkably few major changes to basic processes over the last four decades. Between the late 1940s and the mid-1970s, reformers truly transformed how the Pentagon and Congress handled the work of defense budgeting. Since the 1980s, there have not been comparable foundational changes, although some parts of the defense budget and its execution were partially liberated from the constraints of the slow-moving basic system via acquisition reforms, war appropriations, and other workarounds. The paucity of dramatic changes in recent decades would seem to lend credence to the claims of today's would-be reformers, who contend that the defense budget system requires a massive overhaul to meet the new challenges of the current century. However, it is not easy to imagine Congress or the Pentagon upending their long-standing foundational practices, even in the current environment of heightened interest in reform. Institutional inertia and selfinterest obviously work against the possibility of revolutionary change. But beyond this, some policy makers may legitimately conclude from the historical record that the Cold War-vintage system continues to serve adequately to balance the many concerns and needs of Congress and the defense establishment. Furthermore, they may conclude that today's geopolitical threats

and patterns of technological change are not so radically different or more challenging than those of the early Cold War era when the current budgeting system took shape. Moreover, a closer look at the specific proposals of today's would-be reformers suggests that many would amount to relatively modest adjustments to business as usual.

What would a truly radical US defense budget overhaul look like in the 2020s and 2030s? The historical record since World War II suggests some possibilities. For example, a massive reassessment of the adequacy of the sheer size of the base budget, such as the one that occurred in the late 1940s and early 1950s, might call for a doubling of expenditure. To pay for this giant increase, Congress would likely need to approve a major hike in income tax rates in a partial return to the early Cold War tax regime. For the moment, such action seems out of the realm of possibility but perhaps a series of major security shocks, such as those in 1949–50, could radically alter the consensus about budget adequacy.

The historical record also offers a guide to what radical reform might involve in the realm of defense budget stability and agility. On the Pentagon side, a much quicker PPBES, or its equivalent, would need to compress planning and budgeting into just a few weeks instead of many months. This would require the DoD to work with truly unprecedented speed; it might require a far more centralized process, with less input from the services, than the one that has prevailed since 1969. On the legislative side, transformative reform might involve embracing several of the proposals recommended widely in the 1980s (and still echoing today), such as comprehensive multiyear budgeting and the consolidation of Congress's defense authorization and appropriation committees.⁸⁸ In theory, Congress could return to very broad permanent defense authorizations, which it used until the 1960s. As the history of the last four decades suggests, Congress does not seem to be eager to enact such changes, which would require levels of trust or deference to the executive branch and centralization of power in Congress itself, which were abandoned in the era of the US Vietnam War and the Watergate crisis. Bowing to these realities, some of today's would-be reformers of congressional practice have fallen back on far more modest suggestions, such as proposals to have the federal fiscal year start on January 1, which might add some budget stability by making it easier for legislators to pass bills on time.⁸⁹

Another less-than-radical set of changes proposed recently involves the areas of budget line-item consolidation and reprogramming flexibility. As we have seen, in the 1950s and 1960s, there were major consolidations and

reassessments of budget titles and categories. In recent years, some would-be reformers—including the Section 809 Panel that worked from 2016 to 2019 have suggested that the DoD move toward "capability portfolio management." The Packard Commission also suggested such a reform in the 1980s.⁹⁰ Doing so might involve consolidating multiple programs into broader mission areas, requiring that Congress's budgeting become more closely aligned to the kind of mission-oriented budgeting launched by McNamara's team in the early 1960s. A move to more "portfolio management" would ideally create a smaller number of budget elements and, therefore, larger pots of money that could be administered more flexibly by the Pentagon and the services, akin to those created by the consolidation reforms of the early Cold War era.⁹¹ A related proposal voiced by the Section 809 Panel and others, which would require less significant structural change, calls for reforms in budget reprogramming—i.e., midyear actions by the defense establishment to move money between individual budget areas, ideally to reduce waste and enhance effectiveness. In recent years, reprogramming has become slower and more difficult, with multiple congressional committee staffs able to veto or delay requests from the DoD. The ceilings on the total dollars that can be reprogrammed are now only about 1 percent of the total budget. Some of today's reformers, including former Pentagon comptroller Dov Zakheim, suggest that this figure might be increased to a level closer to 5 percent to provide much-needed flexibility and agility.⁹²

As the details of these specific proposals suggest, despite the stridency of today's rhetoric about the need for radical changes to meet current global security challenges, it would seem unwise to predict that the 2020s and 2030s will likely bring a fundamental overhaul of US defense budgeting of the kind that occurred during the early Cold War. Those reforms of the 1950s-1970s occurred in the context of the emergence of an unprecedented existential threat in the form of a nuclear-armed Soviet Union; the infancy of the DoD and Office of the Secretary of Defense; and a disastrous US war in Vietnam, which, along with the Nixon administration's downfall, inspired Congress to reorganize itself and become more assertive over defense policy and budgets. Meanwhile, other major developments, including the abrupt jumps in the late 1950s and 1970s in worries about the US-Soviet military balance, as well as the end of the Cold War and the 9/11 attacks and ensuing wars, caused some significant adjustments to the size of defense budgets but not much change to fundamental budget processes and systems. As we have seen, over the past half century, the flaws of those aging processes and systems have

largely been dealt with by an array of supplements and workarounds rather than radical reform.

The unpredictability of domestic and global developments in the coming months and years, always the bane of defense policy makers and budgeters, means we cannot rule out the possibility of massive new reforms. In any case, whether the next few years see a big overhaul akin to that of the early Cold War or more modest adjustments like those that accumulated since the 1980s, reformers will benefit from reviewing the relevant history. If policy makers attempt to return to the practices of the 1950s, they will do well to remember the origins of those practices and the stories of why and how they were altered over time to establish the foundations of our current system.

Notes

1. William C. Greenwalt and Dan Patt, "Competing in Time: Ensuring Capability Advantage and Mission Success through Adaptable Resource Allocation," Hudson Institute, February 25, 2021; US Senator Jack Reed, speech and Q&A at Ronald Reagan Institute, May 11, 2021, https://www.reed.senate.gov/news/releases /defense-priorities-with-senator-jack-reed; Eric M. Lofgren, "Pathways to Defense Budget Reform," *Proceedings of the Nineteenth Annual Acquisition Research Symposium*, Naval Postgraduate School (May 2022): 336–55.

2. Matt MacGregor, Greg Grant, and Peter Modigliani, "Five First Steps to a Modern Defense Budgeting System," MITRE Center for Data-Driven Policy, August 2022.

3. This body is currently at work and is scheduled to issue interim and final reports in 2023–24.

4. Chris Higginbotham, "Procuring the Cross of Iron: The Effect of Congressional Approval on the US Defense Budget" (PhD diss., University of Kansas, 2017), 51.

5. Robert M. Gates, *Duty: Memoirs of a Secretary at War* (New York: Alfred A. Knopf, 2014), 580–81; also see 453–54.

6. Ash Carter, Inside the Five-Sided Box: Lessons from a Lifetime of Leadership in the *Pentagon* (New York: Dutton, 2020), 130, 136.

7. Melvyn P. Leffler, A Preponderance of Power: National Security, the Truman Administration, and the Cold War (Stanford, CA: Stanford University Press, 1993), 373, 451; Michael J. Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State (New York: Cambridge University Press, 1998), 311.

8. Douglas Kinnard, "President Eisenhower and the Defense Budget," Journal of Politics 39, no. 3 (August 1977): 596–623; Iwan W. Morgan, Eisenhower versus "The Spenders": The Eisenhower Administration, the Democrats and the Budget, 1953–60 (London: Pinter Publishers, 1990), 51.

9. Morgan, Eisenhower versus "The Spenders," 35.

10. Samuel P. Huntington, The Common Defense: Strategic Programs in National Politics (New York: Columbia University Press, 1961), 107–12; Edward A. Kolodziej, The Uncommon Defense and Congress, 1945–1963 (Columbus: Ohio State University Press, 1966), 215-88; Arnold Kanter, "Congress and the Defense Budget: 1960-1970," American Political Science Review 66, no. 1 (March 1972): 129-43; Kinnard, "President Eisenhower and the Defense Budget," 611–17; Melvin R. Laird interview, August 18, 1986, Office of the Secretary of Defense, 3-12, https://history.defense .gov/Historical-Sources/Oral-History-Transcript-3; Aaron L. Friedberg, In the Shadow of the Garrison State: America's Anti-Statism and Its Cold War Grand Strategy (Princeton, NJ: Princeton University Press, 2000), 134-39; David L. Snead, The Gaither Committee, Eisenhower, and the Cold War (Columbus: Ohio State University Press, 1999). The Rockefeller Brothers Fund report is held up as a model by some of today's champions of more agile defense acquisitions, including former Google CEO Eric Schmidt. See Special Competitive Studies Project, Mid-Decade Challenges to National Competitiveness, September 2022. For an account of the original report, see John Andrew III, "Cracks in the Consensus: The Rockefeller Brothers Fund Special Studies Project and Eisenhower's America," Presidential Studies Quarterly 28, no. 3 (Summer 1998): 535-52.

11. Rebecca Lissner, Wars of Revelation: The Transformative Effects of Military Intervention on Grand Strategy (New York: Oxford University Press, 2021), 44–45.

12. The Hoover Commission Report on the Organization of the Executive Branch of the Government (New York: McGraw Hill, 1949), 36–37; Oral history interview with Wilfred J. McNeil, September 19, 1972, 19, Truman Library, Independence, MO, https://www.trumanlibrary.gov/library/oral-histories/mcneilwj.

13. Charles J. Hitch, *Decision-Making for Defense* (Berkeley: University of California Press, 1965), 69; Kolodziej, *Uncommon Defense and Congress*, 472; James E. Hewes Jr., *From Root to McNamara: Army Organization and Administration*, 1900–1963 (Washington, DC: Center of Military History, United States Army, 1975), 271–84.

14. Kolodziej, Uncommon Defense and Congress, 147-49.

15. McNeil interview, Truman Library, 21–22. McNeil was reportedly a powerful player in 1950s defense budget making, who often made last-minute adjustments to the Eisenhower administration's requests, usually by trimming items to meet ceilings, not necessarily in ways that followed a broad set of strategic priorities. See Harold Brown with Joyce Winslow, *Star-Spangled Security: Applying Lessons Learned over Six Decades Safeguarding America* (Washington, DC: Brookings Institution, 2012), 18; Elliott V. Converse III, *History of Acquisition in the Department of Defense, Volume I: Rearming for the Cold War, 1945-1960* (Washington, DC: Office of the Secretary of Defense Historical Office, 2012), 86–87.

16. Huntington, *Common Defense*, 128–38, 225; Christian E. Jarchow, "Task Force on Budgeting and Accounting—Hoover Commission," *Woman C.P.A.* 19, no. 3 (1957): 5–10.

17. McNeil interview, Truman Library, 47.

18. Merton J. Peck and Frederic M. Scherer, *The Weapons Acquisition Process: An Economic Analysis* (Boston: Harvard University Graduate School of Business Administration, 1962), 51.

19. Christian Brose, *The Kill Chain: Defending America in the Future of High-Tech Warfare* (New York: Hachette, 2020), 43–46, 75.

20. Peck and Scherer, *Weapons Acquisition Process*, 4, 53–54; Michael E. Brown, *Flying Blind: The Politics of the US Strategic Bomber Program* (Ithaca, NY: Cornell University Press, 1992). One recent study has argued that the average length of the development and acquisition process for major programs has not actually changed much since the early Cold War era. See Morgan Dwyer, "Understanding Acquisition Speed for the Defense Department's Costliest and Most Complex Programs," Center for Strategic and International Studies, Report CSIS-AM-20-159, September 2020.

21. Robert S. McNamara, *The Essence of Security: Reflections in Office* (New York: Harper & Row, 1968), 90; Robert S. McNamara with Brian VanDeMark, *In Retrospect: The Tragedy and Lessons of Vietnam* (New York: Times Books, 1995), 23–25; Alain Enthoven interview, December 27, 1968, 19, LBJ Presidential Library, Austin, TX.

22. Hitch, *Decision-Making for Defense*, 18, 23–25, 33–34; Alain C. Enthoven and K. Wayne Smith, *How Much Is Enough? Shaping the Defense Program*, 1961–1969 [originally published 1971], new edition (Santa Monica, CA: RAND, 2005), 36; Alain Enthoven interview, February 3, 1986, Office of the Secretary of Defense, 2–3, https://history.defense.gov/Historical-Sources/Oral-History-Transcript-3; Stephanie Caroline Young, "Power and the Purse: Defense Budgeting and American Politics, 1947–1972" (PhD diss., University of California, Berkeley, 2009), 54–65.

23. Hitch, *Decision-Making for Defense*, 30; This did not change over the course of McNamara's tenure, and remains true to this day. US Department of Defense, *Report to the President and the Secretary of Defense on the Department of Defense, by the Blue Ribbon Defense Panel*, July 1, 1970, 117; Lawrence J. Korb, "The Budget Process in the Department of Defense, 1947–77: The Strengths and Weaknesses of Three Systems," *Public Administration Review* 37, no. 4 (July–August 1977): 343; Robert F. Hale, "Financing the Fight: A History and Assessment of Department of Defense Budget Formulation Processes," Brookings Institution, April 2021, 11–12.

24. Hitch, Decision-Making for Defense, 35-38.

25. Some critics of PPBS from the time of its introduction in the 1960s through the present day have charged that five-year planning constrains policy makers' ability to alter defense budgets quickly in response to new conditions. This commonsensical proposition surely contains at least a grain of truth, but it was dismissed from the beginning by the architects of PPBS. According to Alain Enthoven, who led the systems analysis team in McNamara's office, the Five-Year Defense Plan was simply a "road map" that did not require any long-run commitments by the president or Congress. Enthoven claimed that the Five-Year Defense Plan actually provided more "flexibility to move in a new direction," by allowing policy makers to comprehend existing practices and the likely costs and benefits of a change. Enthoven and Smith, *How Much Is Enough*?, 31–72, 50.

26. Hitch, *Decision-Making for Defense*, 25, 31, 63; Korb, "Budget Process," 337; The United States does not appear to be exceptional, in this regard; many nations see a similar lag of approximately two years. Richard C. Eichenberg and Richard Stoll, "Representing Defense: Democratic Control of the Defense Budget in the United States and Western Europe," *Journal of Conflict Resolution* 47, no. 4 (August 2003): 411.

27. Korb, "Budget Process," 340.

28. Korb, "Budget Process," 341; David Packard interview, November 9, 1987, Office of the Secretary of Defense, 5, https://history.defense.gov/Historical-Sources /Oral-History-Transcript-3; William F. West, *Program Budgeting and the Performance Movement: The Elusive Quest for Efficiency in Government* (Washington, DC: Georgetown University Press, 2011), 41; Hale, "Financing the Fight," 13–14.

29. For example, Secretary of Defense Harold Brown tried in 1977 to allow more input from his office and from President Carter, before the services drafted their POMs—a move that was resisted by the services and their allies in Congress. See Russell Murray II memo on PPBS, September 26, 1977; Brown to JCS and service secretaries, October 25, 1977; Bob Sikes et al. to John C. Stennis et al., January 5, 1978, all in folder "Punaro: Military Budget (Fiscal Year 1979)," 1978, box 544, Sam Nunn Papers, Emory University.

30. Jerry Y. Draper, "Role of the Defense Resources Board in the Planning Phase of the Planning, Programming, and Budgeting System" (US Army War College, 1985); author correspondence with David Chu, February 7, 2023.

31. For descriptions of the process in recent years, see Higginbotham, "Procuring the Cross of Iron," 55–61; L. R. Jones, Philip J. Candreva, and Marc R. DeVore, *Financing National Defense: Policy and Process* (Charlotte, NC: Information Age Publishing, 2011).

32. Franklin C. Spinney, "Defense Facts of Life" slide presentation, December 5, 1980, 7, copy in folder "Military Affairs: Defense Technology, General File, 1981–1989," box 447, Nunn Papers.

33. Allen Schick, *The Federal Budget: Politics, Policy, Process*, 3rd ed. (Washington, DC: Brookings Institution Press, 2008), 14.

34. Julian E. Zelizer, ed., *The American Congress: The Building of Democracy* (Boston: Houghton Mifflin, 2004), 311.

35. Norman Augustine interview, December 14, 2001, Office of the Secretary of Defense, 22–24, https://history.defense.gov/Historical-Sources/Oral-History -Transcript-3.

36. Kolodziej, *Uncommon Defense and Congress*, 365–81; Herbert W. Stephens, "The Role of the Legislative Committees in the Appropriations Process: A Study Focused on the Armed Services Committees," *Western Political Quarterly* 24, no. 1 (March 1971): 146–62.

37. Bernard K. Gordon, "The Military Budget: Congressional Phase," *Journal of Politics* 23, no. 4 (November 1961): 710.

38. Robert J. Art, "Congress and the Defense Budget: Enhancing Policy Oversight," *Political Science Quarterly* 100, no. 2 (Summer 1985): 227-48; James M. Lindsay, "Congress and the Defense Budget," *Washington Quarterly* 11, no. 1 (1988): 59–60; Aaron Wildavsky and Naomi Caiden, *The New Politics of the Budgetary Process*, 4th ed. (New York: Pearson, 2000), 250.

39. Wildavsky and Caiden, *New Politics of the Budgetary Process*, 251; Jamie M. Morin, "Squaring the Pentagon: The Politics of Post–Cold War Defense Retrenchment" (PhD diss., Yale University, 2003), 156–57.

40. James M. Lindsay, "Congress and Defense Policy: 1961 to 1986," *Armed Forces* & *Society* 13, no. 3 (Spring 1987): 371–400; Harold Brown interview, March 4, 1994, Office of the Secretary of Defense, 8, https://history.defense.gov/Historical-Sources /Oral-History-Transcript-3; Augustine interview, December 14, 2001, 22–24.

41. Morin, "Squaring the Pentagon," 39, 130.

42. Lawrence J. Korb, "Congressional Impact on Defense Spending, 1962–1973: The Programmatic and Fiscal Hypotheses," *Naval War College Review* 26, no. 3 (November–December 1973): 49; Lindsay, "Congress and Defense Policy"; Linda Sinclair, *The Transformation of the US Senate* (Baltimore: Johns Hopkins University Press, 1989); Morin, "Squaring the Pentagon," 85–86.

43. Wildavsky and Caiden, New Politics of the Budgetary Process, 74.

44. Charles W. Ostrom Jr. and Robin F. Marra, "US Defense Spending and the Soviet Estimate," *American Political Science Review* 80, no. 3 (September 1986): 819–42; Noel E. Firth and James H. Noren, *Soviet Defense Spending: A History of CIA Estimates, 1950–1990* (College Station: Texas A&M University Press, 1998).

45. Morin, "Squaring the Pentagon," 55.

46. Daniel Sargent, A Superpower Transformed: The Remaking of American Foreign Relations in the 1970s (New York: Oxford University Press, 2015), 266.

47. Lindsay, "Congress and the Defense Budget," 58.

48. Lindsay, "Congress and the Defense Budget," 66.

49. Art, "Congress and the Defense Budget," 227–48; Lindsay, "Congress and the Defense Budget," 59–60; Wildavsky and Caiden, *New Politics of the Budgetary Process*, 250; Paul Stockton, "Beyond Micromanagement: Congressional Budgeting for a Post–Cold War Military," *Political Science Quarterly* 110, no. 2 (Summer 1995): 254; Arnold Punaro, *The Ever-Shrinking Fighting Force* (McLean, VA: Punaro Press, 2021), 442–43.

50. Jacques S. Gansler, "Reforming the Defense Budget Process," *Public Interest* 75 (Spring 1984): 71.

51. Alice M. Rivlin, "The Need for a Better Budget Process," *Brookings Review* 4, no. 3 (Summer 1986): 3–10.

52. Gansler, "Reforming the Defense Budget Process," 65-68.

53. Robert Hanberg and Robert Bledsoe, "Shifting Patterns in the American Military Budget Process: An Overview," *Journal of Strategic Studies* 2, no. 3 (1979): 348; Eichenberg and Stoll, "Representing Defense," 411. This point is also made by those who would like to see non-US legislatures have a greater role. See, for example, Allen Schick, "Can National Legislatures Regain an Effective Voice in Budget Policy?," *OECD Journal on Budgeting* 1, no. 3 (2002): 15–42; Michael D. Hobkirk, *The*

Politics of Defence Budgeting: A Study of Organisation and Resource Allocation in the United Kingdom and the United States (Washington, DC: National Defense University Press, 1983), 39–42, 76–79; Aaron Wildavsky, Budgeting: A Comparative Theory of Budgetary Processes (Boston: Little, Brown & Co., 1975), 91, 225–27; Wildavsky and Caiden, New Politics of the Budgetary Process, 262.

54. President's Blue Ribbon Commission on Defense Management, A Quest for Excellence: Final Report to the President (Washington, DC, 1986), xix–xx, 21–30.

55. Defense policy makers had discussed the advantages of multiyear budgeting during the early McNamara years as well, but Pentagon officials believed Congress would never allow it. Hitch, *Decision-Making for Defense*, 63.

56. Jasmine Farrier, *Passing the Buck: Congress, the President, and Deficits* (Lexington: University Press of Kentucky, 2004), 42–45; Robert G. Boatright, "Biennial Budgeting Debates in Congress: 1977–2000," *Journal of Public Budgeting, Accounting & Financial Management* 15, no. 2 (Summer 2003): 275–308.

57. Robert J. Art, "The Pentagon: The Case for Biennial Budgeting," *Political Science Quarterly* 104, no. 2 (Summer 1989): 193–214; Wildavsky and Caiden, *New Politics of the Budgetary Process*, 238, 273.

58. Jones, Candreva, and DeVore, *Financing National Defense*, 108; Hale, "Financing the Fight," 19.

59. Augustine interview, December 14, 2001, 40.

60. Gates, Duty, 453.

61. US Senate Permanent Subcommittee on Investigations, Committee on Homeland Security and Governmental Affairs, *Defense Acquisition Reform: Where Do We Go from Here? A Compendium of Views by Leading Experts* (Washington, DC: GPO, 2014), 196, https://www.hsgac.senate.gov/subcommittees/investigations/library /files/defense-acquisition-reform-where-do-we-go-from-here_a-compendium-of -views-by-leading-experts; Jones, Candreva, and DeVore, Financing National Defense, 370–72; Punaro, *Ever-Shrinking Fighting Force*, 75–77, 453–57.

62. Rivlin, "Need for a Better Budget Process," 3-10.

63. Lindsay, "Congress and the Defense Budget," 66.

64. Lindsay, "Congress and the Defense Budget," 69–71; Louis Fisher, "Biennial Budgeting in the Federal Government," *Public Budgeting & Finance* 17, no. 3 (Fall 1997): 87–97; US House of Representatives, *The Broken Budget Process: Perspectives from Former CBO Directors: Hearing before the Committee on the Budget*, September 21, 2011, 112th Cong., 1st sess. (Washington, DC: GPO, 2012); Jessica Tollestrup, *Biennial Budgeting: Options, Issues, and Previous Congressional Action*, Congressional Research Service Report R41764, February 2, 2015, 9–11.

65. Lindsay, "Congress and the Defense Budget," 72–73; Punaro, *Ever-Shrinking Fighting Force*, 75–77, 453–57; Hale, "Financing the Fight," 15–21.

66. Punaro, Ever-Shrinking Fighting Force, 184–91.

67. Richard B. Doyle, "The Rise and (Relative) Fall of Earmarks: Congress and Reform, 2006–2010," *Public Budgeting & Finance* 31, no. 1 (Spring 2011): 1–22; Jones, Candreva, and DeVore, *Financing National Defense*, 189–90; Schick, *Federal*

Budget, 246; Iwan Morgan, The Age of Deficits: Presidents and Unbalanced Budgets from Jimmy Carter to George W. Bush (Lawrence: University Press of Kansas, 2009), 237; Scott A. Frisch and Sean Q. Kelly, Cheese Factories on the Moon: Why Earmarks Are Good for American Democracy (New York: Routledge, 2010), 132.

68. Leon Panetta with Jim Newton, Worthy Fights: A Memoir of Leadership in War and Peace (New York: Penguin, 2014), 371–72.

69. Punaro, Ever-Shrinking Fighting Force, 449.

70. Winslow Wheeler, *The Wastrels of Defense: How Congress Sabotages US Security* (Annapolis, MD: Naval Institute Press, 2004).

71. J. Ronald Fox, *Defense Acquisition Reform, 1960–2009: An Elusive Goal* (Washington, DC: US Army Center of Military History, 2012).

72. Morin, "Squaring the Pentagon," 181; Peter Levine, Defense Management Reform: How to Make the Pentagon Work Better and Cost Less (Stanford, CA: Stanford University Press, 2020), 104.

73. Philip L. Shiman, Elliott V. Converse III, and Joseph A. Arena, *History of Acquisition in the Department of Defense, Volume V: Reform and Experimentation after the Cold War* (Washington, DC: Historical Office, Office of the Secretary of Defense, 2022), 23–51.

74. Shiman, Converse, and Arena, *Reform and Experimentation after the Cold War*, 155–78; Levine, *Defense Management Reform*, 116–20; Michael Joshua Stricof, "The Peace Dividend and Defense Conversion in the United States after the Cold War, 1989–2001" (PhD diss., Université d'Aix-Marseille, 2019), 345–67.

75. Levine, Defense Management Reform, 118.

76. Shiman, Converse, and Arena, *Reform and Experimentation after the Cold War*, 299–343.

77. Jamie Morin testimony, in *Defense Acquisition Reform: Where Do We Go From Here?* (2014), 135–36; Levine, *Defense Management Reform*, 120–37; author interview with former SASC staffer, March 2018.

78. Author email exchange with former SASC staffer and DoD official, March 2018.

79. Morgan, Age of Deficits, 234–35; Jones, Candreva, and DeVore, Financing National Defense, 149–50, 219–22; Daniel Wirls, Irrational Security: The Politics of Defense from Reagan to Obama (Baltimore: Johns Hopkins University Press, 2010), 154–57; Gates, Duty, 312–13; Brendan W. McGarry and Emily M. Morgenstern, Overseas Contingency Operations Funding: Background and Status, Congressional Research Service Report IN11839, September 6, 2019; Hale, "Financing the Fight," 24–25.

80. Punaro, Ever-Shrinking Fighting Force, 325–28, 343.

81. Providing for the Common Defense: The Assessment and Recommendations of the National Defense Strategy Commission (2018), https://www.usip.org/publications /2018/11/providing-common-defense.

82. William J. Weinig, "Other Transaction Authority: Saint or Sinner for Defense Acquisition?," *Defense Acquisition Research Journal* 26, no. 2 (2019): 106–27; Douglas Steinberg, "Leveraging the Department of Defense's Other Transaction Authority to

Foster a Twenty-First Century Acquisition Ecosystem," *Public Contract Law Journal* 49, no. 3 (Spring 2020): 537–65; Rhys McCormick, "Department of Defense Other Transaction Authority Trends: A New R&D Funding Paradigm?," Center for Strategic and International Studies Brief (December 2020); Dolores Kuchina-Musina, "Other Transaction Authorities: Evaluating Innovation Policy Impact of Alternative Contract Vehicles in the Department of Defense" (PhD diss., Old Dominion University, 2022), 41–50.

83. William Greenwalt and John Lehman comments, in *Defense Acquisition Reform: Where Do We Go from Here?*, 92–95, 121.

84. Gregory J. Ingram, "Bridging the Innovation Gap at SOCOM" (DBA diss., University of South Florida, 2021), 36.

85. Levine, Defense Management Reform, 144–46.

86. William A. LaPlante comments at George Mason/NDU "Acquisition Next" Conference, November 4, 2022, https://acquisitiontalk.com/2022/11/podcast -getting-weapons-into-production-with-usd-as-bill-laplante.

87. Wildavsky and Caiden, *New Politics of the Budgetary Process*, 257; Morin, "Squaring the Pentagon," 470; Jones, Candreva, and DeVore, *Financing National Defense*, 78; Moshe Schwartz and Jason A. Purdy, *United States Special Operations Command Acquisition Authorities*, Congressional Research Service Report R45252, July 9, 2018; Russell Rumbaugh, "The Fragmentation of DoD: Changing Role of the Services and What It Means for the Space Force," Aerospace Corporation Center for Space Policy and Strategy (October 15, 2020), 5, 11.

88. Punaro, *Ever-Shrinking Fighting Force*, 75–77, 453–57. Compare to Lindsay, "Congress and Defense Policy," 394–95.

89. Hale, "Financing the Fight," 15–21.

90. President's Blue Ribbon Commission, A Quest for Excellence, xix-xx, 21-30.

91. Report of the Advisory Panel on Streamlining and Codifying Acquisition Regulations: Volume 3 of 3 (Arlington, VA, 2019), 49–131; Eric Lofgren, "Pathways to Defense Budget Reform," George Mason University Center for Government Contracting White Paper Series 13 (November 1, 2022), 1–16.

92. Dov Zakheim, A Vulcan's Tale: How the Bush Administration Mismanaged the Reconstruction of Afghanistan (Washington, DC: Brookings Institution Press, 2013), 86, 289; Report of the Advisory Panel on Streamlining and Codifying Acquisition Regulations: Volume 3 of 3, 173–92; Richard E. Hagner, "Defense Appropriations: The Process, Politics, and National Security Implications" (PhD diss., Vanderbilt University, 2020), 63–69; Gates, Duty, 453; author interview with former HASC and OSD staff member, September 21, 2022; Lofgren, "Pathways to Defense Budget Reform."