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Our Military Debt Crisis

Preserving America's Strategic Solvency

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For thirty years, the United States has deferred the recapitalization and modernization of its armed forces. It did so first under the pretense of peace in the 1990s, then because the demands of the wars in Iraq and Afghanistan predominated, and finally, in the name of politics and so-called fiscal responsibility. America borrowed against its strategic future. It decreased the size and force structure of its military, slashed defense and especially defense procurement funding, canceled dozens of weapons programs, cut planned procurement of others, and put off much-needed recapitalization of the force.

Along the way, warning signs appeared: the hollow force of the late 1990s exposed by two wars in the Middle East, the readiness crisis of the 2010s that claimed lives and undercut America's standing, and the rapid expansion of China's People's Liberation Army (PLA). Yet the requirements of the moment continually superseded the long-term solvency of the American defense enterprise. The modernization debt grew larger.

Now the Chinese Communist Party has come to collect the debt. Confronted with a war in Ukraine and the perilous ambitions of Xi Jinping, America must rapidly recapitalize its fighting force and modernize its military capabilities. Doing so will cost extra because we have not done so for three decades. Doing so will be hard because we must move quickly to win what the Biden administration has called "the decisive decade."¹ And doing so will require us to overcome the temptation to believe that technology alone can save us.

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.

However, serious questions remain about our nation's ability to meet the moment. External and internal pressures squeeze the defense budget. Mandatory spending commitments, particularly on social security, Medicare, Medicaid, and other health-care programs, as well as interest payments on the national debt, consume an increasing portion of every federal dollar. Within the defense budget, fixed costs, including personnel pay, health care, and the costs of operating and maintaining the force, constrain funding for modernization.

The following pages recount the making of the modernization debt and the decisions that brought the nation to this point. They then summarize the recapitalization and modernization priorities and identify two limiting factors of note: the tyranny of time and the limitations of the defense industrial base. Finally, they synthesize the pressures constraining future defense spending and close by questioning what the United States can do to preserve its strategic solvency.

The budgetary pressures will not abate. The threat of the Chinese Communist Party will not miraculously dissipate. The need to modernize the military's capabilities will not go away. The debt must be paid—the question is how.

Peace Dividends and War Spending: The Making of the Modernization Debt

The tale of America's strategic insolvency begins following the collapse of the Soviet Union. At the time, the United States saw fit to begin shrinking the US military and to take what has been called a procurement holiday. The cuts went into place swiftly. By 1996, the defense budget was slashed by more than \$94 billion, adjusted for inflation.

The procurement budget paid the highest price. It shrunk by more than 45 percent in those first years, and new weapons acquisitions stalled.² No fighter aircraft, for example, were acquired in the mid-1990s, and no new army platforms entered service. As the decade progressed, some spending was restored but not enough. A Congressional Budget Office study in 1999 predicted it would cost \$90 billion per year "to replace equipment as it wears out or becomes obsolete." Only \$49 billion was budgeted for that purpose.³

Although the post-Cold War cuts were based on the promise of peace, service members continued to operate around the world, placing great pressure on already aging equipment. Aircraft crews, for example, encountered

shortages of spare parts, so maintainers had to cannibalize them from other aircraft—a practice we will see later. And army warrant officers complained about the difficulty of maintaining equipment that had surpassed twenty years in operation.⁴ After one decade of deferred modernization, the cracks began to show.

A new millennium brought a new administration but not a renewed interest in recapitalization. While defense spending increased substantially, most of the new dollars went to waging the wars in Iraq and Afghanistan. The hard fighting of the wars and the adverse environmental conditions in which they were waged wore out old equipment and drove up the costs of keeping it in action. Operation and maintenance budgets (O&M) climbed by over 75 percent.

Acquisition budgets also rose but did not translate into a meaningful modernization of the force. From 1991 to 2006, the United States acquired, on average, just 6 major ships, 68 fighter and attack aircraft, and 334 tanks, artillery, and armored vehicles per year. Compare this to the average annual procurement rates in the final fifteen years of the Cold War: 19 ships, 349 fighter and attack aircraft, and 2,083 tanks, artillery, and armored vehicles. The procurement holiday continued well into the 2000s.

There are two principal reasons. First, immediate wartime needs, such as mine-resistant ambush-protected vehicles and defenses against improvised explosive devices, trumped longer-term interests.⁵ Second, dozens of the long-term modernization priorities at the time amounted to nothing. Mackenzie Eaglen of the American Enterprise Institute estimates that \$81 billion was spent on canceled programs from FY2002 to FY2012, which led to a combined \$400 billion in deferred modernization spending.⁶ Among these canceled programs was the army's Future Combat Systems, which envisioned new brigades comprising a system of manned and unmanned weapons systems. It consumed over \$22 billion and was canceled in 2009, leaving the army without a plan or a program of record to begin replacing its aging tanks and armored personnel carriers.

As Eaglen points out, the long-term losses of this period go beyond these sunken costs. The decision to acquire only 187 F-22 fighter jets, rather than the planned 750, for example, left the air force undersupplied on air superiority capabilities and substantially drove up the program's costs. Tens of billions of dollars were spent to develop cutting-edge weapons. Some programs never saw the light of day. Some did, but in numbers far short of what was required. As a result, in the words of famed defense analyst Andrew Krepinevich, "the

US military can be said to have experienced a ‘hollow buildup’ during the first decade of the twenty-first century.⁷

The debt grew deeper with the passage of the Budget Control Act of 2011 (BCA). After the cancellation and truncation of more than two dozen modernization programs, the BCA placed strict spending limits on defense and domestic discretionary accounts. As originally conceived, it would have excised almost \$1 trillion from the Obama administration’s defense plan. Fortunately, those caps were amended repeatedly to lessen the impact, but serious damage was done. In 2013, the sequestration mechanism went into effect and immediately slashed defense spending, inciting a force-wide readiness crisis that persisted for years. All told, over \$550 billion in expected defense resources were lost from 2012 through 2019 thanks to this act.⁸

Recurring congressional fights over appropriations compounded the problem. How could the US military plan beyond the immediate horizon if it didn’t know how much money it would have on hand or when that money would be appropriated? How could commanders organize training without an annual budget for their units? Suffering from both budget cuts and total unpredictability about when funding would come through and at what level, the military found itself fighting a losing action.

It is hard to overstate the damage of these cuts and this instability. As already alluded to, they triggered a devastating readiness crisis. The army struggled to field more than three ready brigade combat teams at any given point. The navy ran its fleet and sailors ragged with eight- and even ten-month deployments, which ultimately contributed to the deadly collisions of the USS *John S. McCain* and the USS *Fitzgerald*. Air force pilots regularly received insufficient training, and at least half of the air force’s major aircraft have not reached combat readiness status since 2011.⁹ Across the services, equipment and training shortages led to an uptick in training accidents and mishaps. Talk of a hollow force returned.

Modernization suffered as well. Between fiscal years 2012 and 2017, the Pentagon’s modernization budget—defined as procurement plus research and development—was cut by \$200 billion, compared to what had been planned before the BCA. The number of major acquisition programs fell accordingly from ninety-seven to seventy-eight.¹⁰ Planned procurements of high-priority capabilities, like F-35 Joint Strike Fighters, decreased. The US military lived through another lost decade.

Setting aside questions about the strategic wisdom of these actions, the fact remains: the United States deferred the modernization of the fighting force

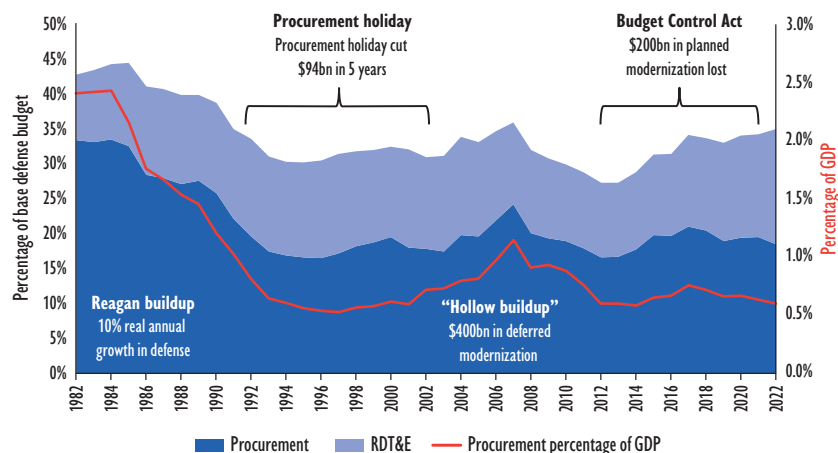


Figure 8.1 The Making of the Modernization Debt

Sources: DoD, Office of the Under Secretary of Defense (Comptroller), *National Defense Budget Estimates for FY 2022* (Green Book), accessed December 2022, available at <https://comptroller.defense.gov/Budget-Materials/Budget2022>; and Office of Management and Budget, Historical Tables, Table 5.1, "Budget Authority by Function and Subfunction: 1976–2028," accessed December 2022, available at <https://www.whitehouse.gov/omb/budget/historical-tables>.

for a generation. First, we took a holiday from history and building a military, resulting in nearly \$100 billion in procurement cuts in five years. Next, we fought two long wars without fully paying for them, deferring \$400 billion in modernization. Finally, we sacrificed the current and future readiness of the fighting force to politics, scrapping \$200 billion in planned modernization investments (see fig. 8.1). The lost generation left the country with an aging, increasingly outdated force and a deep modernization debt that now must be repaid if we hope to remain a superpower.

Modernization Debt and the Cost of Repaying It

The cost of repaying the nation's modernization debt would be daunting if we could sequence investments and pay it out in tranches. We have no such luxury. The modernization bills of the army, air force, navy, marine corps, and nuclear enterprise are coming due at the same time.

In 2018, the bipartisan National Defense Strategy Commission summarized the recapitalization needs well. For the army, "more armor, long-range fires, engineering, and air-defense units are required to meet the ground-heavy challenges posed by Russia in Eastern Europe," and "additional air-defense and logistical forces" are necessary in the Pacific. The navy must "expand its

submarine fleet” and “dramatically recapitalize and expand its military sea-lift forces” to project power into the Pacific. The air force “will need more stealthy long-range fighters and bombers . . . as well as more tankers to refuel them,” and it must supplement with additional lift and intelligence, surveillance, and reconnaissance capabilities. The entire nuclear triad of bombers, ICBMs, and submarines needs modernizing, as does the supporting infrastructure, and the list goes on to include cyber capabilities, missile defenses, space, munitions, and more.¹¹

The intervening years have only increased the urgency and cost. In 2017, for example, the Congressional Budget Office estimated that the nuclear triad would cost \$34.1 billion annually by 2021. But, by 2021, that estimate rose to \$42.1 billion. Modernizing the triad’s delivery systems alone will likely cost the Pentagon over \$150 billion in this decade—and that number does not include other nuclear costs, such as modernizing warheads or operating and sustaining the nuclear enterprise.¹²

Moreover, the list of long-term modernization needs is concerning. The navy has repeatedly delayed three high-priority development projects: the DDG(X) program to replace its Arleigh Burke-class destroyers, the SSN(X) program to replace its Virginia-class attack submarines, and the next-generation air dominance program to replace its F/A-18 Super Hornets. The army needs to replace its soon-to-be-obsolete fleet of ground combat vehicles, including the Bradley fighting vehicle and the Abrams tank. The air force must develop the next-generation air superiority fighter, which will replace its rapidly aging F-15s and address the small F-22 inventory while maintaining its new bomber program.

The combined force of these investments creates what some have called the modernization bow wave. In a 2019 study of the same name, Mackenzie Eaglen dubbed it the “2020s Tri-Service Modernization Crunch.”¹³ That study documented what each service planned for this decade’s first and second halves and provided a comprehensive assessment of their modernization requirements and associated costs. It does little good to restate her work. Suffice it to say that the modernization debt far exceeds the Pentagon’s current procurement budget plans.

However, the debt goes beyond money. Thirty years of deferred modernization created two inescapable realities.

First, as seen in the air force’s attempt to reverse a three-decade decline, we’ve lost the luxury of time. The services must all invest in near-term

recapitalization efforts and longer-term modernization projects. They must do so immediately and over the course of the coming decade. And they must do so simultaneously. But can they act quickly enough to preserve the nation's ability to defend itself?

Second, as exemplified by the navy's shipbuilding woes, the defense industrial base is not up to the task. The cumulative effect of past choices has left it shrunken and hollow, with fundamental deficiencies that will hinder any effort to modernize the force.

Time versus Reality in the Air Force's Modernization Plans

Arguably, the air force took the largest hit during the lost generation of modernization. Its aircraft inventory is getting older, smaller, and less ready, and plans to reverse these trends by fielding upgraded and new aircraft have been slow to manifest. As such, a graveyard spiral that began three decades ago continues, and the ground is fast approaching.

The air force's procurement budget was cut in half through the 1990s, and it has consistently retired or lost more aircraft than it has acquired. At the end of the last fiscal year, the air force had 47 percent as many fighters, 42 percent as many bombers, 69 percent as many tankers, and 75 percent as many airlift platforms as it did in the late 1980s.¹⁴ The administration planned to shrink those numbers further, but the recently passed National Defense Authorization Act restored purchases of some assets.

Not only is the inventory shrinking, but it is also aging. John Venable of the Heritage Foundation places the average age of the air force's aircraft at over twenty-nine years. Some prominent platforms, such as the B-52 bomber and the KC-135, exceed sixty years. The F-15 fighter fleet averages over thirty years—beyond the planned lifecycle of the aircraft—as do the F-16s. Correspondingly, the availability rates for air force fighters have declined for fifteen years, as have training opportunities. Low availability rates mean fewer aircraft ready to deploy in defense of the country's interests. For example, just 121 of the 304 F-15Cs in the air force's possession would qualify.¹⁵ Diminished training means less proficient pilots, but it also leads to problems in retaining and recruiting airmen. Both harm the strategic readiness of the nation's air force.

A 2018 US Air Force study warned of the need to reverse these trends. It called for the service to grow from 312 to 386 squadrons, arm those squadrons with the most advanced aircraft, and provide pilots with more training

time to prepare for high-end flights.¹⁶ But the money never materialized, and the air force's procurement budget has not even kept pace with inflation. The problems persist, as a recent study from the Mitchell Institute warned:

The air force lacks the force capacity, lethality, and survivability needed to fight a major war with China, plus deter nuclear threats and meet its other national defense requirements. This is the result of decades of inadequate budgets that forced the service to cut its forces and forgo modernizing aircraft designed fifty to seventy years ago for environments that were far more permissive than what exists today in the Indo-Pacific.¹⁷

The list of investment priorities required to reverse this trend is long and wide, including upgrading its command-and-control capabilities, surveillance and reconnaissance platforms, and munitions. But three programs warrant particular attention: the F-35A Joint Strike Fighter and the B-21 Raider, and the KC-46A tanker.

The F-35A is the top priority. The air force intends to acquire more than 1,700 to replace its ground attack and multirole aircraft. So far, it has 376 (356 in the active component) and plans to buy roughly 200 through FY2027 for more than \$22 billion. However, the service cut its procurement rate to just 33 this year. Congress raised that to 38 in the NDAA, but it's still short of the 60 bought in 2021, much less the 100 that can be produced annually.

The F-35A now competes for procurement dollars with the F-15EX Eagle II, an upgraded F-15 intended for immediate entry into service. Air force leaders say the Eagle II is needed to relieve aging fighters, so it requested 24 of these aircraft in addition to the 33 F-35s. But even the two together are short of the 72 new fighters the air force needs to acquire each year to replace aging and retiring aircraft. Moreover, it drives down the buy rate of F-35s, making the production line more inefficient and putting off the eventual fielding of a full inventory of stealthy multirole fighters. In the effort to make up for lost time and ease the wear and tear on their aircraft, the air force is losing capacity and further delaying modernization, all while driving up the price tag.

After the F-35A, the B-21 Raider tops the list of air force interests. The B-21 long-range bomber, which was rolled out in dramatic fashion in December 2022, will replace the B-1 and B-2 and join the B-52 as the backbone of the nation's bomber fleet. Current plans call for acquiring at least one hundred at a little over \$700 million each. Through 2027, that will come to roughly \$32 billion—\$20 billion in procurement and \$13 billion in R&D.¹⁸

So far, it is the model acquisition program in many ways, but there is cause for concern. The bomber's first flight has already been delayed, and even if the bomber stays on schedule from here, it will not enter service until the late 2020s at best—at the tail end of the “decisive decade.” History also gives cause for concern. Recent high-profile air force programs have either been severely truncated, as in the cases of the F-22 and the KC-46A tanker, which ran into problems, or been drawn out (see the previous paragraph).

Finally, there is the KC-46A Pegasus tanker. Intended as a replacement for the legacy tanker fleet of KC-135s and KC-10s, the tanker program has run into persistent technical and political hurdles, including a problem with the boom that connects the tanker to the refueling plane, which rendered it mission incapable. Despite these delays, the air force expects to have 95 in the fleet by the end of this fiscal year and 179 total by the decade's end.¹⁹ Yet again, this isn't enough. The planned purchase would replace less than half of the country's tanker fleet, leaving most of it needing additional recapitalization.

These three programs—the F-35A, B-21A, and KC-46A—are intended to replace core platforms, and each is vital for the air force to preserve a combat-credible force, to help deter our adversaries over the coming decisive decade and to ensure the United States maintains airpower dominance well into the future. However, they all face questions of whether sufficient numbers will be delivered in time. Will the current pace of F-35A purchases be enough, particularly as the service fighter fleet shrinks? Will the B-21 Raider enter service in time to strengthen the nation's conventional deterrence during the window of maximum risk? Will fewer than two hundred KC-46As suffice as the legacy tanker fleet reaches old age? If the window of opportunity to deter China is closing, as national security officials have warned, will the air force be ready?

Industrial Limitations and the Navy

The navy faces a similar set of challenges. Like the air force, the navy has undergone a long-term contraction. Once claiming nearly six hundred ships in the waning days of the Cold War, the navy fleet has numbered less than three hundred since 2003. Then, the navy deployed 15 percent of its fleet at a time. Today, it deploys 35 percent.²⁰ That usage rate contributed directly to the exhausting deployments and tragic accidents previously referenced.

Successive administrations and secretaries of the navy bemoaned the situation, warned of a closing window of opportunity to deter China, and put forward grand plans for a navy with 355 ships. The Biden administration rolled out a new vision to grow it to 373 manned ships and 150 unmanned ships. But talk has not translated to action.²¹

The most recent administration budget proposed decommissioning twenty-four ships, nearly half of which are not even ten years old. The plan would put the navy on a path to 280 battle-force ships in 2027 and push the dream of a larger, more capable navy further into the future.²² Meanwhile, the PLA navy already surpasses our fleet size, and the Pentagon expects it to grow to 400 ships by 2025 and 440 ships by 2030.²³

Even if the United States wanted to build ships at that rate, we would be hard pressed due to a lack of shipbuilding and repair capacity. Indeed, the unique features of shipbuilding highlight a second component of the modernization debt: the inescapable limitations of America's industrial base.

The navalist Alexander Wooley sums up the problem well: "For decades, the number of public and private yards has been shrinking, resulting in little competition and reduced capacity. Yards won't invest in infrastructure without orders on the books, and without a steady flow of orders, builders lose skilled workers, know-how, and subcontractors. Unlike in China, there's little commercial shipping to fall back on to keep the US shipbuilding base afloat."²⁴ Wooley's diagnosis is backed by a 2018 Pentagon assessment of the defense industrial base, which warned that the subtiers of the defense supply chain have been hollowed out, the workforce weakened, and critical capabilities offshored.²⁵

Today, the United States is home to just seven large-scale shipyards, compared to dozens operating in China. That disparity severely limits our ability to keep pace. In addition, once ships are built and commissioned, they still face problems created by insufficient infrastructure. Small numbers of old facilities have led to massive maintenance delays, effectively diminishing the fleet's size. In 2021, for example, the submarine fleet lost 1,500 days' worth of operational capacity due to backlogs in dry docks. Some surface combatants have sat in port waiting for maintenance for over a year.

To be clear, supply chain weaknesses, labor and equipment shortages, and shipyard limitations are not the principal source of the navy's modernization problem, nor are they the only obstacle to growing the navy. A lack of strategic clarity and insufficient and unpredictable budgets bear far more blame for the current situation.

Industrial shortages, however, exemplify how a generation of deferred modernization weakened the fighting force and decayed the infrastructure required to modernize, build, and maintain a modern military. To quote a recent bipartisan task force of the Reagan Institute, the slow erosion of our defense industrial base, hastened by underfunding and neglect, has "resulted in America being ill-prepared to act in a time of crisis, with insufficient shipyard capabilities, lack of surge capacity, and uncompetitive pricing."²⁶

Moreover, while the navy may be the clearest example, the shortcomings of the defense industrial base reach across the military, as the war in Ukraine has made plain. Decades of “efficiencies” in producing precision-guided munitions have strained supply chains and led to critical dependencies, including on Chinese-made propellants. And unpredictable weapons purchases have whiplashed domestic producers, driving out small and medium-sized contractors.²⁷ A similar story has played out across the industrial base. Even if America were to commit the resources necessary to procure large numbers of advanced weapons, we would struggle to do so quickly.

America’s modernization debt may give policy makers sticker shock, but it should also inspire some introspection. A fundamental truth of defense planning is that today’s modernization is tomorrow’s readiness. Every year that Washington defers necessary investments, it puts the military deeper in debt in the future and, therefore, in jeopardy.

The readiness crisis of the late 2010s should have taught us this lesson. In the wake of BCA-inflicted budget cuts, the military ran aground. The airframes of old aircraft began to fail, leading to tragic training accidents. Aircrews couldn’t keep planes flying, so pilots didn’t get the needed training. Scores left the service as a result. Army brigades preparing to deploy regularly couldn’t find spare parts, so they would cannibalize them from other units’ tanks and vehicles. Navy ships ran rust, and crews suffered long, brutal tours. The nation violated its sacred oath and sent men and women into harm’s way without the training or equipment they needed.

The modernization crunch and industrial decay today tell the same story. Due to choices made ten, twenty, and even thirty years ago, the air force will face stealth fighter, bomber, and tanker shortages right at the moment that a peer adversary is making them most vital. The navy will likely be unable to keep pace with China’s rapid ascension. America’s modernization debt will have a lasting, deleterious effect on America’s national security.

What Comes Next?

The case of the defense industrial base should also be a reminder of another, more worrying truth: even in a time of relative peace, America is struggling to build and maintain an undersize military. Yes, threats loom on the horizon, but the long wars have ended. American troops are as out of harm’s way as they have been in years. Yet severe, systemic pressures remain and show few signs of abating.

There are many explanations, but the simplest is that defense spending has been deprioritized. Once making up half the federal budget, national defense

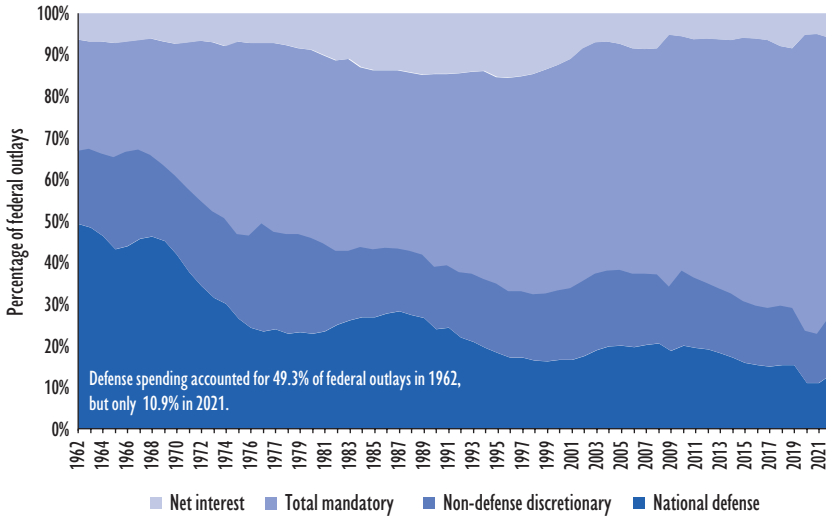


Figure 8.2 Sixty Years of Declining Defense

Source: Office of Management and Budget, Historical Tables, Table 8.1, “Outlays by Budget Enforcement Act Category: 1962–2028,” accessed December 2022.

accounted for less than 11 percent of it in 2021 (see fig. 8.2). And as a percentage of GDP—a useful measure of the burden of defense spending on the economy—it has declined from 9 percent in 1962 to 5.7 percent in 1988 to just over 3 percent today. In place of the common defense, social security, Medicaid, Medicare, and other mandatory programs have become the government’s principal business, consuming over 70 percent of every dollar Washington spends.

A similar dynamic has occurred within the defense budget. Fixed costs—such as personnel pay, health care, and other operation and maintenance accounts—consume an increasingly large portion of the Pentagon’s finances. Operations and maintenance (O&M) and personnel costs account for almost two-thirds, as opposed to just over one-third for modernization accounts.

This balance is a far cry from the last time we faced an existential threat. During the last major modernization era—the Reagan buildup—the balance reached roughly 51 percent O&M and personnel to 45 percent modernization.

Moreover, not every “modernization” dollar is made equal. During that buildup, procurement was the largest account in the defense budget, and the Pentagon spent more than \$3 buying equipment for every \$1 spent developing it. Now, procurement is the third-largest account, and the modernization

ratio has fallen to just \$1.33 in equipment bought for each \$1 spent on R&D.²⁸ While R&D spending is the foundation for future technological supremacy, it does not solve the immediate modernization or recapitalization needs of the military. Nor does it position America to win the “decisive decade.”

In sum, the United States stands at a perilous moment. More than thirty years of deferred modernization has left the military with a shrinking, antique force and widespread structural deficiencies, including a brittle industrial base. And the future promises heightened competition with an increasingly aggressive Communist China and a widening gap between the nation’s strategic goals and what it’s willing to spend to accomplish them. No relief appears on the horizon. Instead, we’re left with questions about the long-term solvency of America’s strategic position and how to preserve it.

FIRST, WHAT WOULD IT TAKE FOR THE UNITED STATES TO PAY DOWN ITS MODERNIZATION DEBT AND RESTORE ITSELF TO STRATEGIC SOLVENCY?

Congress took admirable steps in that direction with the 2022 National Defense Authorization Act, increasing the topline by 8 percent (in nominal terms). However, compare that to the Reagan buildup again, which saw *real* annual growth of upwards of 10 percent and a 49 percent *real* increase in defense spending from 1979 to 1985.²⁹

That level of investment may not be necessary now, but it is emblematic of the kind of societal commitment required to recapitalize the force in the past. Is it possible to approach that level again?

The external budgetary pressures of unencumbered entitlement growth will likely not abate. Higher interest rates will drive up the cost of servicing the national debt, and a persistently weak economy would place additional pressure on Washington to prioritize domestic concerns. The internal pressures of pay, health care, and operating costs will also likely grow, spurred in part by inflation and the costs of transitioning away from fossil fuels.

Against those forces, will Congress and the administration get together to raise the level of investment in the common defense, accelerate the recapitalization of the military, and sustain the effort beyond one or two good years?

SECOND, GIVEN THE REALITIES OF RESOURCE CONSTRAINTS, CAN THE UNITED STATES INNOVATE ITS WAY TO SOLVENCY?

Some have argued that the defense establishment should focus more on developing cutting-edge, revolutionary weapons and pay for them by scrapping legacy systems and shifting money toward these future-oriented programs.

This “divest to invest” concept has its merits, including that it’s foolhardy to bet on higher budgets and that there is a military value to smaller, cheaper, dispersible, and survivable capabilities.

It also has its faults. For one, lawmakers and Pentagon leaders seem to forget about the second half of the divest-to-invest equation. That is, they decommission equipment and spend more on R&D, but they have yet to buy actual weapons or platforms at scale.

There is also the danger of trading away useful equipment before the replacement arrives. Much of the promised game-changing technology remains years away from maturity. Even if these research programs succeed fabulously, what is the solution to the shortages that would be produced in the next five years, which happen to coincide with the window of maximum danger from China, if America were to mothball its existing capabilities?

Finally, the argument that America must choose between legacy systems and advanced capabilities sets up a false choice. For one, it presupposes a definition of legacy systems that is hard to match with the reality of military power. The United States operates fleets of aircraft, ships, and vehicles acquired, upgraded, and upgraded again over decades. Some of the most advanced capabilities in the military’s arsenal are found on so-called legacy systems. What is the proper definitional line here?

Moreover, the value of a weapons system depends on its intended use. For example, the promise of advanced capabilities largely hinges on their lethality and operational utility in combat. However, the armed services must also perform a long list of duties short of war, including assuring allies and signaling American intent, preserving free lanes of commerce in the commons, and the host of missions and postures that translate to conventional deterrence. These missions often require different tools.

The heated rhetoric of old versus new often skips over these basic considerations and therefore loses the necessary nuance.

THIRD, EVEN IF FUNDING IS SECURED, MODERNIZATION TAKES TIME. WHAT STEPS CAN THE UNITED STATES TAKE TO STRENGTHEN ITS POSITION IN THE INTERIM?

Congressman Mike Gallagher recently warned that “the reality is we won’t be able to build the navy the nation needs within the next five years.” Therefore, he suggested, the United States should assemble an “anti-navy—asymmetric forces and weapons designed to target the Chinese Navy, deny control of the seas surrounding Taiwan, and prevent the PLA’s amphibious forces from gaining a lodgment on the island.”³⁰

What are the other opportunities, along these lines, to field asymmetric capabilities rapidly and maximize the value of those systems in which the Pentagon is already invested? For example, can upgraded munitions, radars, communications, or other technologies augment the survivability and lethality of American airpower? Or could loyal wingman concepts, wherein unmanned systems support manned systems, prove a force multiplier?³¹ What about the potential to improve command and control through advanced battlefield management systems or other enabling tools? Though not revolutionary, these are the types of solutions that could yield tremendous near-term value—and help ease the burden of the modernization debt.

More simply, why not buy more of what's available? The commercial sector offers promising off-the-shelf technologies that could ease the burden on command staffs and operators alike, and the Pentagon has copious authorities to acquire more of it. The solution presents itself. The defense industry can deliver more as well. It just needs stable contracts. Does the military need more firepower? Sign munitions manufacturers to more long-term contracts. Need more airpower? Buy the F-35 at the full rate of production. Cost savings would follow.

Washington must also address two other deficiencies: the decay of the defense industrial base and the slow pace of technological innovation. The aforementioned Reagan Institute Task Force identified four critical steps for rebuilding the nation's industrial competitiveness: first, invest in the American worker by significantly expanding workforce development programs; second, increase access to patient capital through innovative public-private financing vehicles; third, modernize and invoke the Defense Production Act to help rebuild the ecosystem of downstream suppliers; and fourth, facilitate multi-nation innovation and manufacturing by, for example, waiving technology-sharing restrictions.³² The number of shipyards will not double overnight, but these steps, taken together, could point us in the right direction.

Similarly, if the cutting-edge capabilities of the future will depend upon technologies developed in the commercial sector, then Washington must leverage private capital markets to accelerate innovation. Put simply, hardware innovators need patient capital to get to a scaled product, but private capital is rarely patient. How can Washington help close the gap effectively? The first step is to buy more—make bets on proven technologies and use the Pentagon's buying power to its full extent. Some waste would be inevitable, but could it exceed what already exists in defense contracting? Another idea is to create a trusted "fund of funds," seeded with taxpayer money on a first-loss

basis and used as a market-driven vehicle to incentivize greater private capital investment in strategic technologies.³³

FINALLY, WHAT HAPPENS IF THE MODERNIZATION DEBT IS DEFERRED AGAIN?

The United States stands at a uniquely perilous moment. Vladimir Putin has threatened nuclear war, and his unjust war continues to rage in Ukraine. Xi Jinping recently reaffirmed the Chinese Communist Party's global ambitions, predicting "stormy seas" ahead for the world. Secretary of State Antony Blinken warned that Xi could soon go after Taiwan, and the US Navy brass echoed the alarm. Meanwhile, the administration and Pentagon leaders continue to make strong rhetorical commitments about standing up to China and strengthening America's strategic position.

Small comfort. The United States has a large and growing disconnect between its stated security and defense strategies and the resources it has committed to accomplishing them. Munitions stockpiles are running low, and the modernization debt accumulated over a generation is coming due. It seems the United States faces a stark choice: either match our resources to our strategy or change the strategy.

Notes

1. The White House, *National Security Strategy*, October 2022.
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