# An Undisciplined Defense: Understanding the \$2 Trillion Surge in US Defense Spending

## EXECUTIVE SUMMARY

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## 1. Contours of the surge

The rise in US defense spending since 1998 has no precedent in all the years since the Korean war. It most readily compares with two earlier, but lesser spending surges: the 1958-1968 surge of 43% and the 1975-1985 surge of 57%. The post-Cold War retrenchment of the US military reached its limit in 1998 with DoD's budget settling at an ebb point of \$361.5 billion (2010 USD). If we treat the 1998 budget level as a "baseline" and project it forward to 2010 (adjusting for inflation), we find that the total amount of funds that have been given to DoD above this level during the years 1999-2010 is \$2.15 trillion (in 2010 dollars). This figure constitutes what we call the post-1998 spending surge. (All told, DoD budget authority for the period was \$6.5 trillion in 2010 dollars).

The rebound in annual defense spending reached its recent peak in 2008: \$696.5 billion (2010 USD) – which is 92.7% above the 1998 level. The portion unrelated to contingency operations (the so-called "base" budget) was \$503 billion that year – which is 41% higher in real terms than in 1998. Total DoD budget authority receded slightly in 2009 and 2010. But it now seems likely that 2011 will set a new high – somewhat over \$700 billion in DoD's authority to spend.

Looking forward, the Obama administration's 2010 budget plan allocates an average of \$545 billion (2010 USD) per year to the DoD base budget for 2011-2017. In addition, it set aside a "place keeper" sum of \$50 billion per year for military operations, recognizing that actual war costs will vary. (And, indeed, the Pentagon already is expected to request at least \$163 billion for contingency operations in 2011.)

Whether one looks at the total DoD budget, or just that portion not attributable to today's wars, US defense spending is now stabilizing at levels significantly above Cold War *peaks* (adjusted for inflation) and far above the Cold War average, in real terms. Measured in 2010 dollars, average DoD budget authority was:

- \$423 billion for the period 1954-2001;
- \$517 billion for the Reagan years; and,
- \$495 billion for the Vietnam War "high tide" years 1966-1970.

All told, the Obama administration plans to spend at least \$5 trillion (2010 USD) on defense during 2010-2017, which is 5% more in real terms than the Bush administration authorized for 2002-2009. As this is occurring, the United States is also entering a period of economic uncertainty marked by increasing demands and constraints on federal resources. By 2011, gross federal debt will surpass 100% of GDP. And it will remain above that threshold for the foreseeable future.

The most ready explanation for the post-1998 spending surge is that it is due largely to post-9/11 military operations. In fact, however, these operations account for just 52% of the surge (and only 17% of total spending during this period). Moreover, the wars have themselves been exceptionally expensive by historical standards. Measured in 2010 dollars, the Korean conflict cost \$393,000 per person/year invested; the Vietnam conflict cost \$256,000; and the Iraq and Afghanistan commitments, \$792,000 so far. Rather than adequately explain the post-1998 spending surge, the high cost of recent military operations only adds to the explanatory burden.

#### 2. The reallocation of DoD funds

Related to the rise in spending, the allocation of DoD funds among appropriation categories also has changed, and this provides some important clues about cost drivers. The four major appropriation categories are Personnel, Procurement, Research and Development (R&D), and Operations and Maintenance (O&M). Looking at spending patterns in the 1990s and during the first decade of the new century we find:

#### Overall spending

When divided by the number of full-time military personnel, DoD budget authority appears remarkably stable throughout the 25-year period 1983-1998. It begins to rise in 1998, accelerating sharply with the onset of the Iraq War. For 2007-2010, it averaged \$459,000 per full-time person in uniform. This is 78% higher than the Reagan peak, 95% higher than in 1989, and nearly three times the inflation-adjusted peak during the Vietnam era.

## O&M spending

The proportion of defense spending allotted to Operations & Maintenance has risen from 31% in 1989 to 41% today. Calculated on a *per person* basis, O&M spending began to climb *in the early 1990s*. It further accelerated in two bursts beginning 1999

and 2003. In real terms, it is today 2.5 times as much *per person* as it was at the peak of the Reagan surge.

About 85% of DoD's civilian payroll is counted as an O&M expense. Over the years, the civilian payroll portion of O&M spending has mostly varied between 30% and 50%. Much of the remainder of O&M costs involve DoD purchases of goods and services. Since 1989, the "goods and services" portion has grown significantly, however. Today, it claims around 80% of the O&M budget. And, within this trend, the portion that is contractor services has grown.

#### Military personnel spending

During the 20-year period 1981-2000, budget authority for personnel varied by only a few percent around an average of \$73,200 (2010 USD) per person. It then rose by 46% between 2000 and 2010. The increase was enough to bring total personnel expenditures back up to Cold War levels – for a military only 69% as large.

#### Modernization spending

This category combines R&D and procurement spending. Over the thirty-year period 1980-2010, modernization spending has moved in a boom-bust cycle, which is historically typical for this category. Of course, what is *atypical* about the 1980-2010 period is that it straddles the end of the Cold War. Reviewing the pattern in modernization spending, however, this event seems to register as little more than a routine dip.

Total modernization spending was 32% lower in the 1990s than in the 1980s. After 1998, however, it began to rebound. For the 2000-2009 period, it was near the 1980s level in real terms. In per person terms, however, modernization spending for 2000-2009 surpassed the 1980s level by 47%.

Comparing just the past four years (2007-2010) with the four peak Reagan years (1983-1986) shows current procurement spending to be 40% higher in real per person terms. In similar terms, R&D spending is 135% higher.

#### Shifts in spending priorities

Looking at how the four main "accounts" have fared relative to each other shows O&M spending to have advanced most significantly. Its relative importance began to increase in the early 1990s. Research & Development funding followed a similar trajectory. Procurement, by contrast, has become more important relative only to military personnel spending, which has slipped in importance.

The greater emphasis on modernization spending relative to personnel spending does not mean that US military power has become much more capital intensive than it was in 1989, however. This is because the principle budget shift, which has been toward a greater emphasis on O&M spending, actually involves a significant expansion of DoD's workforce – by means of contract labor.

## 3. Explaining the spending surge

Three distinct, but related processes contributed to the exceptional rise in defense spending after 1998 and to its present stabilization above Cold War levels. These processes also shaped the reallocation of funding among appropriation categories.

### 3.1 Peace versus power dividend

First, in the wake of Soviet collapse, both Republican and Democratic administrations sought to realize a "dividend" in the currencies of both peace and power. The first entailed military force reductions and DoD budget cuts. The second involved adopting more ambitious security goals and requiring America's armed forces to sustain a substantial continuous global presence, increase peacetime engagement activities, and prepare to conduct more types of missions, faster, across a broader swath of the earth. While smaller, the US military was to be better supported and more ready, more deployable, and more active. In addition, all the facets of US military power – the many different types of capabilities and the multiple regional commands – were to be retained, if not enhanced.

The efforts to achieve a peace dividend and a power dividend pulled the budget in opposite directions. But the two imperatives were supposed to be reconciled by DoD reform and transformation initiatives that would putatively allow the armed forces to do more for less. An additional challenge was that, in becoming smaller, the US military lost some economy of scale in both support and acquisition functions. So the challenge for reformers was considerable.

Reform efforts were to focus principally on trimming infrastructure, streamlining support, renovating business practices, and privatizing various activities. A prospective "revolution in military affairs," driven by new information technology, also was supposed to help the armed forces achieve "new efficiencies".

In implementation, however, both the reform and the transformation agendas fell well short of their promise. In both cases, institutional resistance and bureaucratic inertia proved stronger than the impetus for change. Squeezed between this shortfall and the ambitions of post-Cold War military strategy, the peace dividend soon vanished.

#### Effects on the DoD budget and workforce

Increased operational tempo, increased support, and the loss of economies of scale were evident in the relative rise in O&M spending beginning in the early 1990s. Among other aims, the prospective reforms were meant to allow a transfer of funds from O&M and infrastructure accounts to procurement. Although some reform efforts – such as base closures – achieved some savings, these have not amounted to more than 4% of the DoD budget. This has not been sufficient to cover the costs of increased operational tempo, much less a rebound in procurement.

These developments also have reshaped the DoD workforce. As noted above, the increase in O&M spending correlated with an increased reliance on contract labor, which is generally less expensive than either military or civilian DoD labor. (In 2004, the life-cycle cost of a US military officer amortized over a 20-year career was approximately \$88,000 per year; for enlisted personnel, \$43,400 per year.)

Despite increased operational tempo, DoD has been reluctant to permanently increase military end strength because of all the follow-on costs involved. Thus, most of the recent additions to the Army and Marine Corp have been either temporary positions or have been matched by reductions in the Navy and Air Force. The total number of full-time US military personnel by the end of 2010 will be barely 50,000 more than the post-Cold War low point – and 22,000 of these will be temporaries.

Rather than add end strength, DoD has focused on squeezing more effort out of the existing pool of military personnel and migrating more of these personnel from the non-deployable to the deployable portion of the force, and from non-combat to combat positions. Civilian DoD and (especially) contract labor have filled the support gaps left behind. Beyond this, the increased support required by increased operational tempo has been increasingly provided by contract labor. Indeed, the role of contractors now extends to some basic security and intelligence functions.

The result is that DoD's total workforce is probably as large today as it was in 1989 (or even larger), but less of the total is in uniform. This accords with the rise in O&M spending and also with studies by Paul C. Light of the Brookings Institution, which suggest that the contractor workforce may have grown by as much as 40% since 1989. By comparison, the full-time military and DoD civilian workforces are both about 32% smaller today than in 1989.

#### 3.2 Discordant modernization

The second process contributing to the exceptional surge in defense spending concerns post-Cold War force modernization efforts. The DoD acquisition process has been the subject of frequent criticism by congressional research agencies, the Defense Science

Board, and others for routinely delivering products late, over cost, and not as capable as promised. But these problems cannot fully explain the exceptional circumstance that DoD is facing today.

Since reaching a low-point in the late-1990s, procurement spending has rebounded substantially, rising by more than 160% in real terms. Not since the nation undertook crash rearmament for the Korean war has as much been spent in a single year as in 2008, when the procurement account was allotted \$170 billion (2010 USD). As noted above, recent modernization spending is comparable to Reagan levels. And, in real *per person* terms, it surpasses them substantially.

And yet, while the earlier period is remembered as one of robust modernization, today's efforts are viewed as "troubled" from all sides.

What distinguishes recent practice is a dysfunction that we call "discordant modernization". Beginning in the early 1990s, acquisition practice has been riven by several, contending trends or visions. More important, DoD has failed to adequately prioritize among them or to compel integration. So these have all lurched forward together, layered one atop the other.

Looking at recent practice, we can distinguish three modernization trends: Legacy, Transformational, and Adaptive.

- Legacy efforts carry forward and seek to enhance the pivotal platforms and capabilities of the recent past;
- Transformational efforts seek to achieve dramatic increases in effectiveness or efficiency by employing new technology, techniques, and forms of organization;
- Adaptive efforts correspond to the perceived requirements of new security missions and circumstances such as stability operations, counter-insurgency, and counter-terrorism.

Given strong strategic guidance and prioritization from the center, these efforts can be fully integrated. Otherwise, they will proceed in a discordant way, competing for funds – a circumstance that, like inter-service rivalry, exerts unrelenting upward pressure on the budget. The Army's recent modernization agenda provides a particularly acute example. But the problem is evident as well in, for instance, the Navy's program which, apart from the decision to retire battleships, has sought to modernize virtually every type of surface, subsurface, and aircraft capability, while adding cruise-missile subs, littoral combatants, remotely piloted vehicles, and tilt-rotor aircraft. And, of course, like every service, the Navy is attempting to build its own encompassing C4I network.

When strategic discipline is lax, legacy modernization tends to predominate, due to its institutional momentum. Eventually, external circumstances may compel a rush of ad hoc

adaptive measures – as is the case today with regard to procurement to meet counter-insurgency needs. These may then come to predominate, prematurely. The only remedy is to strongly discipline force modernization in accord with a sustainable, adaptive, and cost-effective national security strategy. The various scenarios and missions that define military requirements must be strongly prioritized, and these priorities must be enforced from the center.

In a broader perspective, discordant modernization risks detaching the nation's finite defense resources from its actual security needs. In the decade before the 9/11 attacks, the United States spent over \$1 trillion on military modernization. But most of this expenditure proved irrelevant to defending against the most serious attack on America in 60 years. Subsequently, three more years of funding added another \$450 billion dollars to modernization accounts, but still the nation found itself ill-equipped to execute the new tasks it had undertaken: counter-insurgency in Iraq and Afghanistan.

## 3.3 Going to war (with the military you have)

The third process contributing to the post-1998 spending surge was America's protracted commitment to two wars of a type for which its armed forces were ill-prepared. As noted above, fully 52% of the spending surge (and 17% of total spending since 1998) can be attributed to contingency operations – principally to the Iraq and Afghanistan wars. Although war costs explain a significant portion of the surge, they also beg the question: Why have these wars proved so much more expensive in real terms than their predecessors?

Part of the reason is that the United States found itself inadvertently fighting "Mr. Johnson's war" using a reduced version of "Mr. Reagan's military." Unlike during the Vietnam War era, the United States today employs an all-volunteer (that is, professional) force. The logic of this policy ensures that long, exhausting, labor-intensive wars will drive personnel costs sharply higher, as DoD must bid higher to recruit and retain personnel. And they have: after remaining virtually flat in real terms for 22 years, military personnel spending measured on a *per person* basis rose 46% between 2000 and 2010. Slightly more than half of this was war-related.

In one obvious respect – size – today's uniformed military is not Mr. Reagan's or Mr. Johnson's. In this respect, too, America's military was ill-suited to undertake occupation and counter-insurgency tasks in two challenging locales with a combined population of approximately 50 million. Principally, DoD sought to compensate by employing a uniquely high proportion of contractors. The Congressional Research Services estimates that 240,000 are employed in the CENTCOM area today – and more are on the way. In budgetary terms, this registers as above-average O&M costs – and the wars are responsible for 73% of the surge in O&M spending.

The wars are also responsible for nearly 43% of the post-1998 surge in modernization spending. The challenge has been not simply to replace the equipment consumed in war, but also to purchase entirely new fleets of equipment suited to these wars (such as Mine Resistant Ambush Protected vehicles) and to significantly adapt existing fleets. As noted above, despite nearly \$1.45 trillion in modernization spending during 1991-2004 – including much invested in ground combat vehicles – the United States found itself illequipped for the major types of operations it chose to conduct. More than three years of fighting passed before DoD began to seriously re-orient its procurement programs.

#### 4. Trillions to burn

The three policy paths outlined above have converged to give America a historically unique global edge in military spending. This has not purchased clear and sure progress toward a more secure and stable world, however. Nor has it produced an especially efficient military, closely adapted to the current security environment.

The road not taken – at a cost of some trillions of dollars – would have involved some combination of (i) a more forceful and thorough-going approach to Pentagon reform, (ii) an integrated or "joint" approach to force modernization and transformation, tailoring these closely to new era conditions, and (iii) greater restraint in setting post-Cold War military goals and missions. That this has not occurred suggests a lapse in attention to the strategic costs and benefits associated with our chosen defense posture. It is as though the nation has trillions to burn.

A permissive spending environment is the precondition for the types of problems identified in this report. It is easy enough to point to the 11 September 2001 attacks as the progenitor of this condition. However, as we note, the surge in spending began before 2001. Moreover, Gallup polls show that public support for increased spending was higher in the two years prior to the attacks than in the two years after. And it has receded significantly since then. This points to a more fundamental enabling condition: presently there seems to be little political gain (and much risk) in pressing for the type of tight DoD budget constraints that might prompt through-going reform and transformation. Nonetheless, emerging fiscal realities may soon compel increased attention to how the nation allocates scarce resources among competing national goals -- foreign and domestic, military and non-military. And this might put the nation on the road to a disciplined defense.

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