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ANALYSIS OF PROPOSALS TO ALLOCATE FOUR PERCENT OF GDP TO DEFENSE

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Over the past two years, a number of organizations and individuals have endorsed the idea that the United States should allocate a minimum of four percent of its gross domestic product (GDP) to defense. Perhaps most importantly, both Secretary of Defense Robert Gates and Chairman of the Joint Chiefs of Staff Admiral Michael Mullen have expressed at least general support for the concept. Although proponents of the “four percent solution” have sometimes been imprecise in terms of exactly what they are proposing, many proposals appear to call for spending at least four percent of GDP on defense *exclusive of war costs*.¹

This analysis offers a brief assessment of the logic and wisdom of adopting such an approach. Although a strong argument can be made that the United States can afford to spend as much as four percent of GDP on defense in coming years (including war costs, defense currently absorbs some 4.2 percent of GDP), there is, on net, little merit to the idea of indexing future defense spending to four percent of GDP. Moreover, focusing on this question may do more to obscure and confuse than to illuminate the critical and difficult question of “How much is enough?” to spend on defense.

In the end, there is probably no workable substitute for the traditional approach to setting the defense topline: considering the range of military threats and challenges the country faces, and determining the strategy, forces and capabilities needed to counter those challenges and advance US interests, at an acceptable level of risk—as well as at an acceptable cost, in terms of other national priorities (including everything from homeland security to health care). The current defense debate would be better served by focusing on these kinds of key policy questions, the answers to which may indicate a need to spend *more* or *less* than four percent of GDP on defense, than on an approach that attempts to divorce defense planning and budgeting from such questions.

WHAT DOES FOUR PERCENT FOR DEFENSE MEAN?

It is not always clear precisely what supporters of the “four percent solution” mean by their proposal, and different groups and individuals have expressed support for somewhat different proposals or couched their support

¹ Pat Towell, Stephen Daggett and Amy Belasco, “Defense: FY 2009 Authorization and Appropriations,” Congressional Research Service (CRS), August 1, 2008, p. 8.

in different terms. In November 2007, Secretary of Defense Gates suggested that the country should use the four percent of GDP “benchmark as a rough floor of how much we should spend on defense.”² For his part, in February 2008, Admiral Mullen, Chairman of the Joint Chiefs of Staff, stated that a “four percent floor is important.” A Pentagon spokesman later attempted to qualify the admiral’s remarks, saying that he believed that the four percent benchmark should serve as a reference to “stimulate discussion relative to the affordability of increased defense spending in a challenging security environment.”³ Neither Gates nor Mullen were clear concerning key elements of the proposal, such as whether the four percent floor should be derived on the basis of the “base” defense budget alone, or should also include war-related funding.

For the sake of clarity, this *Backgrounder* focuses on the proposal made by the Heritage Foundation and a number of others that defense spending should be essentially indexed to GDP, with four percent representing the minimum share of GDP that should be allocated to defense, with that share being calculated exclusive of any war-related costs.⁴ In other words, the proposal analyzed here calls for spending at least four percent of GDP on the base defense budget, with extra funding provided through supplemental appropriations to cover any war-related costs. This means that the overall defense budget (i.e., the base defense budget plus war-related supplemental spending) would exceed four percent of GDP in wartime.⁵

DEFENSE SPENDING IS AT OR NEAR RECORD LEVELS TODAY

At some \$685 billion including war costs, the fiscal year (FY) 2008 defense budget is the highest defense budget in real (inflation-adjusted) terms since FY 1946, when the United States was still drawing down its spending from World War II.⁶ The Administration’s FY 2009 request includes about

² Robert M. Gates, Secretary of Defense, Speech at Kansas State University, November 26, 2007. <http://www.defenselink.mil/speeches/speech.aspx?speechid=1199>

³ Travis Sharp, “Tying US Defense Spending to GDP: Bad Logic, Bad Policy,” Center for Arms Control and Non-Proliferation, April 15, 2008, http://www.armscontrolcenter.org/policy/securityspending/articles/tying_spending_to_gdp_bad_policy/

⁴ For a discussion of this proposal, see The Honorable Jim Talent and Mackenzie M. Eaglen, “Providing for the Common Defense: Four Percent for Freedom,” *Executive Memorandum*, The Heritage Foundation, December 13, 2007; James Jay Carafano, Baker Spring and Mackenzie M. Eaglen, “Four Percent for Freedom: Maintaining Robust National Security Spending,” *Executive Memorandum*, The Heritage Foundation, April 10, 2008; and “Providing for the Common Defense: Why 4 Percent,” White Paper, The Heritage Foundation, April 2, 2008.

⁵ This analysis assumes that under this proposal the 4 percent benchmark would be applied to funding for National Defense—which includes the budget of the Department of Defense (DoD) plus funding for Department of Energy (DoE) and other defense-related activities—rather than the DoD budget alone. Although it is unclear, this assumption appears to be consistent with the Heritage Foundation proposal.

⁶ Estimates of real change in this analysis were derived based on the GDP deflator.

\$541 billion for the base defense budget.⁷ This would bring the base defense budget to its highest level ever, and represents a 44 percent real increase since FY 2000. So far Congress has appropriated about \$66 billion as a down-payment on FY 2009 war costs. But far more will eventually have to be provided to cover the full cost of military operations through the end of FY 2009. Thus, it is likely that the total defense budget for FY 2009 will ultimately reach a level comparable to that enacted for FY 2008.

DEFENSE SPENDING ACCOUNTS FOR A SMALLER SHARE OF GDP TODAY THAN IT GENERALLY HAS HISTORICALLY

Notwithstanding the fact that funding for defense is currently at or near record levels, measured as a share of GDP, spending on defense is relatively low by historical standards. Including war costs, FY 2008 spending on defense accounts for about 4.2 percent of GDP, with the share projected to grow to some 4.5-5.0 percent in FY 2009 (depending on how much funding is eventually provided to cover war costs for the full year). By comparison, at the height of World War II the United States spent about 37.8 percent of GDP on defense. Likewise, at the height of the Korean and Vietnam Wars, the country spent, respectively, some 14.2 percent and 9.4 percent of GDP on defense.

The share of GDP absorbed by defense has declined over time because, although the defense budget has tended to increase (albeit rather fitfully) over the years, the US economy has typically grown faster. Thus, for example, the decline in the share of GDP absorbed by defense that has occurred since the Vietnam War reflects the fact the US economy is now some 3.3 times larger, rather than any reduction in budget levels—indeed, defense spending today is some 50 percent higher in real terms than it was at the height of the Vietnam War.

In the same way and for the same reasons, the share of GDP absorbed by some other major categories of federal spending has also declined over the past several decades, including domestic and international discretionary spending, and entitlement spending other than Social Security, Medicare and Medicaid.⁸ By contrast, the share of GDP absorbed by these last three programs has grown substantially over the past few decades because those costs have grown faster than the economy.⁹

Given the fact that defense now absorbs a substantially smaller share of GDP than it has generally since World War II (though it remains well above the share typically sustained prior to World War II), it seems reasonable to conclude that the United States could afford to spend more on defense—and perhaps substantially more. That said, there is no objective way to determine how much the country can afford to spend on defense, or in any other policy

⁷ This includes \$518 billion for DoD and \$23 billion for DoE and other defense-related activities.

⁸ *The Budget and Economic Outlook: Fiscal Years 2008 to 2018* (Washington, DC: CBO, January 2008), pp. 155-57.

⁹ *Ibid.*

area. Moreover, some might argue that it is misleading to compare the past half-century with the next half-century in terms of the defense burden Americans can afford to bear. This is especially true considering demographic changes that will, in coming years, see the United States become an older country with a much larger retiree population and a much lower ratio of workers-to-retirees.

THE BUSH ADMINISTRATION HAS REJECTED THE “FOUR PERCENT SOLUTION” IN ITS BUDGET PLANS

As noted earlier, military spending currently absorbs about 4.2 percent of the United States’ GDP. However, this includes spending on the wars in Iraq and Afghanistan. The base defense budget alone now absorbs some 3.5 percent of GDP. Moreover, under the last Bush Administration budget plan, submitted in February 2008, the share of GDP accounted for by the base defense budget would fall to some 3.1 percent of GDP in FY 2013. Thus, although a number of Bush Administration officials have rhetorically expressed some support for the idea of indexing defense spending to four percent of GDP, the administration has rejected the idea in its own budget plans, which remain the most important and meaningful expression of any administration’s true priorities.

Under the current plan, the base defense budget is projected to decline slightly (by about 1.5 percent) in real terms between FY 2009 and FY 2013. This explains a small fraction of the decline in the share of GDP allocated to the base defense budget that is projected to occur under the plan. However, the main driver of the projected decline in the share of GDP absorbed by the base defense budget is the continued growth forecast for the US economy. Over the next five years US GDP is projected to increase by an average annual rate of some 3 percent in real terms.

ABSENT SPENDING REDUCTIONS OR TAX INCREASES, INCREASING DEFENSE SPENDING TO FOUR PERCENT OF GDP WOULD ADD \$1.4-1.7 TRILLION TO DEFICITS OVER THE NEXT DECADE

Increasing the share of GDP absorbed by the base defense budget to four percent and sustaining it at that level in the future would result in a dramatic increase in spending on defense. The Congressional Budget Office (CBO) estimates that US GDP will reach about \$14.8 trillion in FY 2009. Thus, if the base defense budget was indexed to four percent of GDP, it would be projected to reach some \$591 billion in FY 2009. This is about \$50 billion more than the Bush Administration has actually requested. Moreover, if indexed to four percent of GDP, the base defense budget would be projected to reach some \$723 billion by FY 2013. This is about \$147 billion more than projected for that year under the administration’s plan. By FY 2018, such indexing would bring the base defense budget to about \$895 billion. This is some \$263 billion above the level that would be projected to be provided if, instead, it were assumed that the base defense budget would simply grow at the rate of

inflation after FY 2013 (the last year included in the administration's latest plan).¹⁰

Altogether, if four percent of GDP were allocated to the base defense budget over the coming decade (FY 2009-18) funding would be projected to total some \$7.4 trillion over the decade. By comparison, under the current plan a total of about \$5.8 trillion would be provided for the base defense budget over this period. Thus, indexing the base defense budget to four percent of GDP would add about \$1.6 trillion in budget authority (BA) to the current plan through FY 2018. The additional *outlays* resulting from this increase in BA would be somewhat less over this period, about \$1.4 trillion.¹¹

In theory, the cost of this increase in the base defense budget could be covered through either offsetting cuts in other federal programs or tax increases. However, given the history of the past eight years—during which time a dramatic increase in spending on defense was accompanied by an expansion of other federal spending and large tax cuts, it may be more likely that any such increase in funding for defense would be covered through additional borrowing. If borrowing were similarly used to fully cover the projected increase in the defense budget, additional interest payments would amount to nearly \$300 billion¹² over the next decade, bringing the ten-year costs of the “four percent solution” to a total of some \$1.7 trillion.

Since the proposal considered in this analysis would exclude war-related costs from the four percent benchmark, it is also important to understand that these extra costs of \$1.4-1.7 trillion dollars would come on top of any extra costs associated with carrying out military operations, including the wars in Iraq and Afghanistan. Data provided by CBO suggest that, depending on how quickly and deeply US forces are withdrawn from these conflicts, roughly \$500 billion to \$1 trillion in outlays may have to be provided to cover associated costs over the next decade.¹³ If these costs are covered entirely through

¹⁰ This is the assumption that CBO applies to overall (defense and non-defense) discretionary spending when projecting the ten-year costs of the administration's plan. *Analysis of the President's Budgetary Proposals for Fiscal Year 2009* (Washington, DC: CBO, March 2008), p. 4.

¹¹ Budget authority represents the amount of funding available to be obligated (e.g., through the signing of contracts for goods and services, or the hiring of personnel), while *outlays* represent the amount actually spent to pay for goods and services as those obligations are “liquidated” (e.g., in the form of progress payments to contractors, and pay checks for DoD civilian and military personnel). Because there is a time lag between when funds are obligated (i.e., contracts are signed) and when those obligations are liquidated (i.e., payments are made), providing \$1.6 trillion in additional BA over the FY 2009-18 period would result in the addition of only \$1.4 trillion in outlays over these same years. The outlays stemming from the remaining BA would be spent in FY 2019 and beyond.

¹² Author's estimate.

¹³ See, for example, Peter Orszag, CBO Director, “Estimated Costs of US Operations in Iraq and Afghanistan and to Other Activities Related to the War on Terrorism,” Statement Before the House Budget Committee, October 24, 2007, p. 2; and *The Budget and Economic Outlook: Fiscal Years 2008 to 2018*, p. 12.

increased borrowing, interest payments will add another \$200-300 billion to the ten-year cost of these operations—bringing the total cost of these wars to some \$700 billion to \$1.3 trillion over the next ten years.

Combining the cost of the “four percent solution” with likely future war-related costs would increase projected spending under the Bush Administration’s current ten-year budget plan by a total of some \$1.9-2.4 trillion, or \$2.4-3 trillion if interest costs are included. Holding all else constant (i.e., assuming no offsetting spending cuts or tax increases), this would cause a substantial deterioration of the country’s fiscal outlook.

IMPLEMENTING THE CURRENT DEFENSE PLAN WOULD NOT REQUIRE SPENDING FOUR PERCENT OF GDP ON DEFENSE

Whether or not the United States can afford to spend a minimum of four percent of GDP on its base defense budget over the long term, it is clear that implementing the Bush Administration’s current defense plan would *not* require spending this much. Based on CBO data, assuming DoD can meet its cost goals for new weapon systems and operations and support (O&S) costs, implementing the current defense plan (that is, fully executing DoD’s existing modernization, force structure and readiness plans, but excluding any war costs), would require increasing funding for defense to some \$560 billion (FY 2009 dollars) over the next five years and sustaining the base defense budget at that level through FY 2025, the last year considered in CBO’s analysis.¹⁴ This is about \$20 billion more than the administration included in its FY 2009 request for the base defense budget, and some \$30 billion more than projected for the base defense budget in FY 2013 under its plan.

If, as is more likely, the cost of DoD’s weapons acquisition programs and O&S activities increase as they have historically, CBO data suggest that the cost of implementing the current plan (again, excluding war costs) could grow to some \$600 billion (FY 2009 dollars) a year over the long run. This is about \$60 billion more than the administration requested for the base defense budget in FY 2009, and \$70 billion more than projected in its plan for FY 2013.

Taken together, these estimates suggest that implementing the Bush Administration’s current defense plan is likely to require increasing annual funding for the base defense budget to an average of some \$560-600 billion and sustaining these higher levels of funding through FY 2025. By contrast, if the base defense budget was indexed to four percent of GDP, funding levels

¹⁴ Author’s estimate based on CBO data. See CBO, “The Long-Term Implications of Current Defense Plans: Detailed Update for Fiscal Year 2008,” March 2008. Although the CBO analysis is based on DoD’s FY 2008 long-term budget plan, the FY 2009 plan appears to differ only very modestly from this earlier plan. Thus, it seems reasonable to use this estimate as a proxy for the long-term costs associated with DoD’s most recent plan. This estimate assumes that funding for DoE and other defense-related activities (which are not included in CBO’s analysis) would continue to be funded at the FY 2009 requested level in the future.

would average some \$735 billion (FY 2009 dollars) a year through FY 2025.¹⁵ In other words, a base defense budget indexed to four percent of GDP would provide some \$135-175 billion more over the next two decades than would likely be needed to fully implement the current defense plan, even assuming that plan experiences historical rates of cost growth in weapons acquisition programs, and O&S activities. Moreover, by FY 2025, the level of funding that would be provided for the base defense budget under the “four percent solution” would exceed the amount that would be needed to execute the current plan by some \$280-320 billion, or about 45-55 percent.

In addition, even to the extent that the current defense plan may suffer from a significant mismatch between likely costs and projected funding levels, simply adding more money is by no means the only alternative available. As a recent CRS report pointed out:

Other alternatives may include backing away from plans to add 92,000 active duty troops to the Army and Marine Corps; shifting resources among the military services to reflect new challenges rather than allocating them in roughly the same proportions every year; reviewing requirements for expensive new technologies in view of the presence or absence of technologically peer or near peer competitors; and shifting resources from military responses to global threats toward non-military means of prevention.¹⁶

ALLOCATING FOUR PERCENT OF GDP TO DEFENSE IMPLIES A SUBSTANTIAL EXPANSION OF THE CURRENT DEFENSE PLAN

Since spending four percent of GDP on defense appears to be far more than would be necessary to simply execute the current defense plan, indexing the base defense budget to four percent of GDP implies a substantial expansion of that plan. The additional funding could be used to expand the current plan in a wide variety of ways. But the magnitude of the growth would be so substantial that it would probably allow the United States to both greatly increase the size of its military (far beyond the 92,000-troop increase in Army and Marine Corps personnel now being implemented) and dramatically expand and accelerate the Services’ modernization plans.

Some idea of just how much an additional \$135-175 billion a year (let alone \$280-320 billion) could buy DoD is suggested by the CBO’s estimate that the planned addition of 92,000 Army and Marine Corps personnel, once completed, will cost DoD some \$15 billion (FY 2009 dollars) a year to

¹⁵ As noted earlier in this analysis, if the base defense budget was indexed to 4 percent of GDP, by FY 2018 the base defense budget would reach some \$895 billion. This is equivalent to \$750 billion in constant FY 2009 dollars. By FY 2025, assuming the economy would continue to grow at roughly 3 percent annually in real terms, 4 percent of GDP would equate to about \$878 billion (FY 2009 dollars), with funding for the base defense budget projected to *average* about \$735 billion (FY 2009 dollars) over the FY 2009-25 period.

¹⁶ Pat Towell et al, “Defense: FY2009 Authorization and Appropriations,” p. 13.

sustain.¹⁷ Similarly, buying 100 more F-22 fighters (raising the total F-22 buy to about 380, as the Air Force desires) would increase funding requirements by only some \$3 billion annually over the next five years.

It may be possible to argue that a major new expansion of the US military is needed and that the pace and scope of the Services' modernization plans need to be vastly expanded beyond what DoD's own plans currently call for. But the need for such a dramatic buildup and expansion is far from self-evident, especially given the very high level of funding provided for the base defense budget over the past eight years. What is more, most discussions of the "four percent solution" are relatively devoid of any argument in favor of dramatically building up US military capabilities beyond what is called for in the Bush Administration's current defense plan.

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¹⁷ CBO, "Estimated Cost of the Administration's Proposal to Increase the Army's and Marine Corps' Personnel Levels," April 16, 2007,