Navigating the Pentagon’s Inflation Labyrinth:

DOD’s Budget Bible Hides Growth and Provokes Excess Spending

President Obama’s Proposal for $400 billion “Savings” in Defense Spending Conceals a Huge DOD-Contrived Gimmick

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Summary

The Pentagon uses a specially tailored measure of inflation that masks past budget growth and induces Congress to appropriate excess funding for inflation that the most commonly accepted inflation index says will not occur.

The Pentagon budget analysts’ bible, the so-called Green Book, records several DOD-tailored measures of inflation, along with the widely accepted GDP inflation index. While flawed, the GDP measure is used throughout government and the private sector and – for the purposes of this paper – is analytically conservative. A comparative analysis of the data in the Green Book reveals that:

- From 2000 to 2012 the Pentagon received an additional $164 billion in “real” growth that the GDP deflator does not justify.

- Historically, the Pentagon has reaped substantially more “real” budget increases than most public DOD budget analysts would recognize. For example, the official Pentagon budget numbers assert that for fiscal year 2012 DOD will spend $124 billion more than we spent on average during the Cold War. The GDP index reveals that we will actually spend from $224 billion to $342 billion more in 2012 than during the average Cold War year. After such huge amounts of additional annual spending, we now have a military force structure that is smaller and older than during any point during the Cold War – even smaller and older than after the build-down after the Cold War.

- The Pentagon’s self-serving inflation index does not just distort budget history, it induces Congress to appropriate money to the Pentagon for inflation that will not occur, according to the widely accepted GDP index. In the years 2013 to 2016, DOD seeks a minimum of $23 billion more than the GDP measure can justify.

- The over-estimation of inflation grows much larger when considering long term deficit reduction. Over the next 12 years, President Obama proposes to “save” $400 billion in “security” spending, including DOD. An extrapolation of data available from DOD and OMB shows that $167 billion of the “savings,” or 62 percent of DOD’s share of the $400 billion, is for phantom inflation.

- Before any discussion starts on the amounts to be saved in Pentagon spending for deficit reduction, the $167 billion in over-estimated inflation should be removed from the current 12 year projection of the defense budget. That $167 billion reduction will, in fact, permit the defense budget to grow at the rate DOD professes to request, and it will not reduce any funding for inflation predicted by the GDP index.

- All Pentagon budget data, including the Green Book, should be audited by an independent, objective party, and the misleading inflation-related numbers should be corrected.
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Each year, the Department of Defense (DOD) publishes its budget estimates in a volume known widely as the “Green Book.” It is a practical bible for defense budget analysts for comparing past, present, and future spending levels, and – among other things – the effects of inflation.¹ The data in the Green Book are the basis for most of the analyses of the defense budget for the past, present and future by outsiders, such as myself, and many insiders as well.

Using the convenient tables in the Green Book, we can analyze how any year in the past (even going back to the 1940s) compares to any other year (even in the future). One can do so in dollars valued to their respective years of appropriation (known as “current” dollars), or one can do so in “real” terms: that is, using dollars with their value held constant to any particular fiscal year (known as “constant” dollars).

For example, some consider it inappropriate to compare the budget authority appropriated to the Pentagon in the pre-war year 2000 ($291 billion in FY 2000 dollars) to the budget request for 2012 ($676 billion in FY 2012 dollars). That $385 billion (or 132 percent) increase is exaggerated compared to normalizing the 2000 dollars to their value in 2012: $291 billion becomes $399 billion in 2012 constant dollars, according to the Green Book table on page 127. The adjustment makes both the absolute increase ($277 billion rather than $385 billion) and the percentage increase (70 percent rather than 132) meaningfully smaller.²

Green Book numbers take on added importance when the Pentagon is under pressure to spend less money, as now. Comparisons of contemporary defense budgets relative to the past need to be understood to comprehend the “real” growth that has occurred, and projections into the future must also be accurately understood, especially – as now – when the president and others measure their defense budget proposals relative to the amount of inflation projected for the future.

The problem is that the Pentagon uses its own specialized – and self-serving – estimates of inflation. Not coincidentally, they make current budgets appear a lesser increase from the past, and they induce higher appropriations in the future than actual inflation would justify. The effect is to bury cost growth – in both the past and the future – and disguise it as inflation.

It is a remarkable, even skillful, deception, and it has been ongoing – unnoticed by many – since the 1980s when it was briefly exposed but not reformed. It will surely be integral to the Pentagon’s strategy – and that of its spending allies – to enhance its position.
relative to the various proposals now being floated to cut the defense budget or hold it steady – both relative to inflation.

To explain, a little budget history and evidence from the Green Book itself is in order.

**DOD’s Track Record on Inflation**

In the mid-1980s, the then-Congressional Military Reform Caucus reported that the Pentagon had been cooking its inflation numbers. The Reform Caucus found that under the guise of more “realistically” estimating inflation, from 1982 to 1985 the Pentagon had leveraged Congress into appropriating to it somewhere between $42 billion and $54 billion more for hardware purchases than would have been justified using an inflation index from the free market manufacturing sector (the Producer Price Index or PPI). Employment of its own – self-interested – inflation index, the Pentagon sought and received more funds than it needed to cover inflation. It was in effect masking cost growth as inflation.

The Chairman of the Senate Appropriations Committee, Sen. Mark Hatfield, R-Ore., wrote to the General Accounting Office (GAO; now the Government Accountability Office) to look further into the matter. GAO validated the Reform Caucus’ findings and found “DOD requested budget authority based on inflated estimates of inflation….” And, “DOD has budgeted $36.8 billion more for inflation since fiscal year 1982 than was needed to cover inflation.” In an update to cover FY 1986, GAO revised its estimate $7.5 billion higher.

One reason for the difference in the GAO estimate compared to the Reform Caucus’ was that GAO used a different measure to assess DOD’s inflation estimates. Rather than using the PPI, GAO used the Gross National Product (GNP) deflator, saying “… we determined that the prices of all defense purchases … rose at about the same rate as the GNP deflator.”

In 1991, the Office of Management and Budget (OMB) switched from the GNP deflator as a measure of inflation for federal government budget analysis to the Gross Domestic Product (GDP). Some argue that both are deeply flawed. The GDP measure may contain biases that overstate real growth in the economy, while understating inflation, therefore masking it – albeit less so than the DOD measure. The GDP index also appears to have been manipulated by presidents (including Lyndon Johnson, both Bush presidents and Bill Clinton) to show even more growth in the economy than any inherent biases would permit. Moreover, as the Reform Caucus study pointed out in 1985, in addition to typically DOD related products such as manufactured goods, food, fuel, clothing, housing and healthcare, it also measures banking, real estate, agriculture, mining and other non-defense activities.

Nonetheless, although the GDP deflator may understate inflation, it is typically now used by the Office of Management and Budget (OMB) for overall federal budget analysis, and
the Congressional Budget Office (CBO) uses it as well for its analysis of DOD budgets. For the purposes of this paper, the GDP measure is not only the commonly accepted measure, it is also analytically conservative: if the criticisms of it are correct, it understates the differences between the specialized DOD measures and whatever inflation may actually be occurring.

It is also notable that the Appropriations and Armed Services Committees on Capitol Hill frequently use the CBO/GDP inflation analyses as the basis for revisions in defense spending labeled “revised economic assumptions” in the General Provisions sections of defense spending bills. There, those committees frequently make changes in DOD budgets amounting to hundreds of millions – sometimes even billions – of dollars in a single year.\textsuperscript{11}

While the GDP measure is the consensus inflation yardstick, DOD has stuck to its self-serving inflation assumptions, and it has distributed them throughout the data for defense budgets in the Green Book going back to the 1940s and into the future. Because the Green Book is used so widely, its aberrant numbers appear in DOD budget analysis by think-tanks, journalists, academe and many in Congress, and it is used as an authoritative policy baseline for discussion of future defense spending.

The critical questions are, 1) How do the Pentagon’s specialized inflation estimates alter the perception of DOD’s budgets in the past, present and the future? And, 2) It this just a matter of historic perceptions, or is real money involved?

What Is Different about DOD Inflation Estimates?

Conveniently, the 2012 Green Book provides a table showing the differences in the GDP inflation index and DOD’s unique indices going back to 1970.\textsuperscript{12} Table 5-1 lists, among others, the GDP and the “DOD Total” indices. The “DOD Total” index in Table 5-1 equates to what DOD uses in Tables 5-6 and 5-7 for a budget authority (BA) index.\textsuperscript{13} (It is an implied comparison between the GDP deflator and the “DOD Total” deflator for BA that may be technically flawed.\textsuperscript{14})

The origin of DOD’s specialized deflators is unclear. The 1985 Reform Caucus study found at least one of them – for “major commodities” – to have been produced by the Commerce Department’s Bureau of Economic Analysis at the request, if not instruction, of the Defense Department,\textsuperscript{15} but this author could find no contemporary explanation or analysis at the BEA or DOD websites, nor in the text of the Green Book. Until the contemporary basis for DOD’s specialized deflators can be further researched, they remain a mystery.

In comparing the DOD Total BA deflator to the one for GDP, it is important to keep in mind that the GDP measure may very well show less inflation, and more GDP or “real” growth, than may be justified. Thus, using the GDP deflator may reduce the inflation estimating bias of the DOD deflators but not remove it entirely. A more objective and
accurate measure of inflation, were it to exist, would arguably enlarge the differences discussed below between the DOD and GDP indices.

In past budget years, the DOD Total deflator is always numerically smaller than the GDP index. The result is to show that, in “real” (so-called inflation adjusted) dollars, the DOD budget, as measured by DOD, has grown less than what the GDP index would show, or – put another way – that contemporary DOD budgets are not as much an increase from the past. See Figure 1 below.

Figure 1: DOD Budget 1948-2012 in DOD Current Dollars, DOD Constant 2012 Dollars and GDP Constant 2012 Dollars (Budget Authority, $Billions)


Figure 1 and the data for it offer a number of important revelations. 

First, note how the GDP data (dotted line) show over time that there has been more growth in the total DOD budget than the – overall more horizontal – DOD data (dashed line). This can be made more apparent by looking at specific years.

Using 2012 as a starting point, or base year, all measures (DOD’s Current and Constant 2012 dollars, and the GDP measure) will show the same numerical figure. But, if one moves just one year back in time to 2011, the differences start to emerge: the $689.647 billion in table 6-8 of the Green Book in current dollars, becomes $700.117 in DOD 2012 constant dollars, but using the GDP deflator on page 54, the “real” dollar amount becomes $699.226 billion, not DOD’s $700.117 billion. The $0.891 billion (or 0.12 percent) difference is small, but as we go backwards in fiscal years, the differences progressively grow.
Going back to the pre-war year of 2000, the DOD current dollar budget is $290.5 billion;  
the DOD constant 2012 dollar calculation for that year is $398.8 billion, and the GDP  
constant 2012 dollar calculation is $373.6 billion. No longer small, it is a difference of  
$25.2 billion between the DOD and GDP measures. It also means that in the 2012 budget  
request, there has been more “real” growth than the DOD numbers would have you  
believe: there has been not $277.9 billion, or 70 percent, “real” growth in the DOD  
budget since 2000; there has been, in fact, $302.6 billion “real” growth, or 81 percent.  

The differences between the DOD and GDP constant dollar deflators become more  
significant over time.  

Second, simply comparing the figures for one year in time (for example, 2000) to another  
(i.e. 2012) does not fully take into account the cumulative differences. There are  
differences between the DOD and GDP inflation measures in each intervening year. The  
tally for these are shown in Table 1 below:  

Table 1: Calculation of 2000-2012 DOD Budgets Using DOD and GDP Inflation Indices,  
with Inflation History Error.  

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>DOD 2012 Constant $</th>
<th>GDP 2012 Constant $</th>
<th>Inflation History Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>398.8</td>
<td>373.6</td>
<td>25.2</td>
</tr>
<tr>
<td>2001</td>
<td>412.4</td>
<td>389.4</td>
<td>23.0</td>
</tr>
<tr>
<td>2002</td>
<td>447.9</td>
<td>427.2</td>
<td>20.7</td>
</tr>
<tr>
<td>2003</td>
<td>548.7</td>
<td>530.1</td>
<td>18.6</td>
</tr>
<tr>
<td>2004</td>
<td>571.6</td>
<td>556.0</td>
<td>15.6</td>
</tr>
<tr>
<td>2005</td>
<td>563.8</td>
<td>553.3</td>
<td>10.5</td>
</tr>
<tr>
<td>2006</td>
<td>605.0</td>
<td>593.0</td>
<td>12.0</td>
</tr>
<tr>
<td>2007</td>
<td>661.2</td>
<td>646.2</td>
<td>15.0</td>
</tr>
<tr>
<td>2008</td>
<td>718.4</td>
<td>706.5</td>
<td>11.9</td>
</tr>
<tr>
<td>2009</td>
<td>699.5</td>
<td>687.9</td>
<td>11.6</td>
</tr>
<tr>
<td>2010</td>
<td>717.1</td>
<td>714.8</td>
<td>2.3</td>
</tr>
<tr>
<td>2011</td>
<td>700.1</td>
<td>699.2</td>
<td>0.9</td>
</tr>
<tr>
<td>2012</td>
<td>676.2</td>
<td>676.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>7,720.7</td>
<td>7,553.4</td>
<td>167.3</td>
</tr>
</tbody>
</table>

The $167 billion shown in the right hand column is not additional sums of money DOD  
received (more on that later), it is the extent to which DOD has altered its own budget  
history. More specifically, it is funding that DOD received that DOD counts as for  
inflation but which the GDP measure shows was available for “real” program growth.  
However, because most U.S. military forces actually shrank (and aged) in this period, the  
increase went not to force growth but mostly to cost growth. “Real” budget growth since  
2000 – measured in 2012 GDP dollars – is $167 billion more than DOD has measured  
with its own index, but because the money was squandered on higher costs for  
smaller/older forces, there was no “real” growth in the forces, just in the money to pay for  
them.
This evidence renders inaccurate pre-existing calculations of the real budget growth the Pentagon has experienced since just before Sept. 11. DOD would have you believe that the “real” dollar increase from the 2000 budget to the 2012 budget was $277.9 billion or 70 percent, but the GDP deflator records the increase as $302.6 billion, or 81 percent. Put another way, if you include the “real” dollar growth benefit DOD received each year (masked as inflation in 2012 dollars), DOD received a “dividend” for program spending (in effect for cost growth), not inflation, of $167 billion.

Third, during the Cold War, the United States and its treaty allies faced over 200 Soviet and Warsaw Pact divisions in Europe, an actively hostile communist China, tens of thousands of nuclear weapons targeted at the United States and its allies, and an international competition for pre-eminence that included two major regional conflicts (Korea and Vietnam) and innumerable other civil wars and insurrections. From 1948 (the Berlin Airlift) to 1990 (the collapse of the Soviet Union), the United States spent—on average—$434 billion on the Pentagon each year according to DOD’s 2012 constant dollar deflators. The GDP deflator puts the Cold War era in a significantly different perspective: the spending average for the years 1948 to 1990 was $334 billion per year.

That revision makes contemporary DOD spending all the more remarkable. Compare that figure to President Obama’s “base” budget request for 2012 (i.e. the portion of the Pentagon’s 2012 budget not intended for the wars in Afghanistan and elsewhere): $558 billion. In the absence of a major conventional and nuclear competitor, major periodic regional wars, and all the other threats and spending engines of the Cold War, we are spending not less money, but dramatically more. Specifically, we are not spending $124 billion more in 2012 (or 29 percent more), we are in fact spending $224 billion more, or 67 percent more.

If one includes the $118 billion that President Obama proposes (for now) to spend in addition on the wars in Afghanistan and elsewhere, the increase since the Cold War becomes even more stunning: at $676 billion for 2012, we are spending $342 billion more than we spent during the Cold War on average (including its many conflicts), or 102 percent more.

Still more remarkable, it is important to acknowledge that the major regional conflicts fought during the Cold War (Korea and Vietnam) both entailed significantly larger deployments of U.S. forces (for example over 500,000 troops in theater at the peak of the Vietnam War) and a significantly more employment of high operating cost equipment, such as aircraft and aircraft carriers.

And yet, with this huge additional increment of spending, what has been happening to our forces? Compared to the year 2000, we currently deploy a smaller combat Air Force and Navy, and the Army is only very marginally larger. Major equipment inventories are older, and forces are arguably less well trained. If one were to compare current force levels, average equipment age, and readiness to any point during the Cold War, the
comparisons become even more unfavorable. Such analysis has been thoroughly done by Franklin C. Spinney in numerous studies.¹⁸

The mismatch of vastly increased spending buying a smaller, older, less trained force is disturbing enough using DOD’s image enhancing data for inflation, but using the GDP deflator, the increase in costs to possess smaller, older, less ready forces is utterly astounding. One is inevitably drawn to the conclusion that something is horrendously wrong in how Congress and the Pentagon have managed our defenses.

Do the Pentagon’s Deflators Cost Real Money?

The question occurs whether we are merely conducting an abstract analysis, or is there a real dollar cost to the Pentagon’s specialized deflators? The answer is yes. The cost can best be seen by looking into DOD’s future budget requests and the inflation DOD predicts for itself.

The deflators for the years 2012-2916 are shown on page 54 of the Green Book, and below. Note how the DOD deflator compares to the GDP deflator: DOD is predicting more inflation for itself than what the GDP deflator forecasts.

Using 2012 as the base year, we can see how much additional inflation DOD claims for itself. These are calculated in Table 2 below.

Table 2:

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>DOD Index</th>
<th>GDP Index</th>
<th>DOD % Increase over GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>100</td>
<td>100</td>
<td>--</td>
</tr>
<tr>
<td>2013</td>
<td>102.01</td>
<td>101.63</td>
<td>0.37</td>
</tr>
<tr>
<td>2014</td>
<td>104.13</td>
<td>103.31</td>
<td>0.79</td>
</tr>
<tr>
<td>2015</td>
<td>106.30</td>
<td>105.11</td>
<td>1.13</td>
</tr>
<tr>
<td>2016</td>
<td>108.57</td>
<td>106.93</td>
<td>1.53</td>
</tr>
</tbody>
</table>

At an average annual rate of increase of 0.39 percent compounded each year, DOD predicts it will experience more inflation than the GDP deflator predicts. The differences in Table 2 have important implications –

- DOD will be requesting more funding to cover inflation than the GDP deflator can justify, and
- DOD budget data for the years 2012-2016 will show less “real” growth than the GDP deflator would show.

Table 3 below shows the real growth implications.
Table 3: Real Growth Implications, DOD versus GDP Deflators 2012-2016, Current Dollars, “Base” DOD Budget (Does not include wars in Afghanistan, etc.)

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Proposed DOD Budget (Billions)</th>
<th>DOD Calculated Real Growth</th>
<th>GDP Calculated Real Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>558.2</td>
<td>3.6%</td>
<td>3.8%</td>
</tr>
<tr>
<td>2013</td>
<td>575.5</td>
<td>1.1%</td>
<td>1.4%</td>
</tr>
<tr>
<td>2014</td>
<td>591.3</td>
<td>0.7%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2015</td>
<td>603.2</td>
<td>-0.1%</td>
<td>0.3%</td>
</tr>
<tr>
<td>2016</td>
<td>615.6</td>
<td>-0.1%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

The GDP index reveals that DOD always experiences more “real” growth than DOD’s specialized data permits observers to appreciate. In the case of 2015 and 2016 above, when DOD asserts its budget is shrinking in “real” terms, it is actually expanding.

The dollar amounts can add up quickly. It is not just a question of the incrementally added “real” growth; it is a matter of dollars that DOD seeks to be appropriated from Congress for inflation that the GDP deflator says will not exist. The annual dollar calculations are shown in Table 4 below.

Table 4: Dollar Amounts Implied by the Difference between DOD and GDP Deflators. (Current Dollars, $ Billions, Base DOD Budget)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>DOD Budget</th>
<th>Growth Error in DOD Inflation Projection (from Table 2)</th>
<th>Dollar Implication</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>558.2</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>2013</td>
<td>575.5</td>
<td>0.37%</td>
<td>2.1</td>
</tr>
<tr>
<td>2014</td>
<td>591.3</td>
<td>0.79%</td>
<td>4.7</td>
</tr>
<tr>
<td>2015</td>
<td>603.2</td>
<td>1.13%</td>
<td>6.8</td>
</tr>
<tr>
<td>2016</td>
<td>615.6</td>
<td>1.53%</td>
<td>9.4</td>
</tr>
<tr>
<td>$ Total</td>
<td></td>
<td></td>
<td>23.0</td>
</tr>
</tbody>
</table>

Note that as the inflators compound (in Table 2); so does the error in the DOD predictions, and so does the dollar amount. While the $23.0 billion for the next five years is not an inconsiderable amount, the dollar bonus DOD derives grows sharply even further out into the future, and it has major implications for the contemporary defense budget debate.

However, the data in Table 4 does not identify the complete inflation bonus DOD has provoked for itself up through 2016; it only identifies that portion that would accrue starting in 2013. Extra monies from the years previous to 2013 are not shown or calculated. As GAO explained in 1985, it is impossible to determine what DOD does with its inflation bonus money. In addition, Congress has from time to time made inflation related adjustments. And, because there is no assurance how the deflators DOD displays for its past budget history in the Green Book correlate with the inflation assumptions it articulated at the time the budgets were actually submitted (or with
subsequent adjustments by Congress), it is impossible to know just what total inflation bonus has accumulated up to now from the dark and chaotic past of DOD records. Whatever that amount is, it has become embedded in the budget requested for the base year in the calculation in Table 4 (FY 2012), and it replicates each year thereafter. It could be considerable.

DOD’s Inflation Bonus in the Context of Deficit Reduction

The comparison of DOD’s prediction of inflation for itself compared to the commonly accepted GDP measure looms as a major consideration when one considers the timeframe that President Obama and Congress are contemplating in the context of deficit reduction. The President’s Commission on Fiscal Responsibility and Reform assumed a budget window of 10 years from 2011 to 2020. In his April 13 speech on deficit reduction the president addressed a budget window going out to 2023, when he implied, but did not explain, a reduction in the planned “security” budget of $400 billion in the 2012-2023 time frame.

There are multiple caveats and uncertainties in the defense related reductions the president appears to have been talking about; these should be identified before identifying how the inflation issue impacts any contemplated savings. They are the following:

- The manner in which the president addressed past and future “savings” made it unclear the extent to which he was addressing actual reductions in spending, or “savings” as efficiencies (i.e. internal transfers inside the DOD budget as Secretary of Defense Gates has for the most part been conducting);

- No DOD budget figures exist for some of the years the president addressed; available DOD figures go out to only 2016; available OMB figures for defense spending go out to 2021, but the amounts for 2022-2023 are unknown; it is also notable that in recent budget history, most deficit reduction plans have spanned either five or ten years, not twelve; the latter spreads out the annual amount required to be saved, and – more importantly – moving savings out to years as far as ten or twelve years away literally moves them to never-never land;

- No figures were released for any reductions in any year, whether the pre-existing annual budget was known or unknown;

- The target for these $400 billion in “savings” is the “security” budget, not just the Defense Department’s budget. The security category includes not just DOD but the State Department/International Affairs budget function, the Department of Homeland Security, the Department of Veterans Affairs, the nuclear weapons activities of the Department of Energy, and other miscellaneous programs and agencies; the Defense Department’s proposed share of the $400 billion “savings” is unknown, and -
Materials released by the White House at the time of the speech asserted that the new plan had a “goal” to hold DOD spending “below” the rate of inflation. While DOD’s preferred rates of inflation will – as always – be used for the DOD budget, the differences between the DOD and GDP inflation indices for the years beyond 2016 have also not been made available.

First, if the Department of Defense is held to the rate of inflation – or just “below” – as calculated by the DOD inflation indices, it is clear from the above analysis that it will be quite possible for the Pentagon to enjoy “real” growth – under the more generally accepted GDP indices.

Second, despite the apparently purposeful vagueness and calculated uncertainties in the president’s $400 billion “savings” in defense and related spending, we can make a data based calculation of the role that DOD’s self-interested inflation indices might play in effecting “savings” in the defense budget.

From Table 2, we determined the average differences in the Green Book between the DOD and GDP deflators from year to year, and we calculated the rate at which they progressively depart: an incremental 0.39 percent added each successive year. We can also make a calculation of the presumed defense budgets for the years 2022 and 2023 based on the previous years.

These calculations are shown in Table 6.

Table 6: 2012-2023 DOD Inflation Bonus, Current Dollars, $ Billions

<table>
<thead>
<tr>
<th>Year</th>
<th>DOD Base Budget</th>
<th>Demonstrated or Calculated DOD Inflator Increase over GDP</th>
<th>Demonstrated or Calculated DOD Inflation Bonus</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>558.2</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>2013</td>
<td>575.5</td>
<td>0.37%</td>
<td>2.1</td>
</tr>
<tr>
<td>2014</td>
<td>591.3</td>
<td>0.79%</td>
<td>4.7</td>
</tr>
<tr>
<td>2015</td>
<td>603.2</td>
<td>1.13%</td>
<td>6.8</td>
</tr>
<tr>
<td>2016</td>
<td>615.6</td>
<td>1.53%</td>
<td>9.4</td>
</tr>
<tr>
<td>2017</td>
<td>626.7</td>
<td>1.92%</td>
<td>12.0</td>
</tr>
<tr>
<td>2018</td>
<td>638.0</td>
<td>2.31%</td>
<td>14.7</td>
</tr>
<tr>
<td>2019</td>
<td>649.4</td>
<td>2.70%</td>
<td>17.5</td>
</tr>
<tr>
<td>2020</td>
<td>661.1</td>
<td>3.09%</td>
<td>20.4</td>
</tr>
<tr>
<td>2021</td>
<td>673.5</td>
<td>3.48%</td>
<td>23.4</td>
</tr>
<tr>
<td>2022</td>
<td>686.3</td>
<td>3.87%</td>
<td>26.6</td>
</tr>
<tr>
<td>2023</td>
<td>699.3</td>
<td>4.26%</td>
<td>29.8</td>
</tr>
<tr>
<td>Total</td>
<td>7,578.1</td>
<td></td>
<td>167.4</td>
</tr>
</tbody>
</table>

Thus, $167 billion, or 42 percent, of the $400 billion that President Obama’s plan would “save” from the security budget is phantom inflation that the GDP inflator predicts will not occur in the DOD budget. Taking that amount out would not cause the loss of a
single “real” dollar from the DOD budget, as advertised, nor would removing that amount of money reduce funding for GDP-estimated inflation.

Moreover, DOD spending comprises 67 percent of the total “security” budget in 2012. Its proportional share of the twelve year $400 billion in “security” savings would calculate to be $268 billion. The $167 billion in phantom inflation money would constitute 62 percent of the savings if it were applied to just DOD’s proportional share of deficit reduction. From the revised $268 “savings” base for DOD deficit reduction, $167 billion in phony inflation, when removed, would require only an actual savings of $101 billion. Saving that $101 billion to achieve President Obama’s overall goal can be achieved by actually reducing DOD spending by just $8.4 billion in each year of the twelve year plan.

The Obama deficit reduction plan for “security” spending was heavily caveated and incomplete as articulated by the president. Taking into account the impact of DOD’s self-interested indices of inflation, the Obama plan becomes more a plan to evade deficit reduction, than to contribute to it.

Conclusions

1) The so-called budget bible for defense budget analysts, the Green Book, is unreliable and contains calculations on inflation that constitute a deception. The Defense Department has created for itself a measure of inflation that –

- distorts budget history,
- conceals real growth in the defense budget,
- obscures cost growth and presents it as inflation, and
- provokes excess appropriations from Congress for inflation that the GDP inflation index predicts will not occur.

2) President Obama’s April 13 proposal for deficit reduction from the Pentagon is too vague and full of caveats and loopholes – and a huge DOD contrived gimmick – to be taken seriously. To the extent that meaningful numbers can be interpreted from it, it is mostly an illusion: a majority of the “savings” that might be extracted from the Defense Department are funds for phantom inflation.

3) As explained in the text above and endnotes # 11 and 22 below, the adjustments that Congress routinely makes to defense authorization and appropriations bills for “revised economic assumptions” do not fully adjust for the inflation bonus DOD creates for itself, are frequently arbitrary and not fully directed at the appropriate accounts, and are made before – not after – inflation actually occurs and can be measured accurately and completely.
Recommendations:

1) The Defense Department’s Green Book should be audited by an independent party, such as GAO, to extract self-serving inflation indices and to replace them with objectively derived inflation indices that do not introduce distortions to DOD budget history. Until such time as that audit is complete, DOD’s calculations for constant dollar budgets and future inflation related changes should be extracted from the Green Book and ignored by budget analysts in think tanks, Congress, and elsewhere.

2) Future predictions of inflation in the defense budget should be based only on indices from comparative segments of the private sector. While flawed, the GDP deflator does not contain the magnified biases of DOD-tailored indices and should be employed as a measure for future defense-wide spending, pending a more suitable, objectively derived private sector measure that is endorsed by both GAO and CBO.

3) Only once a fiscal year has transpired and actual – objectively calibrated – inflation has actually occurred should adjustments be made in defense spending legislation to adjust for actual economic occurrences. The data for these adjustments should be obtained from OMB and validated by CBO.

4) All future years in any defense-related deficit reduction proposal for however many years should not be based on DOD’s self-interested inflation indices that provoke extra spending for inflation that is not predicted under the GDP measure.

5) The president’s proposal for deficit reduction in defense and related spending needs to be replaced with one that is fully explained and contains spending figures, including proposed reductions, for all fiscal years in discussion.

6) DOD’s existing numbers for spending from 2012 to 2023 need to be revised downward by $167 billion, as explained in this paper, to establish an objectively derived baseline – including inflation – for discussion of meaningful deficit reduction in DOD spending. Similarly, the same $167 billion should be extracted from DOD budget requests to be considered by Congress. It is important and notable that the extraction of the $167 billion will not remove any DOD-requested “real” growth from those future years in the defense budget nor any money for GDP-predicted inflation.
The Green Book also addresses other basic economic and defense-related data; it is published by the Pentagon’s Comptroller, usually in March of each year. Find electronic versions at http://comptroller.defense.gov/Budget2012.html, where you can trace them back to 1998; printed versions go back at least as far as 1984.

For the analysis above, see pp. 127-128 of the 2012 Green Book (at http://comptroller.defense.gov/Budget2012.html). FY 2012 is adjusted to add the president’s request of $117.8 billion for Overseas Contingency Operations, i.e. Iraq, Afghanistan, and elsewhere.


GAO, Potential for Excess Funds in DOD, 1985, pp. 4-5. GAO had been attempting the conundrum of estimating what inflation was actually occurring in the DOD budget, rather than simply comparing it to the measured inflation in the private sector manufacturing community.

The two differ largely in GDP’s exclusion of the value of foreign assets held by domestic U.S. corporations.

For example, see the arguments and history at http://www.shadowstats.com/article/gross_domestic_product, a part of the Shadow Government Statistics Web site at http://www.shadowstats.com/.

See the section labeled “A Tempting Target for Manipulation” in the analysis at http://www.shadowstats.com/article/gross_domestic_product.

See footnote 1 on p. 15 of the Reform Caucus study.

For example, see Section 8117 of the newly enacted HR 1473 which removes a total of $1.477 billion from DOD’s 2011 budget based on “revised economic assumptions.” These are typically re-estimates of future inflation using CBO’s and/or OMB’s GDP-based inflation re-estimates. However, these congressional revisions never fully address the problem: they are made not to rectify the inflation-accounting books but instead are done to effect arbitrary, across-the-board reductions in defense bills to accommodate political and earmarking requirements.


See pp. 59-60 of the 2012 Green Book.

As the peer review process of an earlier draft of this paper pointed out, the GDP deflator measures economic activity in a specific year, such as 2010. However, budget authority is a measure of appropriations in a single year that can spread out for as much as six – in rare cases seven – years. (See Table 5-11 on pp. 65-67 of the 2012 Green Book.) For example, a single appropriation of BA in 2010 for shipbuilding can spend out for ongoing construction for six years, out to 2015. (See p. 66.) Outlays (actual expenditures in a single fiscal year) might be a more appropriate set of deflators for comparing to the GDP index. Technically, that would appear to be the case because the “outyears” in a BA appropriation will have deflators embedded in them not just for the year of appropriation (e.g. 2010) but also for the amounts paid out in 2011-2015. That would result in a numerically different deflator for BA for the year 2010 as opposed to a deflator for all monies spent in 2010, as for outlays. However, the differences, while varied, average to a minor amount. For the 47 years in the time frame 1970 to 2016 (available in Tables 5-6 through 9 on pp. 59-62), the outlay deflators vary as much as 5.7 percent lower (and therefore show more inflation), to as little as 0.01 percent, with relatively lesser amounts being more frequent. In ten years of the years between 1970 and 2016, the outlay index was higher than the BA index (as much as 1.0 percent higher) and, therefore, showed less inflation. Overall, the outlay deflators showed an average of 1.5 percent more inflation than the BA deflators. In other words, the DOD Total BA deflator, on average, understates the differences with the GDP deflator, which as argued above already understates inflation as a result of political manipulation and other issues. However, for several reasons, this paper will retain its focus on budget authority in historic and future budgets: 1) CBO has routinely challenged OMB’s and DOD’s calibration of outlays as biased towards the outyears (see CBO’s latest analysis at
2) most DOD budget analysts are more familiar with BA as a measure of DOD budgets; citing DOD budgets in terms of outlays can be confusing.

3) the Green Book presents the BA deflators as the relevant comparison to GDP deflators, and it is a major focus of analysis in this paper, and 4) the differences between the outlay and BA deflators are minor, and using the BA deflators understate the differences with the GDP deflator and are therefore analytically conservative.

15 See p. 3 of the Reform Caucus study.

16 The DOD Total index subsumes various specialized indices that DOD employs for categories and subcategories of its spending (shown in tables 5-6 and 5-7 of the 2012 Green Book). Those include military personnel, operation and maintenance, procurement, R&D, military construction, family housing, and several more. There is a notable and important anomaly in the DOD inflation indices for procurement and R&D: for the years 1978 to 2007, DOD’s indices show multipliers that diverge from both the DOD Total and the GDP indices. Thus, contemporary acquisition budgets have seemed to have grown even less relative to the past. DOD frequently likes to argue that procurement and R&D have not grown as much as it would prefer; this facilitates the argument that the acquisition budget is undernourished. A furtherance of that analysis, while important, is not pursued for the purpose of the evidence presented here. It would be an important analysis to perform; this author encourages it.

17 From 2001 to 2011, the Navy’s “battlefleet” decreased from 316 ships and submarines to 287, a decline of 10 percent. This is not a smaller, newer fleet; it is a smaller, older fleet—about four years older, on average, according to CBO. Also, for the past year the press has repeatedly reported on severe maintenance problems throughout the fleet, and Navy combat pilot training in the air has remained at historic lows. The situation in the Air Force is worse. During the same 2001-2011 period, the number of active and reserve fighter and bomber squadrons went from 142 to 72, a decline of 49 percent. Aircraft are older on average also; according to CBO they are now about nine years older and at historic highs of about 23 years. Air Force budget data tells us that fighter pilot air training hours today are only one-half to one-third of what they were in the 1970s, an era not touted for high readiness. The Army’s number of brigade combat teams grew – from 44 to 46, an increase of just 4.5 percent. But still, CBO tells us that major Army equipment inventories are mostly older, and in 2006, the House Armed Services Committee held hearings and leaked a memo documenting historic lows in the readiness of active Army units. The analysis has not been publicly updated; we should worry that it has gotten worse, not better.

18 Find some prominent examples of Spinney’s extraordinary work at


19 The real growth figures for 2011 assume a DOD base budget appropriation of $530.4 billion in 2011 dollars.

20 Tables 2 & 3 display current dollars as the differing inflation in them is embedded, rather than extracted in constant dollars.


22 The calculated bonus that DOD derives is not eliminated by the periodic adjustments Congress makes for “revised economic assumptions” in authorizations and appropriations bills. Congress makes those adjustments to, in effect, require across the board reductions in selected accounts, often favoring, if not exempting, the acquisition accounts (which are actually more heavily impacted by DOD’s concocted deflators). Also, the adjustments Congress makes do not coincide with the bonus amounts DOD presumes for itself with its deflators for any single year. It is also worth pointing out that the CBO/GDP-based calculations that Congress employs to effect its arbitrary “revised economic assumptions” are layered on top of the DOD deflator-based levels of spending – without reconciling the two – thereby resulting in incoherent implications about inflation that may or may not be occurring. In fact, it would be far more appropriate not only to rebase DOD inflation assumptions on the GDP deflator but also to make adjustments in the amounts needed to cover GDP inflation only after the rate can be verified to actually have occurred. Instead, Congress makes its adjustments for fiscal years yet to occur, which only adds another layer of uncertainty – and chaos – to the entire affair.

The data for the years 2012-2021 are from OMB’s 10 year projection for the base DOD budget; see table 32-1 of OMB’s 2012 budget materials at http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/32_1.pdf.

The years 2012-2016 are as shown in Table 2. The years 2017-2023 assume an incremental increase of 0.39 percent per year: the average growth of the years 2012-2016.

No official budget figures are available. The figures shown here assume demonstrated rate of inflation in previous years: 1.9 percent.

It is important to note that the 12 year data are merely predictions; the amount of inflation that actually occurs will be different; no one knows by how much, or if actual inflation will be higher or lower than the predictions. This is even true in the short term; many times in the past – even routinely – predictions for the next twelve months, let alone for the next twelve years, have proven to be quite wrong.