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Eight Things You Should Know About Defense Spending and Inflation

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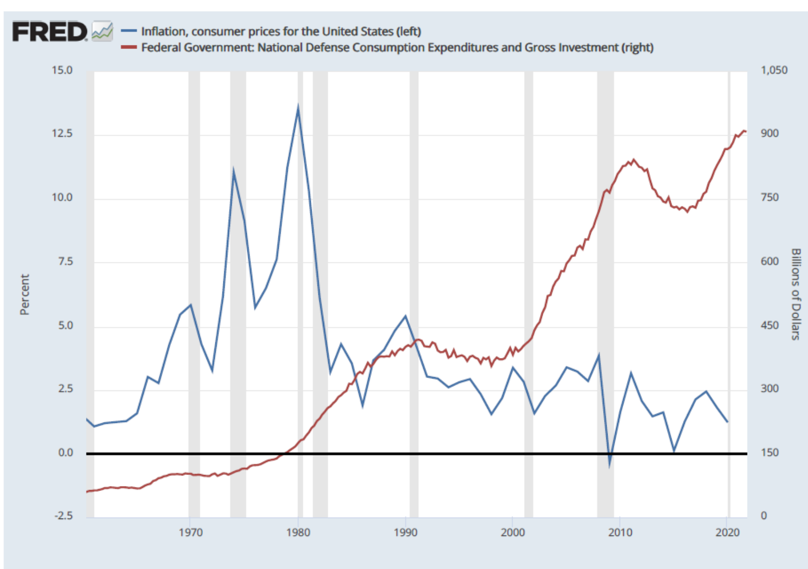
Current discussions in the United States Congress regarding the Fiscal Year 2023 federal budget are raising the issue of whether the budget for the Department of Defense (DoD) should be increased in line with recent rises in the rate of inflation. This research brief sheds light on this issue by providing eight essential pieces of background information. Together, they explain why **rising rates of inflation should NOT be a reason to increase the FY2023 DoD budget**. The DoD experiences and measures inflation differently from the rest of the economy and has resources and available strategies to cope with energy price fluctuations.

1. **Defense spending has never moved in tandem with inflation.** Despite using anticipated inflation rates in estimating budgets, DoD spending has moved quite separately from inflation, as shown in the chart here:

Figure 1. U.S. Defense Spending and Consumer Price Inflation, 1960-2021



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Over the past 60 years, defense spending (in red) grew significantly during the Cold War era, as well as post-9/11, including in the decade following the 9/11 attacks and in the spending surge starting in 2014. Large spikes and falls in inflation over the same periods had little to no correlation with the level of defense spending.

2. **The current defense budget request already factors in inflation.** Department of Defense (DoD) budgets have always incorporated expected inflation rates in their projections and requests, as per the White House's Office of Management and Budget (OMB) Circular A-11 guidance.[2] Based on testimony at a recent Armed Services committee hearing, the DoD used a GDP deflator of 4 percent for its projected budget FY2023-2027.[3] At this same hearing, Defense Secretary Lloyd Austin testified that the current defense budget is sufficient for operational needs.

3. **The Department of Defense does not measure or experience inflation in the same way as the broader economy.** The current level of economy-wide inflation, which includes all types of consumer purchases, including food and fuel, is not necessarily the most appropriate rate of inflation to use for DoD. The inflation statistics most Americans read about in the news are based on the CPI (Consumer Price Index), which measures the change in prices of a typical assortment of goods that consumers buy. A broader measure of a change in prices is the GDP deflator, which measures the change in prices of all goods and services in the economy from one year to the next. GDP deflators are calculated both for the overall economy as well as for specific industries and sectors. The DoD uses the GDP deflators, rather than the CPI, when incorporating inflation into their budget estimates.

4. **Inflation does not impact each portion of the defense budget equally.** An economy-wide inflation rate, such as the CPI or a single GDP deflator, does not accurately capture how prices change for Defense-specific purchases. Because of this, the DoD has historically used a weighted average level of inflation for its estimates. Price indexes are based on five categories of military expenditures:
    a. Military pay
    b. Civilian pay
    c. Fuel
    d. Medical expenses

[2] For more see: Horowitz, Stanley et al. (February, 2013) "The Use of Inflation Indexes in the Department of Defense (Journal Version)." *Institute for Defense Analysis*. https://www.ida.org/-/media/feature/publications/i/id/ida-nsd4807-the-use-of-inflation-indexes-in-the-department-of-defense-journal-version/ida-document-ns-d-4807.ashx

[3] Comptroller Michael McCord's testimony before the U.S. Senate (2022, April 7) https://www.armed-services.senate.gov/imo/media/doc/22-26_04-07-2022.pdf

e. Other purchases

Based on guidance provided by the OMB, the DoD Comptroller uses a weighted-average price index, with weights based on appropriations to these five spending categories.[4] The rates of inflation for the pay and medical expenses categories are based on employment and medical cost indexes calculated by Bureau of Labor Statistics (BLS). The rate of inflation for the fuel category is based on oil prices as calculated by the Energy Information Administration (EIA). The "Other purchases" category applies the economy-wide GDP deflator for all purchases that do not fall in these other categories.[5]

5. **Volatile energy costs do not affect the entire defense budget and can be managed by decreasing operations or abandoning outdated platforms.** While DoD Secretary Austin believes that DoD budgets are currently sufficient for operational needs, DoD Comptroller Michael McCord recently expressed worry that energy prices will remain high and that the DoD budget under-estimated the rise in energy prices.[6] If energy prices do indeed remain high, a few relevant points:
    a. In the past three years, the DoD spent $8 - $11 billion per year on petroleum and aerospace energy ($8.15 billion in FY2021).[7] This is the DoD budget line that could potentially rise with the recent increase in energy prices. Any potential upward adjustments to the DoD's budget should therefore be a percentage of this figure, rather than a percentage of the DoD's entire budget.
    b. Energy cost increases can be met with a reduction in energy use, rather than increased spending, which will also answer the need to reduce greenhouse gas emissions and the DoD contribution to climate change. Seventy percent of the DoD's energy use is from operations (the other 30% is from installations), so scaling back unnecessary operations would be one way to

[4] For more see: Horowitz, Stanley et al. (2013, February) "The Use of Inflation Indexes in the Department of Defense (Journal Version." *Institute for Defense Analyses*. Section C-3. https://www.ida.org/-/media/feature/publications/i/id/ida-nsd4807-the-use-of-inflation-indexes-in-the-department-of-defense-journal-version/ida-document-ns-d-4807.ashx

[5] This is also reflected in the Department of Defense's FY2022 'Green Book': "DoD uses inflation rates provided by OMB as a baseline. OMB bases their rates on Gross Domestic Product (GDP) composite rates. DoD includes military and civilian pay raise rates, fuel rates, and medical factors in its composite rates. In addition, outlay rates for each appropriation account are factored into the final DoD inflation rates." *National Defense Budget Estimates for FY 2022.* https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2022/FY22_Green_Book.pdf P.3.

[6] See: Comptroller Michael McCord's testimony before the U.S. Senate (2022, April 7) https://www.armed-services.senate.gov/imo/media/doc/22-26_04-07-2022.pdf

[7] The Defense Logistics Agency (DLA) manages all fuel purchases for the DoD. This statistic is from their 2021 Energy Fact Book, https://www.dla.mil/Portals/104/Documents/Energy/Publications/DLAEnergyFactBook2021_2.pdf?ver=NJ0NwnrAlbjZSxxhrPjnHA%3d%3d

reduce energy costs.[8] Energy use could also be reduced as outdated platforms are off-ramped (as suggested in the same committee hearing).

c. The DoD is the world's largest institutional consumer of petroleum and the world's largest institutional emitter of greenhouse gases.[9] Climate change itself can increase inflation, partly through its effects on food supply and energy use.[10] The DoD can reduce inflationary pressures by reducing its fuel use and emissions.

d. Energy prices fluctuate wildly, and high prices now do not imply that these high prices will remain throughout FY2023. More on this in the points below.

6. **Energy prices are sure to keep fluctuating and need not be the basis of a defense budget increase.** The Bureau of Economic Analysis provides National Defense price indexes for the last 50 years. Figure 2, below, shows a selection of these indexes, including overall spending ("expenditures and gross investment"), employee compensation, consumption of durable goods (e.g. aircraft, weapons, electronics, etc. purchased by the DoD), and petroleum. Plotting these 50 years of price indexes, we see that almost all the indexes have gradually increased over time, with the exception of petroleum, which fluctuates wildly. Arguably, then, the DoD and other government agencies should not try to precisely pin their budget estimates to energy prices at any one point in time. In some years there will be savings as energy prices decrease, and in other years (such as Spring 2022), energy prices will be higher than expected. But historically there is no evidence that energy prices would remain at today's levels.

   Furthermore, the Defense Logistics Agency (DLA), which buys and stockpiles fuel for DoD uses, has both financial and fuel reserves that it can use in years with

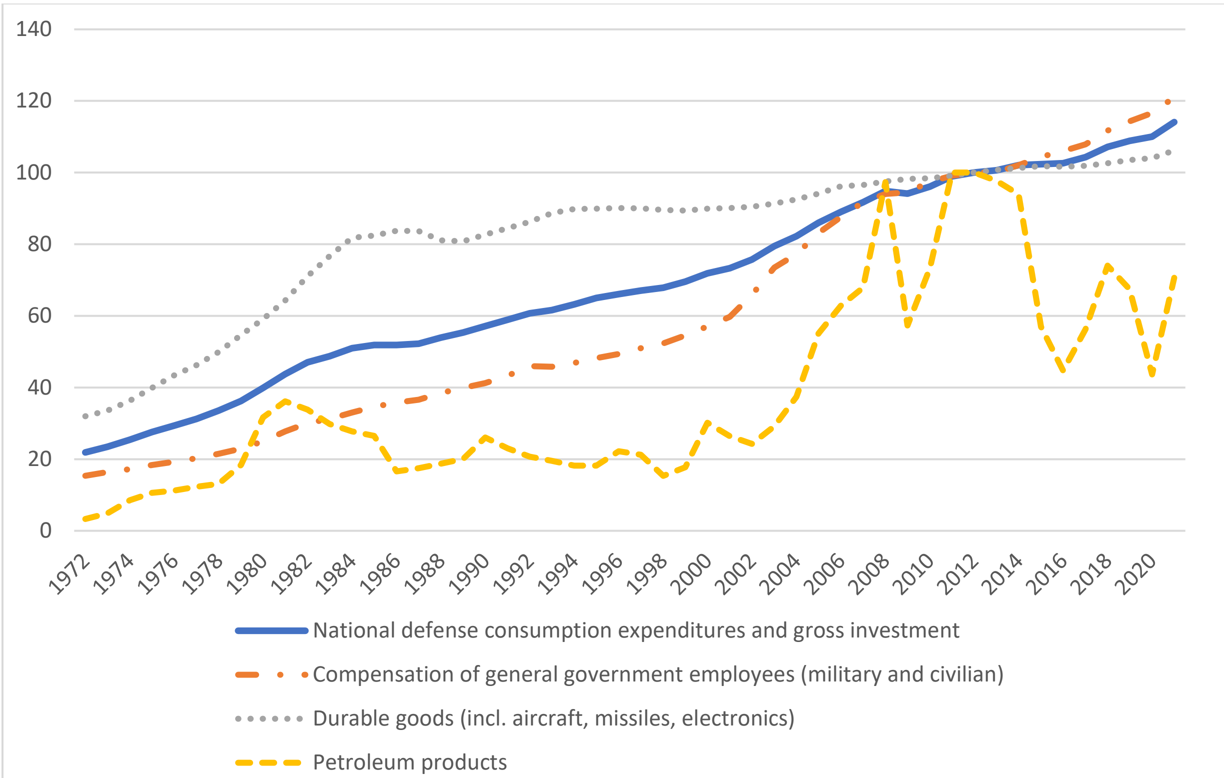
[8] For more see: Crawford, Neta. (2019, November 13) "Pentagon Fuel Use, Climate Change, and the Costs of War", *Costs of War Project.* https://watson.brown.edu/costsofwar/files/cow/imce/papers/Pentagon%20Fuel%20Use%2C%20Climate%20Change%20and%20the%20Costs%20of%20War%20Revised%20November%202019%20Crawford.pdf

[9] Crawford, Neta. (2019, November 13) "Pentagon Fuel Use, Climate Change, and the Costs of War", Costs of War Project. https://watson.brown.edu/costsofwar/files/cow/imce/papers/Pentagon%20Fuel%20Use%2C%20Climate%20Change%20and%20the%20Costs%20of%20War%20Revised%20November%202019%20Crawford.pdf

[10] For more on this, see: Tappe, Anneken. (2022, February 1) "Here's another thing keeping prices high: Climate change", *CNN Business.* https://www.cnn.com/2022/02/01/economy/climate-change-inflation-food-energy-prices/index.html; Worland, Justin. (2022, February 3) "If the U.S. Wants to Fully Tackle Inflation, It Needs to Tackle Climate Change", *TIME*. https://time.com/6144788/climate-change-inflation-link/; Masters, Jeff. (2021, December 6) "Extreme weather and pandemic help drive global food prices to 46-year high", *YALE Climate Connections.* https://yaleclimateconnections.org/2021/12/extreme-weather-and-pandemic-help-drive-global-food-prices-to-46-year-high/;

energy price spikes, so that DoD budgets don't have to rise in accordance with short-term fluctuations.[11]

Figure 2. Inflation Rates for Defense Purchases, 1972-2021 (Index Numbers, 2012=100)



Source 1: Chart by author, based on data from U.S. Bureau of Economic Analysis, Table 3.11.4, "Price Indexes for National Defense Consumption Expenditures and Gross Investment by Type," March 30, 2022

7. **Building inflation expectations into the defense budget means preparing for long-term outcomes, not basing the entire budget on what is happening currently.** Just one month ago, in testimony from March 28, 2022, only 10 days prior to the testimony mentioned above in point #5, Comptroller McCord acknowledged that DoD included increases in inflation in each of the next five years

[11] The Defense Logistics Agency (DLA) manages all fuel purchases for the DoD. This statistic is from their 2021 Energy Fact Book, https://www.dla.mil/Portals/104/Documents/Energy/Publications/DLAEnergyFactBook2021_2.pdf?ver=NJ0NwnrAlbjZSxxhrPjnHA%3d%3d

of budget estimates, even though there was no way to predict where price levels would be by the end of Fiscal Year 2023:

> *So what we did was build the inflation that we saw happening now into a sort of a one-time step up of each of the five years of the FYDP, but we do not — we don't have an accelerating assumption that inflation continues at high rates. That would have to be revisited if that were to be the case, but we're a long way off even from figuring out, you know, from knowing what's going to happen in F.Y. '23, which doesn't start for six months and doesn't end for 18 more months. I think that's one of the real hard things for everyone is to separate in your mind what happened last month or the month before from saying you know what's going to happen 12 months from now let alone across the FYDP.*[12]

8. **Defense contractors benefit most from increased defense budgets, and use inflation as an excuse to price-gouge.** As Costs of War research has shown, half of DoD spending goes to contractors. As mentioned by Senator Elizabeth Warren in the April 7 testimony, many large companies, including military contractors, have used rising inflation levels to justify raising their prices even higher. Furthermore, various sources have shown that at least 30 percent of contract spending is lost to waste, fraud, and abuse. Rather than increasing budgets and payments to contractors by using a higher inflation rate in its budgetary estimates, DoD could instead save money by cracking down on the tens or hundreds of billions of dollars lost in contracting every year.[13]

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[12] "Comptroller Michael J. McCord and Vice Adm. Ron Boxall Hold a News Briefing on President Biden's Fiscal 2023 Defense Budget". (2022, March 28) *U.S. Department of Defense.* https://www.defense.gov/News/Transcripts/Transcript/Article/2980711/comptroller-michael-j-mccord-and-vice-adm-ron-boxall-hold-a-news-briefing-on-pr/

[13] For more see: Peltier, Heidi. (2020, June 30) "The Growth of the "Camo Economy" and the Commercialization of the Post-9/11 Wars". *Costs of War Project.* https://watson.brown.edu/costsofwar/files/cow/imce/papers/2020/Peltier%202020%20-%20Growth%20of%20Camo%20Economy%20-%20June%2030%202020%20-%20FINAL.pdf