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***The Cost of Debt-financed War:  
Public Debt and Rising Interest for Post-9/11 War Spending***

Heidi Peltier<sup>1</sup>

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Throughout the 18 years the U.S. has been engaged in the “Global War on Terror,” mainly in Iraq and Afghanistan, the government has financed this war by borrowing funds rather than through alternative means such as raising taxes or issuing war bonds. Thus, the costs of the post-9/11 wars include not only the expenses incurred for operations, equipment, and personnel, but also the interest costs on this debt. Since 2001 these interest payments have been growing, resulting in more and more taxpayer dollars being wasted on interest payments rather than being channeled to more productive uses. This paper calculates that the debt incurred for \$2 trillion in direct war-related spending by the Department of Defense and State Department has already resulted in cumulative interest payments of \$925 billion. Even if military interventions ceased immediately, interest payments would continue to rise, and will grow further as the U.S. continues its current military operations.

War is expensive — in terms of lives lost, physical damage to people and property, mental trauma to soldiers and war-zone inhabitants, and in terms of money. The expense of war is not restricted to the annual budgetary costs of the war spending itself, but also depends upon the way in which war is financed. When war is financed through debt, the costs are much greater than when it is financed through taxation or other revenues, since interest payments must be made as long as the debt is outstanding. In fact, interest payments can sometimes grow to beyond the level of the debt itself, as will likely be the case with the post-9/11 wars.

If war spending ceased immediately, interest payments on the \$2 trillion of existing war debt would rise to over \$2 trillion by 2030 and to \$6.5 trillion by 2050. These interest payments will grow larger as the U.S. continues its post-9/11 military interventions and continues amassing debt to pay for the costs of war.

This level of borrowing to pay for the post-9/11 wars has been unique. Since the country’s founding, U.S. wars have been funded at least partly through revenues raised specifically for that purpose, including war bonds and direct taxes levied for war. As noted by Boston University political scientist Rosella Cappella-Zielinski, “Taxation as a percent of war finance was significant during the World Wars, meeting 30 percent of the cost of World War I and almost 50 percent of the cost of World War II, and peaked as a method of war finance during the Korean War, which was fully financed by taxes. Starting with the Civil War and ending with the Korean War, the government made a systematic effort to pay for its wars via direct taxation (2018, p. 3).”

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With the post-9/11 wars, however, the U.S. Congress has not specifically solicited funds for war, and therefore war spending has come from general federal government revenues. Rather than raising taxes or shifting funds from other parts of the federal budget, the Bush administration *cut* taxes while increasing war spending, moving the nation out of budgetary surplus and into deficit spending, which in turn increased the national debt and the interest that must be paid on that debt. Since September 2001, U.S.-led wars in Afghanistan and Iraq, and later Syria, Yemen, Pakistan, and other areas related to the Global War on Terror, have been funded entirely through borrowing – both from domestic sources as well as foreign. About 40 percent of the post-9/11 wars have been financed by foreign borrowing.<sup>2</sup>

The \$2 trillion figure this paper uses to calculate interest payments is drawn from data from the Congressional Research Service (CRS 2019) and Crawford (2019) and is specifically the amount of Overseas Contingency Operations (OCO) and other emergency supplemental funding since September 2001. The CRS writes, “Since the terrorist attacks of September 11, 2001, Congress has appropriated \$2 trillion in discretionary budget authority designated as *emergency requirements* or for *Overseas Contingency Operations/Global War on Terrorism* (OCO/GWOT) in support of the broad U.S. government response to the 9/11 attacks and for other related international affairs activities. This figure amounts to 9.5% of total discretionary spending during this period.”<sup>3</sup>

This paper assesses the cost of the debt and interest payments attributable to the post-9/11 wars. It updates estimates made by Edwards (2011) on this topic, and supplements more general discussions of the costs of rising national debt and interest payments, such as those presented by the Congressional Budget Office (CBO 2019), the Office of Management and Budget (OMB 2019), and scholars including William Gale from the Brookings Institution (Gale 2019). While these general discussions are important in guiding macroeconomic policy, the focus of this paper is on war-related spending. Assessing the interest costs attributable to war borrowing enables readers and taxpayers to understand the full implications of federal spending on the post-9/11 wars, and makes explicit the tradeoffs that the U.S. makes in not only paying for war, but also in paying for interest on war debt, both of which constrain opportunities to make more meaningful and productive investments in the economy.

### **Estimating Interest Payments on War-Related Debt**

Interest payments on the post-9/11 wars are calculated here by assuming that these wars were entirely funded through public debt. Following the practice of the Costs of War’s previous estimate, made by Ryan Edwards (2011), this calculation uses the interest rate on the 10-year treasury note as the interest rate applied to the debt held each year.

The calculation uses the annual cost of the wars since September 2001, starting with \$16 billion in 2001, rising to over \$200 billion in 2008, and down to about \$75 billion by 2019, for a cumulative total of about \$2 trillion from 2001 through 2019.<sup>4</sup> (See Table 1 for a yearly estimate of this spending.)

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<sup>2</sup> See Table 6. Calculated based on values provided by the St Louis Federal Reserve Bank for “Federal Debt Held by Foreign and International Investors” and “Federal Debt Held by the Public”:

<https://fred.stlouisfed.org/series/FDHFIFIN>; <https://fred.stlouisfed.org/series/FYGFDPUN>

<sup>3</sup> CRS 2019, p. 1, italics original

<sup>4</sup> The \$2 trillion – plus figure is the sum of Overseas Contingency Operations funding through both the Department of Defense and the Department of State. It does not include additions to the base budget of the DoD that are attributable to war, or the cost of veterans’ care, homeland security, or other war-related expenses. The total rises to \$5.4 trillion when these, plus interest, are included, and \$6.4 trillion when we include the future cost of care for veterans. See Crawford (2019) for a full accounting of the costs of the post-9/11 wars.

For each year, this paper calculates the amount of interest that would accrue from that year up until 2020 (or some future year), at the interest rate of the 10-year treasury note in that year, using annual compounding. The interest rate calculation for each year is then:

$$=P_n*(1+i_n)^{t_{m-n}}$$

Where  $P_n$  is the principle, or amount of war spending, in year  $n$ ,  $i_n$  is the interest rate in year  $n$ , and  $t_{m-n}$  is the number of years between the given year  $n$  and some future year for which we are interested in calculating cumulative interest payments,  $m$ .

Calculating the above yields the cumulative debt plus interest payments attributable to each year of war spending. Subtracting the amount of principal,  $P_n$ , then yields an estimate of the interest alone.

As an example, in year 2001, war spending was \$16 billion and the interest rate on the 10-year treasury note was 5.02%. To calculate the value of interest payments made from 2001 to 2020 on those \$16 billion, we have:

$$\text{Debt plus interest} = 16*(1+0.0502)^{19} = 40.58$$

Then, subtracting principal, we can calculate interest only = 40.58 - 16 = 24.58

This amount, \$24.58 billion, then represents the cumulative interest accrued between 2001 and 2020 for the initial \$16 billion of spending in year 2001.

Doing this each year from 2001 to 2020, calculations of yearly debt (war spending) and interest, and cumulative debt (war spending) are as follows:

Table 1

Annual War Spending and Cumulative Debt and Interest by 2020				
Fiscal Year	Annual War Spending (OCO plus Emergency) in billions	Cumulative War Spending (cumulative war-related debt) in billions	10 year Treasury note	Cumulative Interest in billions by 2020
2001	\$ 16.00	\$ 16.00	0.0502	\$ 24.58
2002	\$ 21.15	\$ 37.15	0.0461	\$ 51.03
2003	\$ 76.67	\$ 113.82	0.0401	\$ 123.94
2004	\$ 92.11	\$ 205.93	0.0427	\$ 211.66
2005	\$ 106.75	\$ 312.68	0.0429	\$ 305.36
2006	\$ 122.60	\$ 435.28	0.048	\$ 419.11
2007	\$ 169.10	\$ 604.37	0.0463	\$ 554.57
2008	\$ 202.12	\$ 806.49	0.0366	\$ 663.58
2009	\$ 160.39	\$ 966.88	0.0326	\$ 731.45
2010	\$ 178.54	\$ 1,145.41	0.0322	\$ 798.02
2011	\$ 171.08	\$ 1,316.49	0.0278	\$ 845.91
2012	\$ 132.65	\$ 1,449.14	0.018	\$ 866.26
2013	\$ 99.46	\$ 1,548.60	0.0235	\$ 883.82

<b>2014</b>	\$ 101.92	\$ 1,650.52	0.0254	\$ 900.37
<b>2015</b>	\$ 80.85	\$ 1,731.37	0.0214	\$ 909.40
<b>2016</b>	\$ 66.79	\$ 1,798.16	0.0184	\$ 914.45
<b>2017</b>	\$ 79.30	\$ 1,877.46	0.0233	\$ 920.13
<b>2018</b>	\$ 70.06	\$ 1,947.52	0.0291	\$ 924.26
<b>2019</b>	\$ 74.57	\$ 2,022.08	0.0224	\$ 925.93

Table 1 shows that the cumulative total spending of \$2.02 trillion over the period 2001-2019 has resulted in cumulative interest accruals of \$925 billion through 2020.

It is important to keep in mind here that the values in the right-most column are NOT the values of the interest payments that the U.S. made in each of those years, but rather the amount of interest that has accrued by 2020 based on that year's amount of war spending. One way to understand these numbers is as the true cost of the debt the U.S. incurred each year due to post-9/11 war spending. In other words, it is how much money the U.S. would have saved over time -- or would have been able to spend in other ways -- from the time the debt was incurred through Fiscal Year 2020. The \$16 billion in spending in 2001 cost the country an additional \$25 billion in cumulative interest payments by FY2020. The cumulative total of just over \$2 trillion in spending through borrowed funds (debt) incurred since 2001 cost \$925 billion in interest payments. And as long as the U.S. continues to engage in deficit spending, the national debt will continue to rise, with interest on that debt continuing to grow.

### Future payments

Even if the United States were to stop incurring any new war-related expenses as of today, the U.S. would continue to make interest payments on war debt well into the future. The \$2.02 trillion in cumulative war spending since September 2001 have already cost the U.S. nearly an additional \$1 trillion in cumulative interest payments by 2020. With no additional war spending, and no additional debt incurred, interest payments will continue to be made on the \$2 trillion in debt incurred from 2001-2019. By 2030, these war debts will have cost us over \$2.14 trillion in interest (in addition to the \$2 trillion of principal that will still need to be repaid), and by 2050 the interest payments from 2001 to 2050 will total about \$6.5 trillion, all for the same \$2 trillion in war debt already incurred. See Tables 2 and 3, below, for these calculations.

Table 2

<b>Annual War Spending and Cumulative Debt and Interest by 2030</b>				
	Annual War Spending (OCO plus Emergency) <i>in billions</i>	Cumulative War Spending (cumulative war-related debt) <i>in billions</i>	10 year Treasury note	Cumulative Interest <i>in billions</i> by 2030
<b>2001</b>	\$ 16.00	\$ 16.00	0.0502	\$ 50.22
<b>2002</b>	\$ 21.15	\$ 37.15	0.0461	\$ 103.77
<b>2003</b>	\$ 76.67	\$ 113.82	0.0401	\$ 248.74
<b>2004</b>	\$ 92.11	\$ 205.93	0.0427	\$ 429.82

<b>2005</b>	\$ 106.75	\$ 312.68	0.0429	\$ 628.16
<b>2006</b>	\$ 122.60	\$ 435.28	0.048	\$ 883.27
<b>2007</b>	\$ 169.10	\$ 604.37	0.0463	\$1,193.05
<b>2008</b>	\$ 202.12	\$ 806.49	0.0366	\$1,436.64
<b>2009</b>	\$ 160.39	\$ 966.88	0.0326	\$1,590.85
<b>2010</b>	\$ 178.54	\$ 1,145.41	0.0322	\$1,748.82
<b>2011</b>	\$ 171.08	\$ 1,316.49	0.0278	\$1,865.79
<b>2012</b>	\$ 132.65	\$ 1,449.14	0.018	\$1,916.02
<b>2013</b>	\$ 99.46	\$ 1,548.60	0.0235	\$1,964.18
<b>2014</b>	\$ 101.92	\$ 1,650.52	0.0254	\$2,014.51
<b>2015</b>	\$ 80.85	\$ 1,731.37	0.0214	\$2,044.73
<b>2016</b>	\$ 66.79	\$ 1,798.16	0.0184	\$2,064.15
<b>2017</b>	\$ 79.30	\$ 1,877.46	0.0233	\$2,091.84
<b>2018</b>	\$ 70.06	\$ 1,947.52	0.0291	\$2,120.62
<b>2019</b>	\$ 74.57	\$ 2,022.08	0.0224	\$2,141.20

Table 3

<b>Annual War Spending and Cumulative Debt and Interest by 2050</b>				
	Annual War Spending (OCO plus Emergency) <i>in billions</i>	Cumulative War Spending (cumulative war-related debt) <i>in billions</i>	10 year Treasury note	Cumulative Interest <i>in billions</i> by 2050
<b>2001</b>	\$ 16.00	\$ 16.00	0.0502	\$ 160.38
<b>2002</b>	\$ 21.15	\$ 37.15	0.0461	\$ 323.20
<b>2003</b>	\$ 76.67	\$ 113.82	0.0401	\$ 733.11
<b>2004</b>	\$ 92.11	\$ 205.93	0.0427	\$1,271.45
<b>2005</b>	\$ 106.75	\$ 312.68	0.0429	\$1,871.48
<b>2006</b>	\$ 122.60	\$ 435.28	0.048	\$2,713.55
<b>2007</b>	\$ 169.10	\$ 604.37	0.0463	\$3,728.45
<b>2008</b>	\$ 202.12	\$ 806.49	0.0366	\$4,441.02
<b>2009</b>	\$ 160.39	\$ 966.88	0.0326	\$4,878.21
<b>2010</b>	\$ 178.54	\$ 1,145.41	0.0322	\$5,333.95
<b>2011</b>	\$ 171.08	\$ 1,316.49	0.0278	\$5,661.33
<b>2012</b>	\$ 132.65	\$ 1,449.14	0.018	\$5,789.97
<b>2013</b>	\$ 99.46	\$ 1,548.60	0.0235	\$5,925.42
<b>2014</b>	\$ 101.92	\$ 1,650.52	0.0254	\$6,074.93
<b>2015</b>	\$ 80.85	\$ 1,731.37	0.0214	\$6,163.72
<b>2016</b>	\$ 66.79	\$ 1,798.16	0.0184	\$6,221.08
<b>2017</b>	\$ 79.30	\$ 1,877.46	0.0233	\$6,311.36
<b>2018</b>	\$ 70.06	\$ 1,947.52	0.0291	\$6,416.73
<b>2019</b>	\$ 74.57	\$ 2,022.08	0.0224	\$6,490.34

It is important to reiterate, once again, that these numbers reflect only the costs of the interest payments that the United States has made and will continue to make over time, based on the already-incurred costs of \$2 trillion and not based on any additional new spending. However, war spending is not ceasing immediately, and thus as the U.S. federal government continues to obligate funds for war, both the debt and the accompanying interest payments will continue to rise beyond what is presented here. Much like with a credit card, interest payments must be made as long as there is an outstanding balance, and as new purchases are made with the credit card, the outstanding balance and interest payments continue to grow. Linda Bilmes has in fact referred to the post-9/11 wars as “credit card wars.”<sup>5</sup>

### **How big is U.S. public debt?**

The national debt has been growing over the past few decades, as federal spending has outpaced federal revenues, what is called “deficit spending.” While there were a few years of budgetary surplus (revenues greater than expenses) in the Bill Clinton administration, most of the past 40 years have seen large increases in the debt due to reduced revenues from tax cuts combined with increased military spending during the administrations of Ronald Reagan, George W. Bush, and Donald Trump, as well as the stimulus spending for the American Recovery and Reinvestment Act of 2009 during the Obama administration.

There is debate over whether the size of the national debt matters. On the one hand, if debt is used for productive purposes that contribute to increased growth and prosperity in the long run, debt can be a useful investment. On the other hand, rising national debt might make investors worry about repayment, which will push up interest rates (since investors require higher rates for riskier investments). Rising interest rates make home ownership, college loans, and other personal expenses more costly at the same time that higher borrowing costs might reduce business investments and thus slow economic growth. Further, as the debt increases, interest payments on that debt increase as well. As war spending contributes to growing national debt, so it contributes to increased interest payments and rising interest rates, which can both reduce economic growth and “crowd out” other types of federal spending.

In addition to assessing the level of the national debt (as in Table 5), economists evaluate the ratio of the debt to GDP (as in Table 4). GDP is a measure of national income, and thus the debt/GDP ratio is a measure of the size of the debt in relation to a country’s ability to repay it, much like an individual’s income is used as a measure of their ability to repay a personal loan.

Public debt as a percentage of GDP was calculated by and presented in the White House’s Office of Management and Budget (OMB) “Analytical Perspectives for 2020,” in which they find that this ratio increased from 33.6 percent of GDP in 2000 to over 80 percent by 2020. Interest payments of \$532.3 billion in 2020 account for 2.4% of GDP.

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[https://watson.brown.edu/costsofwar/files/cow/imce/papers/2017/Linda%20J%20Bilmes%20\\_Credit%20Card%20Wars%20FINAL.pdf](https://watson.brown.edu/costsofwar/files/cow/imce/papers/2017/Linda%20J%20Bilmes%20_Credit%20Card%20Wars%20FINAL.pdf)

Table 4

Debt held by public (in billions of dollars)					
	Nominal	2018 dollars		Public Debt/GDP	Interest on Public Debt
<b>2000</b>	3,409.8	4,821.9		33.6%	232.8
<b>2005</b>	4,592.2	5,811.6		35.6%	191.4
<b>2010</b>	9,018.9	10,33.6		60.9%	228.2
<b>2011</b>	10,128.2	11,383.5		65.9%	266.0
<b>2012</b>	11,281.1	12,443.6		70.4%	232.1
<b>2013</b>	11,982.7	12,978.8		72.6%	259.0
<b>2014</b>	12,779.9	13,579.2		74.1%	271.4
<b>2015</b>	13,116.7	13,770.5		72.9%	260.6
<b>2016</b>	14,167.6	14,737.3		76.7%	283.8
<b>2017</b>	14,665.4	14,984.0		76.5%	309.9
<b>2018</b>	15,749.6	15,749.6		77.8%	371.4
<b>2019</b>	16,918.6	16,583.3		79.5%	444.2
<b>2020</b>	18,086.9	17,374.2		80.7%	532.3

In the "Fiscal Year 2020 Budget of the U.S. Government," (2019) the White House estimates that over the next decade, public debt and net interest payments will continue to increase, with annual net interest payments surpassing \$900 billion by 2029, and public debt nearing \$25 trillion. Net interest, as seen in Table 5, more than doubles from 2018 to 2023, and nearly triples from 2018 to 2029, thus growing much faster than the rate at which the debt itself is growing.<sup>6</sup>

Table 5

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>Debt Held by the Public [1]</b>	15,750	16,919	18,087	19,222	20,334	21,304	22,064	22,756	23,390	23,957	24,519	24,770
<b>Net Interest [2]</b>	325	394	482	548	611	666	709	749	789	828	868	903

Sources: [1] Table S–1. Budget Totals; <https://www.whitehouse.gov/wp-content/uploads/2019/03/budget-fy2020.pdf>; [2] Table S–3. Baseline by Category

<sup>6</sup> Note: Net interest calculations are slightly different in Tables 4 and 5, since the OMB Analytical Perspectives and Whitehouse budget document estimate interest for 2019, 2020, and beyond, based on assumptions of GDP, interest rates, and other factors. Due to slight differences in the assumptions underlying the estimates for 2019 and later, the net interest payments in the tables presented here are slightly different.



The national debt is not only due to war spending, of course, but war spending is certainly a major contributor to the debt. The more than \$2 trillion of spending on Overseas Contingency Operations since 2001 has raised our national debt by that same amount.

As deficit spending continues over the next decade, war will continue to be financed with public debt. The White House projects that from FY2019 to FY2029, debt held by the public will rise from just under \$17 trillion to nearly \$25 trillion. This represents 79.5% of GDP in FY2019, rising to a high of 82.1% in FY2022 and falling back to 71.3% of GDP by FY2029.<sup>7</sup> Projections of public debt are even higher in a recent Congressional Budget Office (CBO) report. In its August 2019 update to the Budget and Economic Outlook, the CBO projected that the economy would continue to remain in deficit through at least the year 2029. The 10-year deficit, from 2019 to 2029, is projected to grow to over \$12 trillion, with net interest payments accounting for a gradually larger share of that deficit. Even while revenues are expected to grow over the period, outlays are expected to grow even faster. The result, of course, is that the national debt continues to grow. Debt held by the public is expected to rise from 79 percent of GDP in 2019 to 95 percent in 2029, the highest level since the World War II era.<sup>8</sup>

William Gale of the Brookings Institution estimates that by 2049, the debt/GDP ratio may reach 169 percent, and that limiting the ratio to 100 percent would require a tax increase or spending decrease of 2.3 percent of GDP per year from 2021 through 2049 (Gale 2019). The Committee for a Responsible Federal Budget finds that interest payments on the national debt are the fastest growing part of the federal budget and will be the biggest expense by 2050, eclipsing Social Security and Medicare (CRFB 2019).

### **Who holds the debt?**

In addition to assessing the size of the national debt, it is important to understand who holds the debt. The figures reported above are for "public debt," not for all national debt in the U.S. National debt can either be held by the public (individuals and companies within the U.S. or outside of the U.S.), or can be intragovernmental debt, in which some agencies borrow or lend among themselves. Debt held in government accounts includes various trust funds, including Social Security, the military retirement fund, the Highway trust fund, and many others.

As a share of GDP, total national debt in the U.S. now exceeds 100 percent. However, about a quarter of this is intragovernmental debt. Public debt, which is held both within the U.S. and abroad in the form of securities, pension funds, mutual funds, and other public holdings, is equivalent to about 80 percent of GDP as of 2020, as shown in Table 5.

As of July 2019, foreigners held about \$6.7 trillion of the U.S. national debt. This represents nearly 40 percent of public debt in the U.S. (\$16.8 trillion), or a bit under 30 percent of total national debt including interagency debt (\$22.7 trillion). (See Table 6 and Figure 1)

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<sup>7</sup> Table S-1. Budget Totals; <https://www.whitehouse.gov/wp-content/uploads/2019/03/budget-fy2020.pdf>

<sup>8</sup> CBO, Aug 2019, "An Update to the Budget and Economic Outlook: 2019 to 2029," retrieved from [https://www.cbo.gov/system/files/2019-08/55551-CBO-outlook-update\\_0.pdf](https://www.cbo.gov/system/files/2019-08/55551-CBO-outlook-update_0.pdf)

Table 6

	in trillions, as of 7/1/2019	Foreign %	Source
A. Federal Debt Held by Foreign and International Investors	6.776		<a href="https://fred.stlouisfed.org/series/FDHBFIN">https://fred.stlouisfed.org/series/FDHBFIN</a>
B. Federal Debt Held by the Public	16.825	40% (A/B)	<a href="https://fred.stlouisfed.org/series/FYGDPUN">https://fred.stlouisfed.org/series/FYGDPUN</a>
C. Federal Debt Held by Agencies and Trusts	5.893		<a href="https://fred.stlouisfed.org/series/FDHBATN">https://fred.stlouisfed.org/series/FDHBATN</a>
D. Public Debt Plus Agencies and Trusts (B + C)	22.718	30% (A/D)	

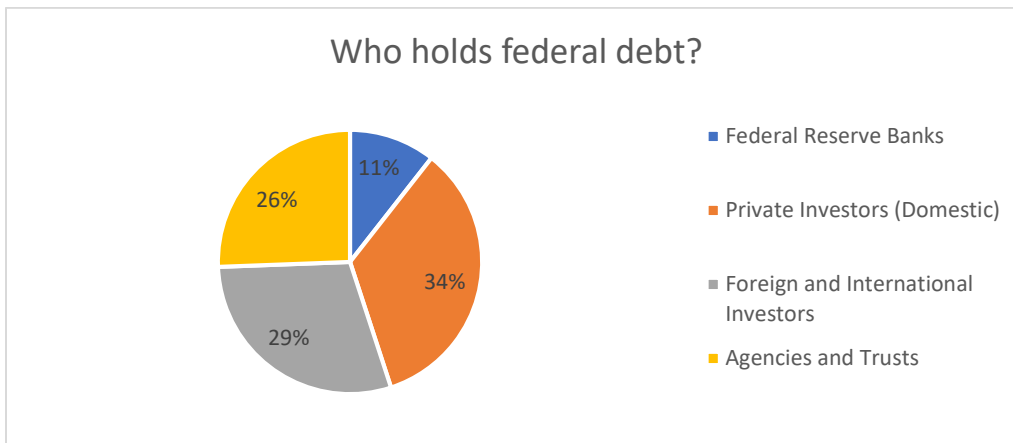


Figure 1. Source: Data for Q3 2019, from FRED (St. Louis Federal Reserve).

Currently, about one third of foreign-held U.S. treasury securities are held by Japan and China, with Japan holding about 17 percent and China 16 percent as of August 2019. These two leading foreign holders are followed by the U.K. and Brazil (5% each), Ireland and Luxembourg (4% each), and then the Cayman Islands, Switzerland, Hong Kong, and Belgium (3% each).<sup>9</sup> Foreign holdings of national debt represent a leakage out of the domestic economy, as interest payments on the national debt are paid by taxpayers. When public debt is held domestically, interest payments are essentially a domestic transfer from all taxpayers to individuals who hold U.S. treasuries. But when those treasuries are held by foreign

<sup>9</sup> Source: Department of the Treasury/Federal Reserve Board, <https://ticdata.treasury.gov/Publish/mfh.txt>, accessed 16-Oct-19. Note: The data in this table are collected primarily from U.S.-based custodians and broker-dealers. Since U.S. securities held in overseas custody accounts may not be attributed to the actual owners, the data may not provide a precise accounting of individual country ownership of Treasury securities (see TIC FAQ #7 at: <http://www.treasury.gov/resource-center/data-chart-center/tic/Pages/ticfaq1.aspx>).

holders, the transfer is from U.S. taxpayers to foreign countries. Currently, 40% of U.S. public debt is held by individuals and institutions outside of the U.S.

## Discussion

Part of the problem with funding war through debt is that American voters and taxpayers don't feel the cost of war. Unless they have a servicemember in their family or among their close friends or relations, in which case they might experience the human toll of war, war poses little burden and is in some ways invisible. Its costs are hidden because we are not, as citizens and taxpayers, being asked to shoulder the financial burden of war in any visible or noticeable way. We are not patriotically buying war bonds (as in World War II) or having war taxes levied upon us that make the costs of war feel immediate and tangible. The costs are borne in a less noticeable and more general way as we pay our regular (peacetime) taxes, and will be borne in greater measure by future generations who will have to face increased taxes or reduced public spending in order to pay the cost of rising public debt and interest. A 2016 quote from an article in *The Atlantic* neatly frames the issue: "As Alan Viard, an economist who served in the Bush administration, once put it 'When you borrow to pay for the war, you feel it less. But if you do borrow, it may be future needs you're sacrificing. There's always a sacrifice.'"

The real costs of war are the human lives lost and the physical and mental traumas experienced by soldiers, their families, and the combatants and civilians in war-torn areas. The Costs of War project estimates that globally, direct war deaths in the post-9/11 wars (primarily Afghanistan and Iraq, as well as Syria, Yemen, Pakistan, and others) total approximately 800,000 lives lost. For the U.S., estimates of the human toll include over 7,000 soldiers and nearly 8,000 contractors and civilians killed, in addition to the physical and mental disabilities not included in the number of casualties (Crawford and Lutz, 2019).

From a financial perspective, which is what we focus on here, the costs include both the spending that has already taken place (\$2 trillion and counting) as well as the rising costs of interest payments (at least \$925 billion as of 2019). But perhaps more importantly, the costs include the "opportunity costs" – the lost opportunities to spend these funds on other, perhaps more important, areas. Not only has the U.S. spent nearly \$3 trillion (including interest) on war that this country could instead have spent on energy, infrastructure, education, and so forth, but Americans are going to continue to spend billions of taxpayer dollars on interest payments alone, rising to trillions of dollars over the decade. By 2030, Americans will have spent over \$2 trillion *on interest alone*, not for anything productive or even any military action that could ostensibly make us safer and more secure. The costs to the country are thus more than simply the funds used on war versus on peaceful activities, but they are even more importantly the funds wasted on interest payments rather than on productive investments, useful programs, or lower taxes. Rather than spending 2.4 percent of our GDP on interest payments, how else could we productively be using those funds? As Linda Bilmes of the Harvard Kennedy School wrote in 2013, "The large sums borrowed to finance operations in Iraq and Afghanistan will also impose substantial long-term debt servicing costs. As a consequence of these wartime spending choices, the United States will face constraints in funding investments in personnel and diplomacy, research and development and new military initiatives. The legacy of decisions taken during the Iraq and Afghanistan wars will dominate future federal budgets for decades to come."

While the existence or growth of debt may or may not be problematic in and of itself, it is nonetheless useful to question whether debt is being wisely used. Policymakers should assess what the debt is being used for, whether it is productive, whether it will repay itself, or at the very least whether it will improve

quality of life for both current and future generations. In other words, what is the opportunity cost? If we spent less on wars, thus reducing future indebtedness and lowering interest payments, funds could be used for other federal programs such as infrastructure repair, energy security, education, or healthcare.

So the question becomes, is taking on debt to fund war really the best use of current and future tax revenues? Or might the lives and well-being of Americans be better served by cutting war spending in order to reduce indebtedness and interest payments, thus allowing for a wider range of future possibilities for lower taxes or more useful public spending?

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