

How Do War Financing Strategies Lead to Inequality? A Brief History from the War of 1812 through the Post-9/11 Wars

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Summary

This report provides estimates for how the United States government has paid for its wars, from the War of 1812 through the current post-9/11 “Global War on Terror” (Iraq, Afghanistan, and Other Operations), and addresses the relationship between war finance and inequality.

The findings suggest that government borrowing to pay for wars leads to greater social inequality in the aftermath of the war. This happens when wars are paid for via general public debt versus a war bond campaign, particularly when combined with indirect taxes (such as sales, value-added, excise, and customs taxes) or a tax cut. Conversely, wars financed via bond campaigns targeted to low- and middle-income populations and direct taxes (such as income, property, and corporate taxes) result in greater social equality.

Applying these patterns to today’s war suggests that the current combination of domestic borrowing to pay for war, accompanied by continuous tax cuts, have led and will continue to lead to rising social inequality in the US.

This report estimates only how the US government met the costs of military operations. It does not include other war-related costs such as veteran’s benefits or the interest paid on money borrowed to finance wars.² This report presents costs of war figures both in “current year dollars,” that is, in prices in effect at the time of each war, and in inflation adjusted “constant dollars” of FY2011 prices.³

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² For a discussion of the difficulties of tabulating costs of war and comparing costs across time see Daggett, Stephen. (2010). *Costs of Major U.S. Wars* (CRS Report No. RS22926). Retrieved from <https://fas.org/sgp/crs/natsec/RS22926.pdf> and Stiglitz, Joseph E. and Bilmes, Linda J. (2012) Estimating the Costs of War: Methodological Issues, with Applications to Iraq and Afghanistan. *Oxford Handbook of the Economics of Peace and Conflict*. Oxford: Oxford University Press.

³ All costs reported herein are from Daggett (2010). Daggett’s report is based on FY2011 prices, so I adopt the same costs throughout this report.

Introduction

Policymakers are concerned about growing US debt, which long-term budget projections suggest will continue to rise. Stagnant tax revenue,⁴ growing entitlement spending,⁵ and unfavorable demographic shifts⁶ will result in continued deficit spending.

An additional contributor to deficit spending is what economist Linda Bilmes has termed the “credit card wars,”⁷ which is the use of deficit financing to pay for the Global War on Terror (Iran, Afghanistan, and Other Operations). While deficit hawks object, others see deficit spending as an economically advantageous war finance strategy.⁸ In addition to allowing the federal government to raise funds quickly to confront an adversary, it provides a series of benefits for the administration in power. First, the US, with its access to inexpensive credit, can finance its wars without overburdening its citizens with a sharp tax increase.⁹ In turn, an administration using deficit financing can avoid certain negative externalities regarding labor supply, consumption, output, and capital. Second, it permits an administration to increase both military and domestic spending in the face of budget constraints. Third, it allows Congress and the President to hold onto their offices via the management of public opinion, as citizens are not asked to make obvious immediate financial sacrifices to pay for the war effort.

Yet the independent observer must ask: is borrowing the best way to finance a war? What does a state sacrifice by wartime deficit financing, especially, as in today’s circumstances, when it is accompanied by a tax cut? Beyond adding to the US debt, with related implications such as long-term sustainability of budgetary projections and economic growth,¹⁰ to what degree does the method by which states pay for war contribute to levels of societal inequality?

⁴ Congressional Budget Office. (2018). *The Budget and Economic Outlook: 2018 to 2028*. Washington, DC: Government Printing Office. Retrieved from

<https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/53651-outlook.pdf>

⁵ Congressional Budget Office. (2018).

<https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/53651-outlook.pdf>

⁶ Selden, Zachary. (2018). Demography, defense budgets, and the transatlantic alliance. *Journal of Transatlantic Studies*, 16(1), 59-80

⁷ Bilmes, Linda J. (2017). *The Credit Card Wars: Post 9/11 War Funding Policy in Historical Perspective*. Retrieved from

<http://watson.brown.edu/costsofwar/files/cow/imce/papers/2017/Linda%20J%20Bilmes%20Credit%20Card%20Wars%20FINAL.pdf>

⁸ Shea, Patrick E. (2014). Financing Victory: Sovereign Credit, Democracy, and War. *Journal of Conflict Resolution*, 58(5), 771-795.

⁹ Barro, Robert J. (1987). Government spending, interest rates, prices and budget deficits in the United Kingdom, 1701-1918. *Journal of Monetary Economics*, 20(2), 195-220.; Barro, Robert J. (1989). *The Neoclassical Approach to Fiscal Policy. Modern Business Cycle Theory*. Cambridge: Harvard University Press.

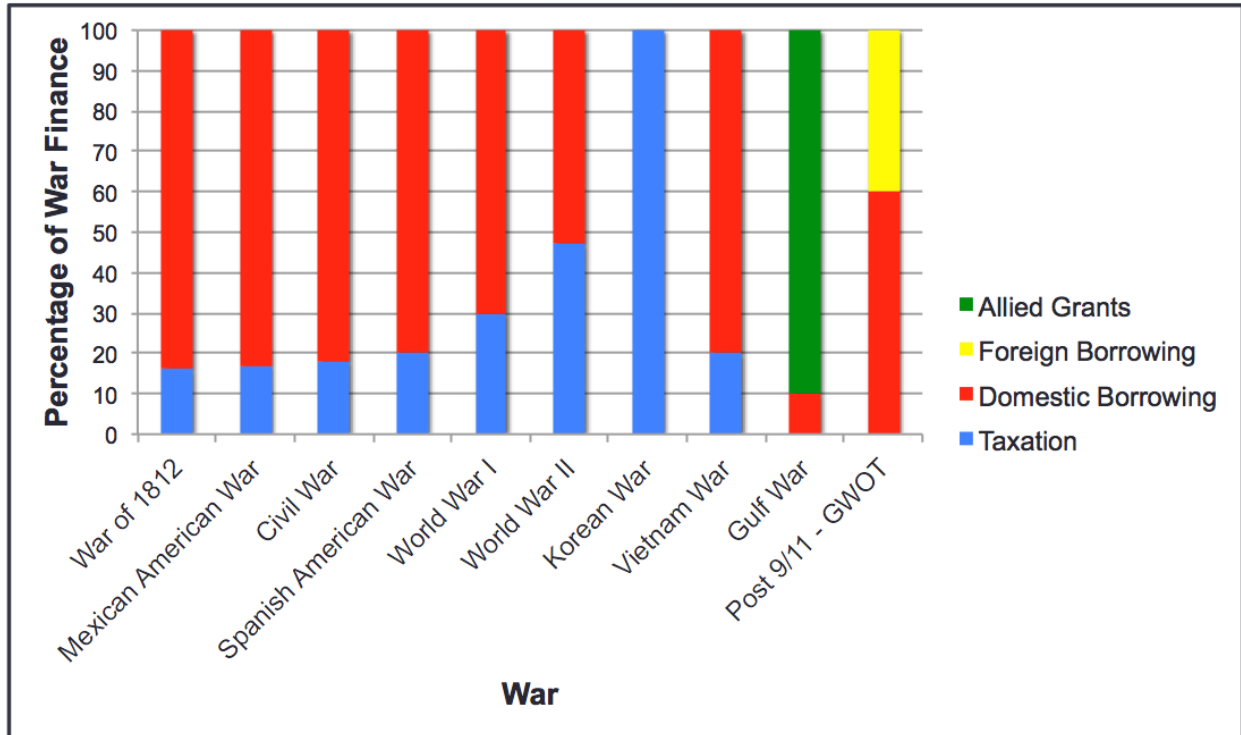
¹⁰ Driessen, Grant A. (2017). *Deficits and Debt: Economic Effects and Other Issues*. (CRS Report No. R44383).

Retrieved from <https://fas.org/sgp/crs/misc/R44383.pdf>; Bilmes, Linda J. (2013). *The Financial Legacy of Iraq and Afghanistan: How Wartime Spending Decisions Will Constrain Future National Security Budgets* [Working paper].

Retrieved from <https://www.hks.harvard.edu/publications/financial-legacy-iraq-and-afghanistan-how-wartime-spending-decisions-will-constrain>.

To help inform these policy debates, this report analyzes historical trends in war finance. It addresses the various ways wars can be financed and the relationship between war financing and the distribution of wealth. It then assesses the ways in which the US paid for all major US wars, from the War of 1812 through Global War on Terror (Iraq, Afghanistan, and Other Operations) and provides assessments regarding the effect of war finance on inequality in the US.

Figure 1. Variation in United States War Financing Strategies¹¹



This report shows, as summarized in Figure 1, that domestic borrowing has historically been the primary means by which the US government has financed its wars. From the war of 1812 through World War I, war debt has been dominated by loans purchased from wealthy elites and/or banking syndicates. 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.

In comparison, both the Vietnam War and the post-9/11 wars began with a tax cut. The role of external finance, allied grants and foreign borrowing has become increasingly prominent.

¹¹ Adapted from Cappella Zielinski, Rosella. (2016). *How States Pay for Wars*. Ithaca, Cornell University Press, 4.

Today, top holders of US debt are US citizens who can afford to buy it, including via their pension and mutual funds. Loans have also been taken from the Federal Reserve and other US governmental agencies. About 30 percent of the post-9/11 operations are financed by foreign borrowing.

This report compares US mechanisms of financing wars over a 200-year period, but it is important to acknowledge that such a comparison is not straightforward. One problem is that the means by which the federal government may pay for war varies from one time period to another. Taxation practices have varied quite substantially. Until World War I, for instance, there was no permanent income tax. Hence, in wars prior to World War I, the US government's ability to extract tax revenue was limited to customs and excise taxes. When a temporary income tax was implemented, bureaucratic institutions to extract said revenue had to be established, delaying revenue collection. Another variation across time is access to external deficit financing—until the 1960s, foreign holdings of US wartime debt were limited (with the exception of the Revolutionary War).¹² Perhaps the most significant challenge in comparing different time periods is generating a basic calculation of the costs of different wars, which is complicated, as many experts have noted, by decisions about what to include beyond the costs of maintaining military forces.

This report also provides initial assessments regarding the relationship between war finance and inequality. Again, comparisons of the causes of inequality over a 200-year period are problematic given that a multitude of factors contribute to inequality,¹³ including structural variables,¹⁴ and separating the effects of each of them is difficult.¹⁵

Despite the challenging nature of these comparisons, this report is based on the premise that such comparisons are nonetheless worthwhile to make, because they can reveal much about how the manner of war finance effects the distribution of wealth in the US.

Definitions: How Can Wars be Financed?

War finance is the means by which a state meets the costs of executing the war effort. There are various mechanisms of war finance. Often the options by which a state can pay for war are reduced to a simple distinction: a state can raise taxes or float debt, or some

¹² U.S. Department of the Treasury (2018). Securities (B): Portfolio Holdings of U.S. and Foreign Securities [Data set]. Retrieved from <https://www.treasury.gov/resource-center/data-chart-center/tic/Pages/ticsec2.aspx>. On the Revolutionary war exception, see Garber, Peter. (1991). Alexander Hamilton's Market Based Debt Reduction Plan. *National Bureau of Economic Research*. Retrieved from <http://www.nber.org/papers/w3597.pdf>

¹³ Donovan, Sarah A., Marc Labonte & Joseph Dalaker. (2016). *The U.S. income distribution: Trends and Issues* (CRS Report No. R44705). Retrieved from <https://fas.org/sgp/crs/misc/R44705.pdf>. See also Piketty, Thomas. (2014) *Capital in the Twenty-First Century*. Cambridge: Harvard University Press.

¹⁴ Keister, Lisa. A. (2000) *Wealth in America: Trends in Wealth Inequality*. Cambridge: Cambridge University Press

¹⁵ Military spending, independent of how it has been financed, has been found to promote income inequality due to pay differentials in the civilian versus military related work and fewer opportunities for women and minorities. See Abell, John D. (1994). Military Spending and Income Inequality. *Journal of Peace Research*, 31(1), 35-43.

combination thereof. Yet such a simplistic dichotomy obscures the varying forms of taxes and debt as well as overlooks other forms of war finance. These variances are sometimes quite significant, as for example in the difference between debt via a bond campaign versus general public debt. In ignoring the various forms of taxation, domestic debt, and other forms such as printing and external debt, it is difficult to assess the effect of war finance on inequality.

Taxation refers to the sum of revenue raised from the existing tax structure and supplementary war taxes (new taxes, including surtaxes, or increased rates on existing taxes), which are raised specifically to pay for the war effort. There are various forms of taxes. Direct taxes are those that are paid to the state directly, and include income, property, corporate and excess-profit taxes. Citizens are unable to “opt out” of direct taxes or transfer the costs to others. Indirect taxes are those collected on transactions such as sales, value-added, excise, and customs taxes. Citizens can attempt to “opt out” of these taxes by avoiding the contexts in which they are collected. Manufacturers can pass the burden of the tax onto the consumer in the form of higher prices.

Domestic debt refers to money lent to the government from its citizens or institutions, with the explicit understanding that it will be paid back over time. Domestic debt is voluntary, as citizens choose whether or not to purchase it. There are various forms of domestic debt. It may be in the form of a war bond campaign in which the government aggressively markets its debt to the population.¹⁶ Domestic debt may also reflect general government debt issue, which is not necessarily marketed to the public but can be purchased by individuals, commercial banks, or other financial institutions.

Another option is printing more money, which, unlike taxation and domestic debt, does not use money already circulating within the state.¹⁷

Finally, external debt as a method of fundraising refers to resources procured from abroad that can be used to achieve domestic objectives. It is a broad category that includes securities floated on foreign markets and interstate or sovereign-to-sovereign loans or grants.

War Finance and the Distribution of Wealth

This section summarizes and explains the relationship between war finance and wealth distribution. A retrospective examination of how wars have been paid for throughout US history reveals that each mechanism of war finance has implications for the redistribution of wealth in society after the war is over. Wealth redistribution, the transfer of income or wealth from some individuals in society to others, can be classified as

¹⁶ Bickley, James M. (2002). *War Bonds in the Second World War: A Model for a New War Bond?* (CRS Report No. RS21046). Retrieved from <http://www.dtic.mil/dtic/tr/fulltext/u2/a516522.pdf>.

¹⁷ Rockoff, Hugh. (2015). *War and Inflation in the United States from the Revolution to the First Iraq War*. *National Bureau of Economic Research*. Retrieved from <http://www.nber.org/papers/w21221>.

progressive or regressive. Progressive redistribution transfers wealth from individuals in higher income brackets to those in lower income brackets. This leads to greater social equality. Regressive redistribution transfers wealth from individuals in lower income brackets to those in higher income brackets. This leads to higher levels of inequality.

Direct war taxes, particularly those levied on high-income earners, promote the progressive redistribution of wealth in the aftermath of war. Direct taxation through a war tax on high-income earners promotes paying for the war outright. When the war is paid for directly by high-income earners, the cost of the war is not transferred to those unable to purchase government debt or those who would be responsible for debt servicing via future taxes.

War bonds, when targeted towards low-income individuals, promote the progressive redistribution of wealth. War bonds promote savings for low-income individuals in several ways.¹⁸ First, creating war bonds in small enough denominations to be purchased by those with low incomes outright or via installment plans makes bonds accessible to a broad range of American households.¹⁹ Second, the bonds are paid back with interest at a later date, which promotes the accumulation of wealth in low-income households. Third, war bonds provide an alternative savings avenue for those who distrust traditional banks, which is the case with many low-and middle-incomes Americans.²⁰

Additionally, both direct taxation and war bonds mitigate war inflation. Inflation promotes inequality by reducing wages and disposable incomes. As wages increase less than the price of goods consumed by wage earners, real income declines. To fight a war, especially a protracted one, the state becomes a dominant player in the market, procuring supplies and labor to confront the enemy. The inflationary effects of the state's actions are twofold. First, the state is removing goods and labor from the market, decreasing the supply accessible to the private sector. This decrease in supply creates an upward pressure on prices as the private sector competes for now scarce resources. Second, the state is increasing the money supply as it purchases inputs for the war effort. As a result, citizens have more income to spend, increasing demand for now scarce goods. This scarcity may be further aggravated during wartime if there is a significant decrease in trade or if citizens fearing inflation begin to hoard goods. As a countermeasure to these trends towards inflation, direct taxes and war bonds reduce the purchasing power of citizens, driving down demand for scarce goods and reducing price increases.

In sum, a war finance strategy that incorporates direct taxation and war bonds marketed towards low-income people will result in the progressive redistribution of wealth, lowering inequality.

¹⁸ Inequality in savings rates, which has increased in recent decades, has been found to contribute to wealth inequality. Saez, Emmanuel and Zuckman, Gabriel. (2016). Wealth and Inequality in the United States Since 1913: Evidence from Capitalized Income Tax Data. *Quarterly Journal of Economics*, 131(2), 519-578.

¹⁹ Hilt, Eric and Rahn, Wendy M. (2016). Turning citizens into investors: Promoting Savings With Liberty Bonds During World War I. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 2(6), 86-108.

²⁰ Hilt and Rahn 2016, 89 and 104.

In contrast, indirect taxes and general domestic debt promote the regressive redistribution of wealth. When states increase indirect taxes to pay for war, those consumers who are unable to opt out of purchases are forced to pay higher prices for goods whose costs have been inflated by war. This, in turn, causes them to relinquish a higher percentage of their disposable incomes. Hence, indirect taxes raise the economic burden on low- and middle-income households.

War debt is also regressive when war bonds are not marketed intentionally to low-income individuals. Those who are able to purchase debt to pay for the war will not only recover their investment but also do so with interest. Yet the future burden of debt servicing to pay back the bonds falls on the entire tax base. Those low- and middle-income households who do not or cannot purchase war bonds must eventually pay off government debt via future taxes, but they will be unable to earn interest on their investments. This, in turn, transfers wealth from lower classes to high-income households.

Wars financed by indirect taxes and domestic debt also promote war inflation. Manufacturers and sellers pass on the cost of indirect taxes to consumers in the form of higher prices that may already be artificially high due to wartime scarcity. In addition, war financed by domestic debt increase the amount of money in an economy, increasing demands for goods, resulting in rising prices.²¹

Wars financed by printing money promote economic inequality via war-related inflation as printing increases the supply of money in the economy.²²

Thus, war finance strategies that rely on indirect taxation, domestic debt that is not marketed to low-income people, and printing money will result in greater inequality in the aftermath of war.

Finally, wars financed by external debt may or may not promote societal inequality. Wars financed by external debt results in the transfer of American wealth to individuals and financial institutions outside of the nation. Such a transfer of wealth does not necessarily affect domestic wealth redistribution.

A History of US War Finance and Resulting Levels of Societal Inequality

The **War of 1812** [1812-1815] cost the US \$90 million dollars, which is equivalent to \$1,553 million in constant FY2011 dollars. War cost as a percent of GDP during the peak year of the war (1813) was 2.2 percent. The War of 1812 was paid for by a combination of loans purchased by a few individuals (85 percent of war costs) and excise taxes (15 percent). Wealthy individuals, including the banking syndicate of David Parish, Stephen

²¹ Easterly, William and Fischer, Stanley. (2001). Inflation and the Poor. *Journal of Money, Credit, and Banking* 33(2), 160-178.

²² Friedman, Milton and Schwartz, Anna Jacobson. (1971). *A Monetary History of the United States, 1857-1960*. Princeton: Princeton University Press.

Girard, John Jacob Astor, and Jacob Barker, a Quaker merchant, purchased the majority of the war debt.²³ In 1814, new taxes were imposed on various domestic manufacturers. Taken together, the large volume of wartime debt purchased by high-income individuals and indirect taxes resulted in inflation²⁴ and the regressive redistribution of wealth from the population at large to the elite individuals who held the debt.²⁵

The **Mexican-American War** [1846-1848] cost the US \$71 million dollars, or \$2,376 million in FY2011 dollars. As a percent of GDP during the peak year of the war (1847), the war cost was 1.4 percent. The costs of the Mexican-American War were met by a combination of loans (85 percent) and taxes (15 percent). No new taxes were levied to pay for the war as an increase in trade at the time boosted general tax revenues.²⁶ The remaining expenses were covered by loans purchased by banks and financial elites, such as Washington bank Corcoran and Riggs.²⁷ The strength of the American economy and the relatively inexpensive cost of the war led to minimal inflation and few redistributive effects.

The **Civil War** [1861-1865] cost the US \$3,183 million dollars, or \$159,631 billion in FY2011 dollars. War cost as a percent of GDP during the peak year of the war (1865) was 11.3 percent. The costs of the Civil War were met by a combination of loans (80 percent) and taxes (20 percent). Initially, the government relied primarily on domestic debt purchased by banking syndicates and wealthy individuals. In 1862, the government began to incorporate a war bond campaign marketed at low- and middle-income individuals into its war finance strategy. Jay Cooke was hired to sell US war debt to anyone who could raise \$50. In regards to taxes, initially the government relied on indirect taxes, but as the war progressed the government increasingly sought revenue from direct taxes. The Revenue Act of 1861 imposed a wide array of war-directed excise taxes as well as a 3 percent flat tax on all incomes over \$800. The Revenue Act of 1862 placed the income tax on a progressive scale, with higher rates for high-income households—3 percent on incomes from \$600-10,000 and 5 percent on incomes above \$10,000. Congress passed tax laws in 1863, 1864, and 1865, all a combination of excise taxes and income taxes, with income taxes made increasingly progressive. In sum, though there were elements of progressive war finance – an increasing reliance on direct taxes and the introduction of a bond campaign – the overwhelming majority of the war was financed by regressive means – excise taxes and deficit spending concentrated in the hands of financial elites. This resulted in high

²³ Studenski, Paul and Krooss., Herman E. (1963). *Financial History of the United States*. New York: McGraw-Hill: 77-78.

²⁴ Schur, Leon M. (1960). The Second Bank of the United States and the Inflation After the War of 1812. *Journal of Political Economy* 68(2), 118-134.

²⁵ Gallatin, Albert. (1831). *Considerations on the Currency and Banking System of the United States*. Philadelphia: Carey & Lea.

²⁶ Dewey, Davis Rich. (1931). *Financial History of the United States*. New York: Longmans, Green, and Co.

²⁷ Studenski and Krooss 1963, 123.

inflation.²⁸ Such inflation was found to erode real wages and accompanied the relative rise in income of wealthy Northerners.²⁹

The **Spanish American War** [1898] cost the US \$283 million dollars, or \$9,034 billion in FY2011 dollars. War cost as a percent of GDP during the peak year of the war (1899) was 1.1 percent. The costs of the Spanish American were met by a combination of loans (80 percent) and taxes (20 percent). While a majority of war debt was purchased by financial elites and banking syndicates, there was an attempt to spread the loans to the mass public. Bonds were issued in denominations as low as \$20. Subscriptions were received through the post-office and more than half of the entire issue was taken by 230,000 of these small subscriptions, and no subscription of more than \$4,500 was accepted. In all, 320,000 persons offered or made subscriptions.³⁰ In regards to taxation, no direct taxes were raised.³¹ Instead, various indirect taxes were implemented, ranging from stamp taxes on legal papers, cosmetics, drugs, chewing gum, playing cards, to amusement taxes on admissions to theaters and other forms of entertainment.³² These war finance strategies did result in the regressive redistribution of wealth, but it was minimal and inflation was also negligible. This case is somewhat of an anomaly in relationship to the patterns described in the preceding section; possible explanations include the short duration and relatively low cost of the war and economic slack in the economy that was still recovering from the great panic of 1893.³³

The **First World War** [1917-1918] cost the US \$20 billion dollars, or \$334 billion in FY2011 dollars. War cost as a percent of GDP during the peak year of the war (1919) was 13.6 percent. The costs of World War I were met by a combination of US domestic debt (70 percent) and taxation (30 percent).³⁴ The government implemented a war bond campaign.³⁵ Anyone who could make a small down payment could buy a bond in denominations of \$50 or more and pay the balance in installments. In late 1917, the Treasury began concentrated efforts to reach low-income individuals by offering war savings stamps in denominations as low as 25 cents and war savings certificates in denominations as low as \$25.³⁶ In regards to taxation, direct taxes were raised. The Revenue Act of 1917 raised the individual income tax from 2 to 4 percent and the maximum surtax from 13 to 63 percent, making the maximum combined normal and surtax rate 67 percent. The law also raised the corporate income tax, increased the estate tax, and enacted a new excess-profits tax as well as increased a series of sales taxes and postal

²⁸ Bense, Richard Franklin. (1990). *Yankee Leviathan: The Origins of Central State Authority in America, 1859-1877*. Cambridge: Cambridge University Press. See also Rockoff (2015).

²⁹ Lindert, Peter H. and Williamson, Jeffrey G. (2017) *Unequal Gains: American Growth Inequality Since 1700*. Princeton: Princeton University Press, Chapter 6.

³⁰ Plehn, Carl C. (1898). *Finances of the United States in the Spanish War*. Berkeley: University of California Press, 433.

³¹ Plehn 1898, 427.

³² Plehn 1898, 428.

³³ Rockoff 2015, 28.

³⁴ Seligman 1919, 747 and 757.

³⁵ Kang, Sung Won and Rockoff, Hugh. 2006. Capitalizing Patriotism: The Liberty Loans of World War I. *National Bureau of Economic Research*. Retrieved from <http://www.nber.org/papers/w11919>.

³⁶ Studenski and Krooss 1963, 290.

rates.³⁷ The Revenue Act of 1918 further raised tax rates on income, corporate, and excess profits. Combined, an unprecedented amount of tax revenue was raised, over 50 percent from income and excess profits taxes.³⁸ Excise taxes were increased to a lesser extent and tariff rates were held constant. Because of these measures, despite high levels of war inflation due to the magnitude of the war and Treasury policy to maintain low interest rates to control the cost of war, wealth was progressively redistributed.³⁹

The **Second World War** [1941-1945] cost the US \$296 billion dollars, or \$4,104 billion in FY2011 dollars. War cost as a percent of GDP during the peak year of the war (1945) was 35.8 percent. The costs of World War II were met by a combination of US loans (50 percent) and taxes (50 percent) and followed the model of World War I financing on a larger scale. In regards to domestic debt, the Treasury engaged in eight war bond campaigns and more people purchased bonds than in any previous loan drive, with the total number of owners at 85 million in 1946.⁴⁰ Between 1942 and 1945, \$24.5 billion worth of savings bonds were sold in denominations of \$10 to \$100.⁴¹ In regards to taxation, taxes were raised five times - the Revenue Acts of 1940, 1941, 1942, 1943, and 1944 - with the largest share coming from individual and corporate income taxes.⁴² By 1944, income taxes supplied 76 percent of revenue. As during World War I, both revenue from domestic borrowing and taxation gave a decided impetus towards the progressive redistribution of wealth.⁴³ Moreover, while US debt increased substantially, its effects were less regressive than if it was purchased by the wealthy, as the working class received repayment with interest on their war savings certificates.

The **Korean War** [1950-1953] cost the US \$30 billion dollars or \$341 billion in FY2011 dollars. War cost as a percent of GDP during the peak year of the war (1952) was 4.2 percent. The Korean War was paid for by direct taxes. Prior to the war, Congress was in the process of reversing World War II tax increases with tax cuts, even overriding Truman's veto of the Revenue Act of 1948. Once the war began, however, Congress raised taxes on corporations and incomes. The Revenue Act of 1950 increased corporate and individual income taxes.⁴⁴ The Excess Profits Tax Act of 1950 increased the corporate surtax and applied an excess profits tax for those companies profiting from the war effort.⁴⁵ Finally,

³⁷ Studenski and Krooss 1963, 295-6. For a review of all income tax rates from 1861 to 1991 see Internal Revenue Service (1993). *IRS Historical fact Book: A Chronology 1646-1992*. Washington, DC: Department of the Treasury, Appendix 5.

³⁸ An excess profit tax is one imposed during wartime to capture wartime profits above and beyond normal peacetime profits.

³⁹ Piketty 2014.

⁴⁰ Studenski and Krooss 1963, 453; See also Bickley 2010.

⁴¹ Studenski and Krooss 1963, 454-55.

⁴² Scheve, Kenneth and Stasavage, David. (2010). The Conscription of Wealth: Mass Warfare and the Demand for Progressive Taxation. *International Organization*, 64(4), 529-561.

⁴³ Piketty, Thomas and Saez, Emmanuel. (2003). Income Inequality in the United States, 1913-1998. *The Quarterly Journal of Economics*, 118(1), 1-39.

⁴⁴ Revenue Act Of 1950. *CQ Almanac 1950*, 6th ed., 573-95. Washington, DC: Congressional Quarterly, 1951. Retrieved from <http://library.cqpress.com/cqalmanac/cqal50-1375509>.

⁴⁵ Excess Profits Tax Act. *CQ Almanac 1950*, 6th ed., 669-78. Washington, DC: Congressional Quarterly, 1951. Retrieved from <http://library.cqpress.com/cqalmanac/cqal50-1376166>.

the Revenue Act of 1951 further increased income and corporate tax rates. Combined, these taxes thwarted war inflation. Despite an increase in prices in 1950, prices began to stabilize the next year and by March 1951 a budget surplus of \$4 billion far exceeded that of any prior month in US history.⁴⁶ The Truman administration raised enough revenue to reduce the gross federal debt at the end of FY1951.⁴⁷ The effects of the Truman Administration's pay-as-you-go war finance policy on reducing inflation, combined with a war financed entirely by direct taxes, resulted in the progressive redistribution of wealth.

The **Vietnam War** [1965-1975] cost the US \$111 billion dollars or \$738 billion in FY2011 dollars. War cost as a percent of GDP during the peak year of the war (1968) was 2.3 percent. The costs of the Vietnam War were met by a combination of loans (80 percent) and taxation (20 percent).⁴⁸ Domestic debt (general government issue versus a bond campaign) financed the majority of the war and national debt reached a value of about \$151.4 billion.⁴⁹ In regards to taxes, the war began with a tax cut. Three months after sending troops into Vietnam, President Johnson signed the Excise Tax Reduction Act of 1965 into law with an estimated cost of \$1.3 billion annually.⁵⁰ It was not until 1968 that the Revenue and Expenditure Control Act of 1968 became law, raising individual and corporate taxes as well as raising excise taxes on automobiles and telephones.⁵¹ The result of this heavy reliance on general issue domestic debt and minimal reliance on taxation was high inflation. Price increases from December 1967 to March 1968 were the largest the US economy had experienced in more than a decade.⁵² These price increases redistributed wealth away from low-income households, promoting inequality. The 1968 tax increase, however, ameliorated rising prices. Hence, over the course the war, the relationship between war finance and inequality varied.

The short **Gulf War** [1991] cost the US and its allies \$61 billion dollars or \$102 billion in FY2011 dollars. War cost as a percent of GDP during the peak year of the war (1991) was a low 0.3 percent. The Gulf War was primarily paid for by allied grants (90 percent) and no new taxes were raised. Various American allies pledged funds amounting to \$54 billion in addition, or en lieu of, committing their military forces to the coalition

⁴⁶ CEA Quarterly Report on the Economic Situation. (April 6, 1951); CEA Monthly Report on the Economic Situation. (March 3, 1951) Quarterly and Monthly Reports to the President 1951–1952 folder, Papers of John D. Clark Box 2, Truman Library.

⁴⁷ For a table of federal receipts, outlays, and debt during the Korean War, see Edelstein, Michael. (2000). *War and the American Economy in the Twentieth Century*. Cambridge: Cambridge University Press, 369, Table 6.6.

⁴⁸ Edelstein 2000, 379–380.

⁴⁹ Riddell, Thomas A. (1975). *Political Economy of the American War in Indo-China: Its Costs and Consequences*. Washington, DC: American University, 367. For a breakdown of public debt in 1975 see United States Treasury. (January 1975). Monthly statement of the public debt of the United States. Retrieved from <ftp://ftp.publicdebt.treas.gov/opd/opdm011975.pdf>.

⁵⁰ Memo, Stan Rose to Joe Califano, 5/7/68, EX FI 11, Box 56, WHCF, LBJ Library.

⁵¹ H.R. 15414 Revenue and Expenditure Control Act of 1968. 90th Cong. (1968). Retrieved from <https://www.gpo.gov/fdsys/pkg/STATUTE-82/pdf/STATUTE-82-Pg251.pdf>.

⁵² Memo, Arthur Okun to President Johnson. (May 27, 1968). *Prices and Wages in the First Quarter*. EX FG 11-3, Box 61, WHCF, LBJ Library.

formed against Iraq.⁵³ These allied payments were the first war payments taken by the US in its history for the purpose of waging war on foreign soil. The significant role of external grants in funding the war effort resulted in a negligible impact on the national debt and few domestic redistributive effects.

The Post-9/11 Global War on Terror (Iraq, Afghanistan, and Other Operations)⁵⁴ is ongoing, but just a segment of it from 2001-2010 cost the US \$1,046 billion in current year currency or \$1,147 billion in constant FY2011 dollars.⁵⁵ War cost as a percent of GDP during the peak year of the war (2008) was 1.2 percent. The Global War on Terror Operations is paid for by domestic debt (60 percent) and foreign debt (40 percent). The war began with a tax cut. The Jobs and Growth Tax Relief Reconciliation Act of 2003 signed into law by President George W. Bush amplified and accelerated components of the Economic Growth and Tax Relief Reconciliation Act of 2001. These tax cuts continued during the Obama Administration.⁵⁶ In 2017 the Trump Administration signed the Tax Cuts and Job Act reducing taxes further.⁵⁷ As opposed to past conflicts where taxes were eventually raised, tax rates continued to decrease. As a result, war operations were entirely deficit-financed.⁵⁸ In regards to domestic debt, top holders of US debt are citizens who can afford to buy it including via their pension and mutual funds, the Federal Reserve, and other US governmental agencies.⁵⁹ Unlike previous wartime borrowing, the post 9/11 operations have incorporated a significant amount of foreign purchases of American debt, about 40 percent.⁶⁰ The effect of post-9/11 war finance,

⁵³ Department of Defense. (1992). *Conduct of the Persian Gulf War: Final Report to Congress Pursuant to Title V of the Persian Gulf Conflict Supplemental Authorization and Personnel Benefits Act of 1991 Public Law 102-25*, Appendix P.

⁵⁴ Belasco, Amy. (2014). *The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11*. (CRS Report No. RL33110). Retrieved from <https://fas.org/sgp/crs/natsec/RL33110.pdf>.

⁵⁵ These are the costs reported by Daggett (2010) of military operations. These costs are different from the comprehensive figures reported by the Costs of War Project, which include veteran's benefits, interest rates on US debt, and other costs associated with the war beyond military operations. For a more comprehensive assessment of the war's costs, see Crawford, Neta (2017). *United States Budgetary Costs of Post-9/11 Wars Through FY2018: A Summary of the \$5.6 trillion in Costs for the US Wars in Iraq, Syria, Afghanistan and Pakistan, and Post-9/11 Veterans Care and Homeland Security*. Cost of War Project. Retrieved from <http://watson.brown.edu/costsofwar/files/cow/imce/papers/2017/Costs%20of%20U.S.%20Post-9%2011%20NC%20Crawford%20FINAL%20.pdf>.

⁵⁶ Jobs and Growth Tax Relief Reconciliation Act of 2003. Pub. L. 108-27. 117 Stat. 752. 28 May 2003. Retrieved from <https://www.congress.gov/108/plaws/publ27/PLAW-108publ27.pdf>; Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010. Pub. L. 111-312. Stat. 3296. 17 December 2010. Retrieved from <https://www.gpo.gov/fdsys/pkg/PLAW-111publ312/html/PLAW-111publ312.htm>; American Taxpayer Relief Act of 2012. Pub. L. 112-240. Stat. 2313. 1 January 2013. Retrieved from <https://www.gpo.gov/fdsys/pkg/PLAW-112publ240/html/PLAW-112publ240.htm>.

⁵⁷ Congressional Budget Office. (2017). H.R. 1, the Tax Cuts and Job Act: Cost estimate. Washington, DC: Government Printing Office. Retrieved from <https://www.cbo.gov/publication/53312>.

⁵⁸ Labonte, Marc and Levit, Mindy (2008). *Financing issues and economic effects of American wars*, (CRS Report No. RL31176). Retrieved from <https://fas.org/sgp/crs/natsec/RL31176.pdf>.

⁵⁹ US Treasury. (December 2017). Monthly Statement of the Public Debt of the United States. Retrieved from <https://treasurydirect.gov/govt/reports/pd/mspd/2017/opds122017.pdf>.

⁶⁰ Labonte, Marc and Jared C. Nagel. (2016). *Foreign Holdings of Federal Debt*, (CRS Report No. RS22331). Retrieved from <https://fas.org/sgp/crs/misc/RS22331.pdf>. As of December 2015, the primary holders of US foreign debt were Mainland China, holding 20.27% of all foreign holdings of federal debt, as well as Japan 18.26%, Caribbean Banking Centers 5.72%, and Oil Exporters 4.76%.

including continuous tax cuts and domestic borrowing, on wealth redistribution will likely entail a transfer of wealth from low- and middle-income individuals to wealthy individuals. This regressive redistribution will be mitigated by the fact that due to general economic weakness, the increased military spending and resulting deficits did not result in wartime inflation. While the substantial role of foreign debt holders does not promote savings within the US, it will not necessarily result in a domestic redistribution of wealth.

Conclusion

Who pays for America's wars has centrally to do with social equality, as each mechanism of war finance targets and effects different segments of the US population. In the aftermath of war, US society is deeply affected by the varying war finance strategies used by the US government. Social inequality is either reduced, or more often, increased. How wars are paid for also affects rates of inflation, which can have second order redistributive effects, as low-income people bear a disproportionate burden for price increases.

Of all the war financing methods employed throughout US history, deficit spending (with the exception of war bond campaigns), indirect taxes, and/or printing money can contribute to inequality. While lawmakers have justified deficit financing – the mechanism currently used to finance the post-9/11 wars – by its expediency in raising funds, its ability to meet the cost of war without overburdening the population with a tax increase, and other political benefits, it has implications for inequality. In the aftermath of war, deficit financing transfers wealth away from citizens who service the debt to those citizens who hold it. In today's case, that entails a transfer from low- and middle-income Americans to this country's elite, which will increase inequality.

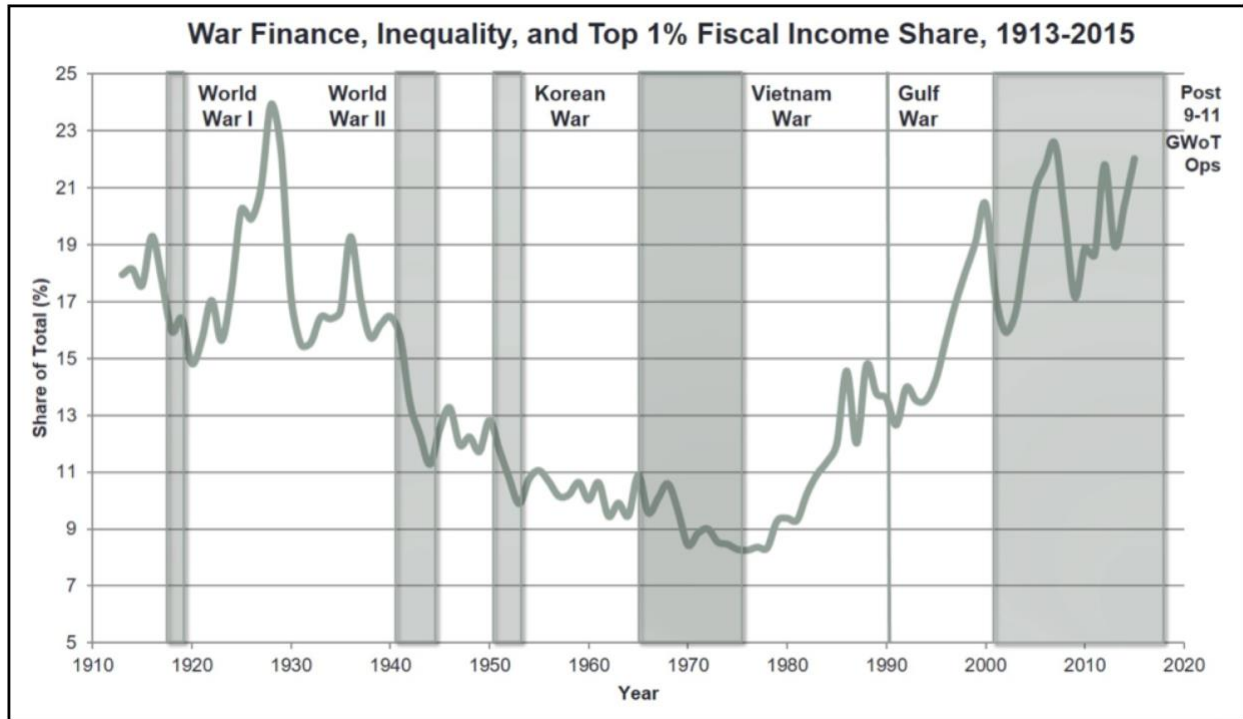
Deficit financing, indirect taxation, and printing money also contribute to war inflation, reducing the purchasing power of low- to middle-income households. This trend leads to greater inequality as well.

In contrast, wars financed by direct taxation and bond campaigns targeted towards low-income individuals promote a progressive redistribution of wealth. As higher income households service the cost of the war, lower income households receive returns on their savings investments, and war's tendency to lead to inflation is mitigated.

Wars financed by foreign loans and grants have a negligible effect on inequality.

Figure 2, below, uses the share of national income held by the wealthiest one percent of Americans as a proxy for inequality levels in the US. The greater share the very rich have of nation's wealth, the greater the country's levels of inequality, and vice versa. Of course, this proxy for inequality is imperfect. Moreover, inequality is a complex phenomenon to which a multitude of factors contribute. Nonetheless, this paper argues that wars and the means by which they are paid for are an understudied yet contributing factor to inequality.

Figure 2. War Finance, Inequality, and the Share of US Wealth Held by the Wealthiest One Percent of Americans, 1913-2015⁶¹



This figure demonstrates that the share of national income held by the wealthiest Americans dropped dramatically during World War I, World War II, and the Korean War, when bond campaigns and direct taxation characterized US war finance strategy. In other words, these wars are associated with progressive wealth redistribution. During the Vietnam War, the relationship between war finance and inequality varied. The 1965 tax cut, deficit war financing, and subsequent inflationary effects resulted in greater inequality. But once the 1968 tax increase was implemented, inequality declined as the tax increase mitigated rising prices and reduced reliance on deficit financing. The Gulf War, due to its financing via allied grants and short duration, created few if any redistributive effects.

The era of the Global War on Terror, which began with a tax cut, followed by more tax cuts, saw its war financed by foreign debt and generally floated domestic debt. It

⁶¹ Data from World Inequality Database (WID) (2018). Income Inequality, USA [Data set]. Retrieved from <http://wid.world/country/usa/>. It should be noted that there are various indicators for inequality (e.g. see OECD (2018), Income inequality (indicator) [Data set]. Retrieved from <https://data.oecd.org/inequality/income-inequality.htm>). However, few indicators include data prior to 1970. Indeed, for the pre-1962 period no annual public-use micro-files were created by the Statistics of Income division of the Internal Revenue Service. Hence, I use fiscal income share of the top 1% of America's population as reported by the WID Database of top incomes that were constructed from annual tabulations of income and its composition by size of income (U.S. Treasury Department, Internal Revenue Service, Statistics of Income).

appears to be associated with increasing inequality as the share of fiscal income held by the top one percent of wealthy Americans has trended upward.

This paper predicts that unless there is a shift in US war finance away from deficit financing and continual tax cuts, inequality will continue to increase along with the post-9/11 wars. In order to mitigate rising inequality in the US, the American government should begin to pay for at least a portion of future Global War on Terror operations outright via direct taxation.