



# U.S. war costs: Two parts temporary, one part permanent

Ryan D. Edwards\*

Economics Department, Queens College, City University of New York, Powdermaker 300, 65–30 Kissena Blvd., Flushing, NY 11367, USA  
National Bureau of Economic Research, 1050 Massachusetts Ave., Cambridge, MA 02138, USA



## ARTICLE INFO

### Article history:

Received 14 September 2010  
Received in revised form 17 March 2014  
Accepted 17 March 2014  
Available online 25 March 2014

### JEL classification:

H56  
H68  
J17  
N41  
N42

### Keywords:

National security  
Budget forecasts  
Value of life

## ABSTRACT

Military spending, fatalities, and the destruction of capital, all of which are immediately felt and are often large, are the most overt costs of war. They are also relatively short-lived. But the costs of war borne by combatants and their caretakers, which includes families, communities, and the modern welfare state, tend instead to be lifelong. In this paper I show that a significant component of the budgetary costs associated with U.S. wars is long-lived. One third to one half of the total present value of historical war costs are benefits distributed over the remaining life spans of veterans and their dependents. Even thirty years after the end of hostilities, typically half of all benefits remain to be paid. Estimates of the costs of injuries and deaths suggest that the private burden of war borne by survivors, namely the uncompensated costs of service-related injuries, are also large and long-lived.

© 2014 Elsevier B.V. All rights reserved.

## 1. Introduction

It is well understood that governments of modern nation-states spend very large amounts on military activities during periods of major warfare. In earlier history, warfare between looser agglomerations could last for many years and even decades, but in the modern era, major wars have most often been relatively brief. Direct military spending has typically been financed through deficits, and the impacts of short-lived but massive amounts of military spending and borrowing on GDP and interest rates are perennial topics in macroeconomics (Barro, 1981, 1987, 2006; Evans, 1987; Seater, 1993; Wang, 2005; Hall, 2009; Ramey, 2011a,b).

Large costs of military spending during wartime are also part of one side of the equation in the cost–benefit analysis of whether or not to go to war. Research into the economics of warfare is broad-based and vibrant (Garfinkel and Skaperdas, 2010), and cost forecasts and estimates are important elements in our understanding of the behavior of

governments (Clark, 1931; Goldin and Lewis, 1975; Edelstein, 2000; Nordhaus, 2002; Wallsten and Kosec, 2005; Stiglitz and Bilmes, 2008; Davis et al., 2009; Glick and Taylor, 2010).

My contribution in this paper, which is empirically focused, provides new insights into both of these areas. I show that the budgetary costs, or the payments by the federal government, associated with major U.S. wars have throughout its history been larger and much longer-lived than is commonly understood. The budgetary costs of war include the direct military spending that is relatively short-lived, but they also include transfer payments and in-kind benefits given to surviving veterans, their spouses, and their survivors. These latter components of budgetary costs, which I will collectively call veterans' benefits, are significantly smaller when measured on an annual basis but are also very long-lived. I find that veterans' benefits typically account for between one third to one half of the present value of all war-related government spending.

I currently restrict my attention to U.S. war costs, but similar patterns and challenges are likely to exist in other industrialized countries. The generosity of public pensions, their work disincentives, and their fiscal impacts tend to vary across the OECD (Gruber and Wise, 1998, 2005), with U.S. pension systems often appearing ungenerous, benign, and small by comparison. To the extent that other advanced countries have ceded major military operations to the U.S. since World War II, veterans' benefits may become less of an issue in those countries over time.

\* Economics Department, Queens College, City University of New York, Powdermaker 300, 65–30 Kissena Blvd., Flushing, NY 11367, USA. Tel.: +1 718 997 5189; fax: +1 718 997 5466.

E-mail address: [redwards@qc.cuny.edu](mailto:redwards@qc.cuny.edu).

But the long shadows of the major European wars of the 20th century could easily have been more important in fiscal terms for the countries that were directly affected.

The implication for macroeconomic studies is that at least in the modern era in the U.S., war spending broadly defined is not all that temporary after all. Under the assumption that it was, previous researchers have attributed the lack of increase in U.S. interest rates during wartime either to Ricardian equivalence (Evans, 1987; Seater, 1993), to patriotism (Mulligan, 1998), or to heightened risk of future disasters (Barro, 2006). By contrast, Barro (1987) had found that in Britain, direct military spending up through World War I (1914–1918) did raise interest rates, as most macroeconomic models would predict if the spending were in fact temporary. The insight that U.S. war-related spending has been relatively long-lived due to veterans' benefits may somewhat reduce the size of this puzzle. As discussed by Costa (1998), Linares (2001), and by Gerber (2000), the permanent system of broad-based veterans' benefits that took hold in the U.S. several decades after its Civil War ended in 1865 represented a major innovation in the development of old-age support that was unique in the world at the time. Although I restrict my focus in this study to U.S. data alone, it seems plausible that the long right tail of veterans' benefits did not exist in Britain or elsewhere much prior to World War I,<sup>1</sup> and that may explain the results of Barro (1987), which do not extend past 1918 to British data (Barro, 2006).

The implications of my results for the cost side of the cost–benefit analysis of warfare remain somewhat murky, because it is difficult to rigorously identify an economic cost as opposed to a budgetary cost. One difficulty is that as the historical record reveals, veterans' benefits in the U.S. have always been a mixture of compensation for war-related wounds and for service. Only the former is a clear *economic* cost of war, by which I mean an additional burden caused by the choice to go to war. Transfers that are unrelated to war wounds may be an economic cost if they represent a deferred part of the marginal product of labor diverted for war purposes. But if instead they are a pure transfer, perhaps they do not belong in a cost–benefit calculation. A second difficulty is that because U.S. government compensation for war-related wounds is designed only to replace lost earnings, it may undercompensate for the harm and produce downward bias in the measure of economic cost. In addition to measuring the budgetary costs associated with war veterans' benefits, which could be larger or smaller than the economic costs, I also directly estimate the economic costs for recent war cohorts using micro-level data. These estimates, which are structurally similar to those of Stiglitz and Bilmes (2008) for veterans of the wars in Iraq and Afghanistan, suggest that the economic costs of war wounds may have been much larger than the budgetary costs.

Other types of government activities may trigger long-lived obligations as well, but I do not explicitly consider them. Civil service pensions would be a long-term cost associated with an expansion in the bureaucracy, for example. Because the typical counterfactual scenario we have in mind is not going to war and not spending the money at all, rather than spending it on an expanded bureaucracy, I leave a comparative analysis of long-lived government obligations to future work.

A final and significant shortcoming is that my analysis focuses only on the costs of waging war and offers no insights at all about the benefits. While I show that war costs associated with veterans are large and long-lived, it is certainly possible that the benefits of war, whether they may include freedom and democracy or territorial control, are also large and long-lived. I merely intend my results to help better inform future cost–benefit analysis, which must also take into account the benefits.

<sup>1</sup> Bismarck's Prussia and Germany is likely to have been another outlier in its development of the welfare state and veterans' benefits, but I know of no study examining Prussian lending rates and war-related spending, or veterans' benefits.

## 2. The scope and aftermath of U.S. conflicts

Wars are costly because personnel and matériel must be deployed to combat zones, because hostilities result in deaths and wounded, and because surviving veterans and survivors of deceased veterans require medical care and are entitled to compensation. All of these costs tend to vary with the scope of the conflict, with offensive and defensive military technology, with medical technology, and with the general mortality environment faced by veterans and their survivors.

Table 1 lists statistics detailing several of these dimensions for each major U.S. war. The source here and throughout this and the next section is the Millennial Edition of the *Historical Statistics of the United States*. Details are described in Appendix A. The left panel in the table shows estimates of military personnel involved, military fatalities, the number of service members experiencing wounds that did not result in death, and the number of surviving veterans, calculated as total personnel minus deaths.<sup>2</sup> The right panel displays several crude incidence indicators: the number of wounded per participating personnel, wounded per killed, and wounded per surviving veteran.

Conflicts have varied widely in terms of overall scope, with World War II (1941–1945) being the largest conflict to date in terms of U.S. participants.<sup>3</sup> The most deaths occurred during the American Civil War (1861–1865), if fatalities on both sides are counted; otherwise World War II was also the deadliest. Recent conflicts, especially the two following the Vietnam War (1964–1972), have been more limited in scope.

Soldiers serving during the Civil War (1861–1865), especially on the Confederate side, were the most likely in history to have died or been wounded. The indicators in Table 1 reveal that nearly 20% of surviving veterans had physical war wounds. Because mental health trauma appears to have been a signature combat ailment in each historical era (Institute of Medicine, 2010), the share of surviving veterans with either physical or mental wounds was probably higher still. In other conflicts, the proportion of survivors with war wounds has fluctuated between 2 and 6%, averaging 2.5%.

In recent conflicts, most notably the wars in Afghanistan (2001–present) and Iraq (2003–2011), the share of wounded soldiers per fatality has risen. This statistic measures roughly how likely it is that a service member will survive his or her wounds. While relatively high during the Revolutionary War (1775–1883) and the War of 1812 (1812–1815), this measure halved during the early mechanization of war in the 19th century. It rose during the World Wars and rose further during the Korean (1950–1953) and Vietnam (1964–1972) conflicts before temporarily dropping during the brief and largely airborne First Gulf War (1991). In Iraq and Afghanistan to date, the statistic is nearly 7 wounded per death. Improvements in emergency medical care and more rapid evacuation by air to trauma centers are responsible for the improvements in survival probability (Tanielian and Jaycox, 2008).

Despite the growth in the probability of surviving wounds, the number of wounded as a share of surviving veterans has fallen recently, from about 4.4% during the World Wars to 1.8% in Korea (1950–1953), Vietnam (1964–1972), and Iraq (2003–2011) and Afghanistan (2001–present). This may reflect an increasing mechanization or automation of warfare, or a force reconfiguration toward more support units and fewer combat units, or both. Other things equal, a more limited share of the wounded among surviving veterans should reduce per-capita

<sup>2</sup> The “wounds not mortal” category probably does not include mental health trauma per se. The former appears to be a statistic that is reported by the service branches during hostilities in order to describe changes in net force strength. Mental health injuries unaccompanied by physical injuries seem likely to have been coded differently, but it is far from clear. The typical interpretation of these statistics, as in Tanielian and Jaycox (2008) for example, is that they capture the prevalence of nonfatal physical wounds.

<sup>3</sup> As shown in Table 3, the number of participants per resident population was also highest during World War II, at 11.7%. Next highest was the Civil War (1861–1865) at 9.6%, and the American Revolution (1775–1783) at 7.7%. The last three wars have involved 4.4, 0.9, and 0.7% of the U.S. population.

Download English Version:

<https://daneshyari.com/en/article/7370364>

Download Persian Version:

<https://daneshyari.com/article/7370364>

[Daneshyari.com](https://daneshyari.com)