Discretionary Wars, Cost-Benefit Analysis, and the Rashomon Effect: Searching for an Analytical Engine for Avoiding War

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1. Introduction

Those of us who value analytic thinking about public policy and, in particular, about war, can learn a great deal from reading “Cost Benefit Analysis of Discretionary Wars” by Diane Hu and her coauthors.1 The article also raises many questions, and considering them spurs learning too. Their article contributes to the literature by formulating and implementing an approach to the cost-benefit analysis (CBA) of war that is tractable and amenable to empirical use. Notably, the authors add value by operationalizing several dimensions of war’s benefits, by introducing certain simplified methods of estimating the costs of war, and by applying their framework of measuring costs and benefits to five case-studies of discretionary war. As the authors note, they build on the work of Nordhaus (2002), Stiglitz and Bilmes (2008), and others regarding the costs to the United States of the Afghanistan and Iraq Wars, as well as on Hausken’s important theoretical framework for conducting a CBA of war (Hausken 2016). By abstracting from many complexities articulated by Hausken, the authors create an empirically oriented framework that can be populated with data from their case-studies of U.S. discretionary war.2 By examining a war’s benefits and assigning monetary values to them, the authors are able to juxtapose these monetized benefits to their estimates of these wars’ costs, thereby answering the question: Did the costs of these wars outweigh their benefits? The authors’ extensive attention to war’s benefits is distinctive, especially in estimating these benefits for five wars. (Other studies of a U.S. war’s monetized benefits focus on one war.)3 Furthermore, they obtain a striking result: costs exceed benefits for all five wars. None, not even the First Gulf War or Korea, escapes the article’s grim verdict: negative net benefits should have ruled out these wars.

Not surprisingly, this pioneering article (as noted) raises questions. The present essay examines the topic of the CBA of discretionary wars in several steps:

• First, this essay comments on the article’s analytic framework and its technical features.
• Second, noting broader, less technical questions that the article raises, the present essay offers potential answers to those questions.
• Third, a conclusions section examines CBA and other analytic tools that might aid in reducing the chances of the United States initiating wars that generate high costs and modest benefits.

2. Observations on the Article’s Framework and Technical Features

2.1. Decision Maker

In focusing on the president as the sole decision maker, the article makes a strategic simplification. Granted, decisions to initiate a war by the United States have, for over a century, involved the president in a major way: for example, Wilson and World War I, Johnson and the Vietnam War, and so on.4 Notwithstanding George W. Bush’s claim that he was “The Decider,” the path to these decisions generally involved an amalgam of elite politics, electoral politics, and public opinion.

A richer empirical characterization of U.S. war-decision making is vital for description and positive analysis, but should it affect the normative standard for assessing a war? Arguably, for a cost-benefit evaluation of a war, specifying a decision maker for that war is unnecessary. Simply presenting the net-benefits...
criterion as an axiom would suffice. Regardless of who makes decisions, the net-benefit criterion rules.

Hausken (2016) reaches a different conclusion because he does not seek a single, net-benefit evaluation of a war. Instead, his framework allows different stakeholders to focus on their preferred set of costs and benefits. As a result, in his framework, net-benefit evaluations can differ by stakeholder. His array of stakeholders, and his drawing on game theory, begin to connect real-world politics, though still stylized, to Hausken’s CBA framework.

2.2. Preferences and Decision Problem

2.2.1. Utility Function

By assumption, the president is a utility-maximizer, and the only relevant arguments in his or her utility function are costs incurred and benefits enjoyed exclusively and directly by the U.S. population as a whole. Altruism and enlightened self-interest are absent from the U.S. president’s utility function. Lives lost and lives saved among foreign populations are incredible and benefits enjoyed exclusively and directly by the U.S. population as a whole. Altruism and enlightened self-interest are absent from the U.S. president’s utility function. Lives lost and lives saved among foreign populations are ignored. (This is not just an America First utility function; it is an America Only one.) The article states that choosing this utility function was necessary to make the estimates of a war’s cost conservative—a reasonable decision.

2.2.1.1. U.S.-Centric Utility. The article’s specification of the president’s utility function could have unintended consequences. The implicit message of the U.S.-centric utility function is that the United States, or at least its president, is utterly callous about the losses suffered by allied personnel and by foreign civilians. Sadly, this may be accurate, at least in part.5 (The article acknowledges this feature of the utility function.) Nonetheless, the prescriptive stance of the CBA makes me uncomfortable about the U.S.-centric portrayal of the (idealized) president, even when the rationale is intended to avoid making the article’s cost estimates appear dramatically unfavorable toward U.S. military campaigns. Some readers might take the U.S.-only utility function as descriptive. I would prefer a sensitivity analysis, with an alternative, semi-altruistic utility function as a companion to the U.S.-only utility function. That would underline that Americans are capable of a normative stance that takes into account the value of non-Americans’ lives. Perhaps subsequent research can relax the assumption of U.S. national narcissism.

2.2.1.2. Realism Versus Parsimony. Some might question whether basing the CBA on a putative presidential dictator or philosopher-king provides the normative foundation for democratic decision making upon which a CBA of war should be built. In addition, the article’s utility function is doubly asocial: just as it eschews caring about foreigners in a positive way, it does not admit the desire for revenge or for punishment of another country, its leaders and its citizens.

In principle, even starting from the article’s normative, evaluative stance, a more realistic utility function might be shaped by the array of forces that act on a president as commander-in-chief. These forces include the political, organizational, and interest groups and individuals that interact with the president and structure his or her choices by titrating and spinning information he has access to. At this point, only Hausken (2016) has presented a more realistic analytical framework and a utility function that accommodates multiple stakeholders.

Alternatively, if “net benefit” is the touchstone for a moral decision regarding war, lack of realism in the utility function is no vice. Behind the curtain labeled “President” stands the normative analyst.

Regarding realism in the utility function, no alternative dominates the other. Ultimately, the analyst’s purpose and vision are dispositive. If one takes it as an axiom that a moral president should act in line with a war’s (expected) net benefits, then the article’s utility function would be appropriate. Moreover, net benefits’ status as an axiom would make the utility function moot. If, however, one is interested in how the American polity should act if the multiple actors impinging on the president’s decisions had, say, received the accurate figures for a future war’s expected net benefits, then some measure of realism would be essential. Hausken’s framework points the way.

2.2.1.3. Aggregate Net Benefits: Two Questions. The president’s utility function, U(.), depends exclusively on the aggregate net benefit of a war. By assumption, the marginal utility of monetized benefits (MU_M B) equals (−1) times the marginal utility of costs (MU_C). That is, in absolute value, an additional dollar of benefits has the same effect on utility as an additional dollar of costs. In a corporate context, shareholders are indifferent between a dollar increase in revenues and a dollar decrease in costs. Either way, profit increases by one dollar. Does this analogy carry over to CBA? It may, but not necessarily. Specifically, when one’s attention shifts from aggregate net benefits as its sole focus, two questions beg to be asked:

- Who gains and who loses?

According to the utility function, the presidential decision maker is unconcerned with the distribution of a war’s costs and benefits among U.S. residents.6 For example, should the president be concerned that, in a war, black soldiers had a higher casualty rate and killed-in-combat rate than white soldiers?7

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5Statistical analysis of four U.S. and U.K. surveys finds an aversion among the general population to civilian casualties. The effect size is moderate and is robust across settings (Johns and Davies 2019). See also Carpenter and Montgomery (2019). The study, based on a survey of about 2500 respondents, found that “about 80% strongly or somewhat agreed that civilians should never be an object of attack in war.” Moreover, respondents’ “beliefs in law and morality strongly influenced respondents’ answers” on a scenario involving the hypothetical U.S. bombing of Iran.

6In economics, this type of single-mindedly self-interested utility function is useful in, say, deriving models of consumer behavior that predicts or explain patterns of aggregate consumption of durable consumer goods relative to consumption of services. In contrast, models of multi-person households often recognize that preferences are interdependent and that individuals’ utility or perceived well-being is affected by the utility or well-being of others.

7In the Vietnam War, black Americans were more likely to be killed in combat than white Americans. “Early in the war, when blacks made up about 11.0% of our [Vietnam] force, black casualties soared to over 20% of the total (1965, 1966). Black leaders protested and President Johnson ordered that black participation should be cut back in the combat units. As a result, the black casualty rate was cut to 11.5% by 1969” (The American War Library 2019).
According to the utility function, such facts are immaterial. The same is true regarding the death rates of draftees versus enlisted personnel. Likewise, presidential utility would not increase if war contracts were to go to politically powerful U.S. arms manufacturers and suppliers of military goods and services, as was alleged to have occurred during the Second Gulf War under the Bush-Cheney Administration with respect to Halliburton.

If the CBA of war is based on the net-benefits axiom, then the omission of these distributional concerns is irrelevant. If, however, moral reasoning about distributional concerns enters presidents’ or voters’ utility functions, then a CBA should incorporate distributional information as well as net benefits. (The same is true if empirical evidence exists that presidents or voters care about distributional information.) Arguably, distributional matters are a second-order concern when analysts focus on nationwide net benefit. If political reality is more salient in the evaluation of a discretionary war, though, then distributional matters (e.g., Halliburton) are less easily excluded from the evaluation.

- What are the tradeoffs between types of costs or benefits?

In the article, a change in the composition of (types of) costs and of benefits does not alter the president’s level of utility. For example, in line with the article’s utility function, $100 million of costs attributable to the deaths of U.S. military personnel are said to have the same, negative effect on presidential utility as $100 million of costs attributable to additional supplies, such as MREs and ammunition for the M-1 semiautomatic rifle. If the U.S. defense secretary were to find $100 million of savings via more efficient purchasing, then those savings would offset the loss of U.S. lives represented by that other $100 million, at least in the mind of a president focused exclusively on net benefits.

As a corollary of this second feature of the utility function, when the president makes a decision to go to war, she sees no tradeoffs. In particular, the elasticity of substitution between $100 million of category A (e.g., American lives lost) and $100 million of category B (e.g., expenditure on military supplies and equipment) is infinite; A and B are perfect substitutes. This might not be problematic in a technical sense if the dollar valuation of one human life reflected the president’s or the American electorate’s “willingness to pay.” If that were the case, the dollar value attached to one human life would be equivalent to its weighting in utility terms. Of course, were one human life’s war-specific dollar value (see the article’s Table 2) equal to a president’s willingness to pay to avoid one death, then presumably that equality would occur only by chance. Yet at some level of additional savings due to defense purchasing reforms, a president might act as if a very large positive in the monetary savings column offset the large nonpecuniary and subjective negative in the lives-lost column.

Ideally, the reader would not be left at sea, adrift in possibilities. Empirical evidence on the tradeoff would help.

2.3. Decision Problem

In maximizing his or her utility, the president’s only decision variable is binary: to go to war or not. For some policy problems—say, whether to build a bridge over a river—a binary choice might reflect the array of technological possibilities, given budget constraints. For other policy problems including a war, the array of options is often larger. “No war” may admit two or more alternatives. (Consider, e.g., the four nonwar (or non-invasion) options regarding Iraq that an important 2002 foreign policy book8 analyzed: “bolstering containment, depending on Iraq that an important 2002 foreign policy book” analyzed: “bolstering containment, depending on Iraq that an important 2002 foreign policy book8 analyzed: “bolstering containment, depending on Iraq that an important 2002 foreign policy book8 analyzed: “bolstering containment, depending on Iraq that an important 2002 foreign policy book8 analyzed: “bolstering containment, depending on Iraq that an important 2002 foreign policy book8 analyzed: “bolstering containment, depending on Iraq that an important 2002 foreign policy book8 analyzed: “bolstering containment, depending on [and] relying on airpower and the Iraqi opposition.”9)

In a retrospective CBA, the analyst can see military and foreign policy “roads not taken.” Each of those counterfactual roads constitutes a trajectory as legitimate for analysis and as hypothetical as “no war,” measured from the day or hour before the war began. No theorem exists that net benefits rise as one moves from the war option to the least muscular and assertive option. To address the net benefits of multiple options, even more empirical work than that reflected in the article would be needed.

A corollary is that multiple options complicate measurement of benefits. The benefits (positive or negative) of a war must be measured by comparing the actual outcome of a war that occurred to the counterfactual outcome of a hypothetical alternative to that war. That benefit-measurement must be repeated for each hypothetical alternative identified.

In a prospective CBA, the demands on the analyst of addressing multiple options probably are greater than on him or her in conducting a CBA that is retrospective. In the former mode—a prospective CBA—many if not most analysts would focus on war versus no war. In a retrospective mode, though, I conjecture that analysts who work for or advise institutional decision makers would pursue multi-option analyses. Such analyses offer a potentially more useful array of net-benefit information for those with institutional responsibilities.

2.4. Constraints

In maximizing his or her utility, the president also faces no constraints, according to the article. For the United States, at least, this premise is not accurate. For example, no president since World War II could risk a war with 500,000 deaths of U.S. military personnel. As the U.S. death rate climbed toward 100,000 for a so-called limited war, the supply of troops might well shrink if not evacuate. So might congressional authorization for continued war funding. In contrast, in 1985–86, Iran and Iraq fought a horrific war, in which each country lost about 500,000 soldiers. A democratic polity imposes some constraints on U.S. war-making. More generally, it might be productive to explore how constraints, including perceived constraints, might affect both retrospective and prospective CBAs.

2.5. Costs

The article identifies the cost categories listed in Table 1. This section identifies both strengths and problematic aspects of the methods used to estimate costs of the five discretionary wars.

8Pollack (2002).
9Council on Foreign Relations (2002).
2.5.1. Monetizing the Loss of Lives

2.5.1.1. Career Midpoint and Bias. To monetize the value of lost lives and of wounded personnel, the article uses the career midpoint of an average soldier’s contribution to the US economy over his or her working life. This choice results in an overstatement of military personnel’s average lifetime economic contribution.

Specifically, the article estimates the soldier’s contribution to U.S. GDP by use of the midpoint of the typical soldier’s assumed length of career of 45 years. This mid-career estimate is likely to overstate the early 10–15 years of lifetime contribution by a bigger margin than it understates the contribution in the latter phase of the typical soldier’s career. At the anchor year—the 22.5-year midpoint of the assumed career—the article takes the U.S. GDP per person, expresses it in 2017 dollars, and multiplies by 45. As a result, the average lifelong contribution is set equal to 45 (years) times an amount close to the maximum of the individual’s annual contribution over his work lifecycle. While earnings functions indicate that mid-career earnings are not very far from the maximum lifecycle earnings, the former are substantially above the average earnings in the first 10–15 years of earnings. Consequently, use of the career midpoint in estimating the average soldier’s contribution to GDP overstates that contribution.

2.5.1.2. Contribution to GDP Versus Willingness to Pay. The several methods in use for estimating the value of a statistical life (VSL) tend to produce estimates somewhat larger than the article’s average military person’s contribution to GDP, even after adjusting for different base-years used to calculate inflation-adjusted GDP and inflation-adjusted VSL. One of the leading experts on valuation of mortality risk “estimates that the VSL in the United States is $10 million” in 2018. Moreover, the rationale for preferring the average military service member’s contribution to GDP over the alternative methods available to estimate the VSL is not spelled out in the article.

The article’s contribution-to-GDP method meets the “conservative estimate” test, but the conceptual basis of methods that estimate the VSL seems stronger. While the methods of estimating VSL have been criticized and likely have flaws, they have the virtue of being used and assessed in many practical settings: for example, personal injury cases, medical malpractice cases, environmental protection regulation (e.g., regarding air quality), wrongful death lawsuits, and transportation safety regulation proceedings. Furthermore, the VSL estimates seem to be closer to the intuitive idea that voters (and policymakers?) have a subjective aversion to their fellow citizens dying in combat. VSL estimates tend to be derived using methods that incorporate, in various guises, individuals’ willingness to pay for a reduction in mortality risk. On balance, the article’s approach to monetizing U.S. lives lost in the five wars yields estimates that likely are lower than VSL methods would generate.

2.5.2. Assessing the Estimation Methods for Economic Costs

The article presents practical methods of estimating or approximating economic costs. The following comments are mostly

Table 1. Categories of noneconomic and economic costs of a war, and basis of Hu et al. estimates.

| Category                      | Monetized value of human lives lost |
|-------------------------------|-------------------------------------|
| Casualties                    | The costs of this category are drawn from U.S. defense budget data. |
| 1. Military operations        | The costs of this category are drawn from U.S. defense budget data. |
| 2. Veterans benefits          | This category is costed out separately, using budget data and accounts, for completely disabled wounded veterans and for those severely disabled. |
| 3. Domestic economy           | Domestic economic gains (or losses) are captured by changes in the value of trade between the United States and its adversaries—postwar or in a counterfactual, no-war history. |
| 4. Assistance to allies       | These cost figures are drawn from U.S. budget data for various types of U.S. assistance to allies. |

NOTE: Source: Hu et al. “Cost Benefit Analysis of Discretionary Wars.”

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11. For example, take a $10 million estimate of VSL in 2018 dollars. Expressed in 1991 dollars, its equivalent value is $5,965,594—not quite $6 million. This value is about 20% higher than the article’s estimate of average contribution to GDP—about $5 million in 1991 dollars.

12. Viscusi (2018).

13. The U.S. Environmental Protection Agency (EPA) (2019) explains the VSL as follows:

Suppose each person in a sample of 100,000 people were asked how much he or she would be willing to pay for a reduction in their individual risk of dying of 1 in 100,000, or 0.001%, over the next year. Since this reduction in risk would mean that we would expect one fewer death among the sample of 100,000 people over the next year on average, this is sometimes described as “one statistical life saved.”

Now suppose that the average response to this hypothetical question was $100. Then the total dollar amount that the group would be willing to pay to save one statistical life in a year would be $100 per person × 100,000 people, or $10 million. This illustrates the “value of a statistical life.”

14. Some authors consider the entire VSL literature so flawed that it should not be used. See Ackerman and Heinerling (2001), Ackerman and Heinerling maintain that

Cost-benefit analysis of health and environmental regulation requires such a number [VSL], yet the concept raises numerous ethical and philosophical questions. There are good general reasons to reject the entire enterprise of monetizing life, and specific reasons to criticize the methods used to create such values. Valuations of life are usually based either on analysis of the wage premium for risky jobs, or on surveys of attitudes toward risk. Recent EPA analyses have relied heavily on an extensive but dated database of wage-risk estimates, leading to an inflation-adjusted estimate of $5.6 million per life in 2000 dollars. Reanalysis of that database, to reflect income elasticity effects, leads to an estimate of $13.8 million—and highlights the ethical limits on the use of any monetary value for life. Nonetheless, the current consensus remains that use of VSL methods is appropriate.
positive, though they also raise questions about certain of the costing methods.

2.5.2.1. Straightforward Cost Items. For categories 1, 2, and 4 (i.e., military operations, veterans benefits, assistance to allies), the methods seem to represent reasonable approximations. Categories 1 and 4 are straightforward, drawing on pertinent budget data. Regarding category 2—veterans benefits—the estimates of their cost involve multiple linkages and approximations, such as those used in establishing the proportions of veterans in a cohort who are completely disabled versus severely disabled. These methods for costing out veterans benefits seem to make sense as approximations, although I am not knowledgeable about the data sources.

2.5.2.2. Trade-Related Questions. Regarding category 3: Using changes in the value of bilateral trade to capture all of a war’s effects on the U.S. domestic economy is not intuitive. Granted, loss of a U.S. trading partner due to a war would decrease the economic welfare of Americans. Perhaps, as the article suggests, a reasonable approximation to the value of that loss is to assume a loss of a trading partner “increases the price of [U.S.] imports by 10%” and “decreases the value of [U.S.] exports by 10%, as alternative trading partners are found.” Perhaps, however, as one of the coauthors of the article believes, the value of imports and the value of exports change by 1%—one-tenth the size of the change that the article assumes. With respect to the coefficients for imports and exports, which capture their response to loss of a trading partner, the magnitude matters for a CBA of war. Consider Table 2, which focuses on the three more recent discretionary wars.

Contrast the last two columns of Table 2. The example of the First Gulf War is most dramatic. By assuming a 1% change in import and export value, one sees that the cumulative U.S. economic loss due to the First Gulf War is on the order of $6 billion, in contrast to the article’s estimate of a cumulative loss equal to approximately $63 billion. Arithmetic is powerful, of course: assuming a response coefficient that is double the article’s premise of a 10% change yields an estimate of cumulative, domestic economic loss equal to $125.7 billion.

Which of the three estimates to prefer? In support of assuming a 10% change in imports and exports, the article cites three distinguished experts in international economics. It certainly is sensible to give weight to their views. However, absent an exposition of their reasoning and evidence, it is imprudent to assume in effect that the probability mass is stacked tightly around 10% as the true value of the change in imports and exports.\textsuperscript{17} The reader would benefit from a sensitivity analysis that shows the effect of the First Gulf War on domestic economic costs and on the overall net benefit finding, based on alternative coefficients of the responses of imports and exports to a loss of a trading partner. If possible, similar sensitivity analyses for the other four wars would also help the reader in assessing the findings.

2.5.2.3. Macroeconomic and Technological Effects. In any case, it is not obvious how the change in the bilateral trade balance is supposed to capture two other potential war-induced effects on the U.S. domestic economy—changes in U.S. GDP and changes to the rate of U.S. technological progress. Even if, say, an increase in U.S. GDP due to a war were reflected in a given bilateral trade balance, presumably not all the economic benefit of that increase in GDP would be captured by the change in the bilateral trade balance. The latter measure of economic cost has a virtue: calculating it is relatively straightforward. Yet the separate macroeconomic and technological effects of a war, which the article discusses, seem to be given short shrift by the exclusive use of the trade balance to approximate costs to the domestic economy.

For that task, Stiglitz and Bilmes (2008) and Hausken (2016) use different measures than the value of trade. The former estimates macroeconomic effects of the Iraq War (the Second Gulf War) directly, while the latter discusses macroeconomic effects of this war but presents a large value ($7 trillion) without describing the method that yields this estimate of economic gain.

Of the three approaches to category 3 discussed above, I find the Stiglitz–Bilmes approach to be the most understandable.

\textsuperscript{17} The article appears to assume that the 10% value of the import- and export-response is constant. It is possible, though, that the response-coefficient’s size differs depending on one or more factors. Perhaps the scale of bilateral trade or the type of industry has an effect on the size of the response-coefficient. As a result, for wars involving certain countries, the response-coefficient might be large (e.g., 10%) while for others it might be small (1–2%).
Nonetheless, in addition to an estimate of a war’s macro-economic cost (or benefit), the article’s trade balance approach may well be worth using as a separate measure of domestic economic cost. Particularly when that trade balance approach can generate an economic cost of $63 billion, I would prefer that the method underlying the estimate be a sturdier reed on which to grasp hold.

2.6. Benefits

2.6.1. Elements of Influence

The article’s conception of a war’s benefits contains items that are unexceptionable, at the very least. However, the category of benefits that is labeled “prestige” and, sometimes, “influence,” does not clearly and sharply identify elements of war’s benefits that decision makers and analysts often cite. These elements include:

1. Upholding (or attempting to uphold) international agreements, bilateral understandings, agreements, and alliances to advance mutual security;
2. Acting in line with mandates of supra-national bodies (e.g., the United Nations [UN]);
3. Maintaining a balance of power in a region and deterring foreign aggression;
4. Advancing humanitarian objectives such as: the delivery of aid and medical services to needy civilians (displaced from their homes or under siege and air bombardment), and protecting civilians from attack, widespread human rights abuses, and life-threatening or harsh conditions as refugees; and
5. Defending a foreign country or its ruler or power elite from foreign conquest or internal revolution or coup.

While this list refers to some potential benefits or objectives of a war or military intervention, it is worth noting that the specific means that the United States might consider or undertake include: (a) undertaking military action to deter or repel assaults on a civilian population by their government to deprive those citizens of life, freedom, civil and political rights, and sustenance; (b) overthrowing a dictator who wages wars, supports terrorism, and perpetrates widespread human rights abuses; and (c) enforcing no-fly zones and creating safe areas to protect refugees fleeing war or civil war from attack by their government or by rebel militias. Through most but not all of these benefit-elements runs a thread: that they represent a defense of norms. All represent criteria against which actions during and after a war can be measured.

The purpose of listing these war-related foreign policy objectives is descriptive, not prescriptive. Some may be considered undesirable on principle (e.g., overthrowing foreign rulers is against international law and the U.N. charter), and many may not be feasible or desirable to pursue in practice (e.g., as shown by the U.S. intervention in Libya in 2011 that led to the death of the tyrant Qaddafi and the fragmentation of Libya). Nonetheless, these objectives should be considered in describing the potential benefits of a discretionary war. In the article, these objectives tend to appear in the discussion of the context of the five wars; they tend not to be central to the article’s exposition of the nature of prestige and other intangible benefits.

2.6.2. Benefit-Accounting is Contested Ground

Listing the elements of a war’s costs is not controversial, especially with respect to domestic costs. An analogous listing of benefits is different. Ideology and viewpoint play an important role in defining what is included as a benefit of a particular war or class of wars and what is excluded. Three examples illustrate the situation:

• First, a president and his inner circle might undertake a war in part to provide a lucrative market for defense companies run by friends and former associates. (As noted earlier, in the Second Gulf War (the Iraq War), the Cheney-Haliburton connection was allegedly an instance of this possible linkage between defense contractors and presidential war decisions.) In cost-benefit accounting, acknowledgement of this dimension is possible but hardly inevitable. If a CBA did include this dimension, though, one analyst might enter the monetized value of the benefit of Haliburton’s winning a contract as a negative value (this type of profit-fueled decision making is generally viewed as a bad). In contrast, another analyst might enter Haliburton’s being awarded a contract as a positive value (since if the new war included Haliburton as a contractor, that would count as fulfilling the war-proponents’ objective).

• Second, a president might initiate a discretionary war, sanctioned by the U.N. Security Council but in conflict with international law. (An historical example is the Korean War, or at least General MacArthur’s push beyond the 38th parallel into North Korea and toward China.) The successful defense of the country that the U.S. supported would be credited as a positive benefit. However, the push beyond the de facto border could reasonably be considered a negative—it arguably may have violated international law and, accordingly, an amount should be debited from the CBA accounts of this war to reflect this situation.

18 The absence from the article’s utility function of any foreigners is consistent with the article omitting the U.S. promotion of the well-being and freedom of foreigners as an objective or value the United States wants to advance.
19 A relatively recent example, from the mid-/late-1990s, is the U.S. participation in the NATO operation to curb Serbian military operations and genocide directed at Bosnian Muslims.
20 The United States has had this foreign policy objective throughout the 20th century, though since World War II the United States has often preferred covert action to outright war. Examples include: the CIA-fostered overthrow of Mossadegh in Iran in 1953, support for or at least acquiescence in the military coup in South Vietnam against Diem; the displacement of Juan Bosch in the Dominican Republic in 1965, and the CIA- and U.S.-encouraged military coup against Salvador Allende in Chile in 1973.
21 The NATO operation in the Balkans, cited in footnote 19, also illustrates this objective.
22 This example is drawn from the proposal by Secretary of State Clinton in 2010–2011 for the United States to undertake a humanitarian intervention in the midst of the Syrian civil war. President Obama rejected this proposal.

More generally, Samantha Powers has been a proponent of similar actions when large-scale attacks on civilians and persistent human rights abuses are perpetrated by a foreign government against its own people. Another recent example—the Myanmar government’s ethnic cleansing of and genocidal attacks on the Rohingya Moslems—illustrates a case in which calls for humanitarian intervention with military forces have not been heard or at least not heeded.
• Third, American presidents typically invoke noble motives as justifications for discretionary wars and U.S. intervention. A notable example is from Harry Truman in 1950:

... The attack upon Korea was an outright breach of the peace and a violation of the Charter of the United Nations. ... This is a direct challenge to the efforts of the free nations to build the kind of world in which men can live in freedom and peace. ... The principal effort to help the Koreans preserve their independence, and to help the United Nations restore peace, has been made by the United States. Now, however, the Korean defenders ... are making a brave fight for their liberty, and an increasing number of American troops have joined them. .... the American people are unified in their belief in democratic freedom. We know that the cost of freedom is high. But we are determined to preserve our freedom—no matter what the cost. ...23

Truman’s speech, an example of the noble self-account of and rationale for American discretionary wars, can also be seen by some as a self-account hypocritically cloaked in virtue. Radical left critics of U.S. foreign policy argue that many of these objectives are in fact smoke screens, disguising the hegemonic impulse of the U.S. as an imperial power, which seeks expansion and dominance in foreign affairs, and which advances the economic and power-seeking interests of various elements in the U.S. elite. Ideally, in pursuit of an Olympian CBA, the analyst would build a comprehensive list of a war’s benefits, which would include those realized by the pursuit of the interests of the U.S. upper class or power elite. As elaborated on below, a comprehensive list of a war’s benefits does not translate into a unitary, one-analysis-fits-all CBA.

2.6.2.1. The Rashomon Effect. The contrast between, for example, Harry Truman’s expression of Wilsonian idealism and Noam Chomsky’s statement that “U.S. foreign policy is straight out of the Mafia” is instructive.24 The attempt to produce a CBA as a technical, objective exercise runs into the Rashomon Effect. In the classic 1950 film Rashomon, three characters give different, subjective, self-serving, and selective renditions of the same incident. Later, a fourth character appears, who happens to have observed the incident and who provides the first apparently objective view of what happened.

Like that fourth character, the analyst can aspire to be objective. In the case of the analysis of a war, though, even identifying the objectives and benefits of that war, let alone measuring them, is likely to be contested ground. Even the measurement of the amount of benefits achieved along a given dimension may differ, depending on the observers’ view of the facts, which may be filtered through an ideology. In this conceptual and measurement hall of mirrors, the CBA analyst can aspire to be Olympian—trying to represent impartially the dimensions of benefits that reflect the many contending actors’ characterization of war’s benefits. However, faced with a list of benefits, some of which are perceived as positive by one group (e.g., Haliburton) and as negative or not relevant by other groups, the CBA analyst may find that her CBA of a discretionary war is not unitary—applicable to a particular nation-state as an entity. Instead, the analyst may develop variants of a CBA; while the cost elements are likely to be common to all variants, the set of benefits considered relevant differs to some extent by stakeholder. Accordingly, the analyst can structure the CBA as a sensitivity analysis, in which the value of the net-benefit finding depends in part on the benefit dimensions that one perspective or another highlights or ignores.

Ideally, differences in the enumeration of benefit-dimensions and discrepancies in measurement would be reduced by the process of scientific inquiry. However, in a relatively fast-moving situation—the run-up to a war—such discrepancies probably would persist, because it takes time for the dialectic of scientific inquiry and critical examination to reach a consensus among experts. Consequently, a CBA of a war would seem to be well-paired with a sensitivity analysis.

2.6.3. Basis for Selecting the Monetized Value of Soft Power

The reader must take on faith that, according to the article, 1% of U.S. GDP in 2016 is “reasonable” as an estimate of the value of soft power that the U.S. gained in the Korean War. That gain apparently is cumulated from 1953 through 2016—about 63 years.

This reader does not have a way to monetize that gain and to select even a range of percentages of GDP as reasonable. (Indeed, researchers like me do not know how to measure gains in soft power directly, not via monetary valuation.25) Perhaps, over 63 years, 50% of 2016 GDP ($9.3 trillion) is reasonable. Perhaps 0.5% of that GDP is reasonable. Who knows? How would a reasonable person make such a determination? How would one determine that one gain in soft power is small and another is medium in size or large? Is the basis for the determination the presumed willingness to pay to avoid losing the soft power in question? Does a gain in soft power result in increases in economic value via international trade or other channels?

2.6.3.1. Inconsistent Valuations of “Soft Power Gained”? In the case of the Korean War, as noted above, the article values the soft power gained due to that war at 1% of U.S. GDP in 2016. In contrast, for the First Gulf War, the value assigned to the gain in soft power is zero. This—despite the fact that the article states the war was “a successful cooperative international effort in response to Iraq’s invasion of Kuwait. It sent a signal that nations should respect boundaries, and it affirmed U.S. leadership.” While the paper notes that the First Gulf War resulted

23Truman (1950).
24Milne (2009). See also Shank (2007). Chomsky on why control is a central motive or objective of the U.S. in its conduct of foreign affairs:

I think it has to do with a feature of world affairs that is insufficiently appreciated. International affairs is very much run like the mafia. The godfather does not accept disobedience, even from a small store-keeper who doesn’t pay his protection money. You have to have obedience otherwise the idea can spread that you don’t have to listen to the orders and it can spread to important places.

In effect, Chomsky endorses as accurate a version of the domino theory.

25A literature on measuring soft power directly is growing (e.g., McClory 2011).
in certain negative factors, it is similarly true that the Korean War resulted in some negative effects as well. Yet the soft power benefit of the earlier war is considered substantial while that later war is said to have yielded no gain in soft power. The reason for this escapes me.

In general, the larger the estimate of the value of soft power gained, the smaller the net cost of a given war, ceteris paribus. Moreover, when a strong conclusion (about soft power and a war’s net cost or net benefit) is put forward, the reader wants to gauge the solidity of the ground upon which that conclusion is built.

That is why the decisions matter regarding the magnitude of these soft-power estimates and, in particular, the decision to set the soft-power gain for a relatively successful war at zero.

2.7. Intertemporal Comparisons

2.7.1. Time Value of Money

The article ignores discounting and the time value of money. It calculates costs and benefits as cumulative magnitudes, summed over a long period that starts with the opening salvos of a given war. Avoiding present value results in cost and benefit magnitudes that are larger, sometimes substantially larger, than the present value of the same year-by-year costs and benefits. If costs are substantial and persist over many years, the reliance on cumulative costs could result in a cost estimate much larger (as much as 40% larger) than the present value of that stream of costs. However, discounting future (or, looking retrospectively, more recent) values would not necessarily result in net benefit estimates more favorable (or less unfavorable) to a particular war. Depending on the size of annual costs and annual benefits as well as their time profile, the present value of net benefit could be more favorable, less favorable, or neutral regarding the initiation of a particular war. I have not sought to calculate the net benefit of each of the five wars in present value terms.

In line with the article’s implementation of CBA, an estimate of $250 billion in costs (or benefits) in one year (say, 1968) is treated by the presidential decision maker as the same as a cumulative or lifecycle estimate of $250 billion—the sum of annual increments of $10 billion over 25 years (e.g., 1968–1993). In contrast, if the presidential decision maker were to have discounted future costs or future benefits at an annual rate of 5%, he or she would treat that 25-year stream of $10 billion per year as equal in present value to approximately $141 billion. In this case, the present value is 56% of the cumulative value ($250 billion).

How would the empirical findings of the article be altered if, adopting a prospective stance, one would require that costs and benefits be discounted to present value? A priori, no general statement can be made. In general, the more back-loaded a magnitude is—for example, 75% of the benefits accrue in years 11 through 50—the smaller their present value, compared to the same cumulative value, 75% of which accrues in years 1 through 10. (The same point holds if “costs” are substituted for “benefits.”) Importantly, however, the effect of discounting on net benefit depends on the time profiles of both benefits and costs. As a result, without carrying out those calculations, this discussion at a general level leaves one agnostic about the relationship between (undiscounted) cumulative net benefit and present value of net benefit.

2.7.2. Time Preference and Uncertainty

Discounting the future can reflect a motivation other than recognizing the time value of money: that is, a response to a particular conception of uncertainty. It is conventional to see variables such as the expected level of GDP characterized by a probability distribution of different degrees of risk. In contrast, though, decision makers can see these variables’ future values as unknowable. Expressed differently, the standard error of forecast cannot be calculated and the probability distribution of expected future levels of GDP cannot be reasonably assessed. Given that sense of radical uncertainty, decision makers may prefer to obtain good things today rather than wait ten years. Likewise, they may prefer that costs, which are undesirable, be back-loaded.

2.7.3. Bottom Line on Discounting

Alone or combined, these two stances toward the future would suggest that cumulative costs and benefits overstate the value decision makers—presidents or voters—place on monetized magnitudes that the decision maker or the nation will only experience 10 or 30 years hence. While a strong case can be made for favoring undiscounted values of costs and benefits when human lives are being compared across time,26 acknowledging that findings might differ if the streams of costs and benefits had been discounted would seem to be prudent. Furthermore, noting the strong effect that different discount rates can have on the calculated present value of a given stream of future magnitudes—future costs, future benefits, or their difference (i.e., net benefits)—would also be helpful.

2.8. Analytic Vantage Point: Retrospective Versus Prospective

The article’s calculations of costs and benefits are retrospective. Each war’s cascade of potential decisions was fluid until, as time inched forward, the decisive moment crystallized them. At that point, counts of the dead and disabled were locked in; U.S. GDP, with its sputters, slumps, and upward trend—once in the rearview mirror—was measured. Veterans’ benefits and other cost- and benefit-variables over the past 65 years became known. When the analyst, using historical data about a war, calculates that cumulative costs exceeded cumulative benefits, the verdict is that the war should not have been undertaken. Of course, the calculations and verdict are rendered years, perhaps decades, after the decisions to launch and prosecute the war were made. No matter how damning the judgment, the past decisions cannot, of course, be undone.

In contrast, as the authors note (echoing Stiglitz and Bilmes 2008), it would be desirable if decision makers, prior to entering a discretionary war, were to conduct a CBA that was prospective. Before missiles took flight and shots were fired, analysts would have forecast expected costs and expected benefits; an estimate of expected net benefits that was positive would signal Go to

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26For an extended critique of discounting for policy analysis, see Ackerman (2008).
War, and an estimate that was negative—No Go. Once the analyst spoke, the decision maker would act accordingly. The effective war-making power would lie with the CBA analysts; the CBA decision rule would dictate and the president would take action accordingly. In less dramatic fashion, a president could use the results of a prospective CBA to inform the internal debate within the White House, the Defense Department, the State Department, and the intelligence agencies. These CBA results might also be shared with the Congress, or at least its intelligence and foreign affairs committees. From there, the results might enter the public sphere, with authorization or not.

That discrepancy in timing—between the war as an historical event versus its subsequent record in data and net-benefit estimation—begs the question, How would the CBA change if it were prospective? If the utility-maximizing president looked forward many years ahead, in particular if he or she had perfect foresight and were true to the article's particular conception of utility maximization, then the president would never have undertaken whatever war he or she had contemplated.

Assume for convenience that the article's retrospective net-benefit results for the five wars are accurate and hence foreseeing those results represents perfect foresight. The combination of CBA and perfect foresight would have had powerful consequences, if the presidential decision maker hewed closely to the CBA tool's results: Truman would have let the North Koreans overrun South Korea. Once Eisenhower assumed the presidency, he would not have sought to dislodge them. John Kennedy would have forsaken following in the footsteps in Vietnam of the defeated French, and Lyndon B. Johnson would have faced down his fear that the Republicans would blame him for losing Vietnam the way they blamed Truman for losing China. Ronald Reagan would have let the Grenadian revolution run its course and perhaps sought a way to airlift out the 600 U.S. medical students on the island. G.H.W. Bush would have used other means—perhaps covert operations?—to weaken Noriega, but Noriega would have continued in power. Regarding that outcome, its hypothetical consequences are not readily pinned down. And G.H.W. Bush would have let Saddam Hussein take Kuwait, control its oil fields, and ... subsequently do what? That datum, in the sense of a single trajectory of events, is conjectural and not obvious.27

2.8.1. Imperfect Cost-or Benefit-Forecasts
What if a president ordered up a prospective CBA of a war he or she was contemplating but recognized that his or her analysts' foresight was imperfect? A moment's reflection reveals that the degree of imperfection in foresight is critical.

- At one pole of imperfection, the actual, historical forecasts of U.S. presidents, their officials, and their analysts regarding the wars in Korea and Vietnam were seriously imperfect. In those two cases, the actual degree of imperfection in forecasting resulted in launching and prosecuting those two wars—the opposite of what perfect-foresight CBA instructed (at least using the article's estimates of costs and benefits).
- For a forecast of net benefit or net cost of a war to be imperfect and yet signal "Don't go to war," the forecast could miss all but an arbitrary increment of the net cost. In the case of Korea, the article finds net cost equals $710 billion, so perhaps if a real-time CBA had projected a net cost of $14 billion (2% of the retrospective net cost), that forecasted sum would have been sufficient to warn off President Truman from what, according to the article, was a war that should not have been undertaken. This example begs the question, Is there a zone of skepticism around the zero net-cost or net-benefit value, which recognizes that forecasting net costs should be considered accurate within plus or minus epsilon? For example, should a projected net cost of $1 billion be sufficient for a president, confronted with a North Korean invasion of South Korea, to abjure a U.S. military response? Suppose the projected net cost were $100 million, $10 million? By the same token, if the projected net benefit were $1 billion, $100 million, or $10 million, should a real-world president follow the decision rule and commit U.S. troops to intervention, as long as the expected net benefit is positive?

The whimsical notion of a zone of skepticism underscores the fact that the CBA is nonstochastic. In it, no cost-element and no benefit-element is estimated by a method that permits statistical inference from sample data. Consequently, no standard error of forecast can be calculated and therefore no confidence interval can be constructed for projected costs and for projected benefits.

Ideally, though, a prudent president would want his or her analysts to develop ways of conveying different degrees of "warranted assertability" or different degrees of skepticism regarding the cumulative cost, cumulative benefit, and net benefit results of the CBA. Given that scalar value, a president would choose the contemporary equivalent of, say, letting North Korea put the entire Korean peninsula under its control, or sending U.S. troops to the bitter cold of that peninsula to fight and, too often, to die. Error is consequential, either way. In light of that, a president likely would be very interested in not only the expected net benefit of the war being planned but the degree of warranted assertability attached by the analysts to the costs, benefits, and net benefits of that war.

3. Broader Issues
3.1. Are Forecasts of the Costs and Benefits of a War Feasible?
The eminently reasonable call for prospective CBA leads to the question, How shall the trajectory of future costs and the trajectory of future benefits be forecast? As a technical matter, is this endeavor feasible?

3.1.1. Reasons for Skepticism
I have not yet located systematic evidence that such forecasts are feasible and practical in general, given current analytic technology and resources. A similar statement, though, applies to the claim that these forecasts are definitively infeasible and impractical. In this apparent no-man's land of evidence, several reasons

27Perhaps Saddam Hussein might have used these new oil revenues to acquire reliable weapons of mass destruction, which he could then turn on his Iranian foes, who had fought Iraq to a bloody draw in 1985–1986, or threaten Israel. Perhaps he would have used those revenues to make the desert bloom. To estimate benefits (negative or positive) of a given war, a CBA analyst must tiptoe through these counterfactual fields.
foster skepticism about prospective CBA being a reasonable bet, at least currently.

First, can war planners, international relations experts, and quantitative social scientists predict the duration of any given war? I suggest: Some wars, yes. In general, no. With respect to an impending war’s duration, at some point in the future, analysts might be able to specify and estimate a survival model that met professional expectations for its within-sample performance. Out-of-sample performance—the real test of such a model—likely would be much less satisfactory. Would responsible analysts advise their principals to decide to wage war—or not—based in part on that prediction of a war’s duration?28 In short, the difficulty of forecasting the duration of a future, even imminent, war suggests a comparable difficulty of forecasting its future costs and future benefits as well.

Second, how well can multiple factors that influence a war’s many features and outcome be forecast? A war’s cost, in lives and in resources, depends on many factors: intensity of combat, the degree to which ground troops are dispersed or concentrated, the nature of the adversary’s forces (conventional infantry, armored units, air power, naval power—in contrast to asymmetrical warfare), the military technologies available to the adversary, and the comparative strength of the U.S. forces and the adversary’s forces. In addition, the article’s sample of discretionary wars highlights the diversity of other factors: terrain, climate and weather, allegiances of the civilian population, the morale of U.S. troops relative to troops fighting on their home turf, political conditions in the U.S. and in the foreign military theater, and the role of mass media as well as propaganda. This list, of course, selects from the plethora of factors that influence the evolution of a military conflict and whether it results in success for one side or stalemate. Note that the forecasting task involves not just forecasting, say, the intensity of combat and the morale of the civilian population, but forecasting their trajectory over time. Future values are likely to be path-dependent. Perhaps some reduced-form model of key variables that drive a war’s costs would make moot all the daunting detail outlined above. Nonetheless, these considerations are not encouraging regarding the forecasting of a war’s costs.

Third, a war can be conceptualized as a large set of decision trees. How well can the linked outcomes of complex decision trees regarding a war be forecast? From a distance, the size of that set might seem manageable. Close up, in any given sector of the field of combat and on any day and hour, the size of that set is much larger. Moreover, it is difficult a priori, or even based on historical experience, to identify the factors on which the entire course of a war can turn.29

28 Perhaps statistical modeling, based on the toolkit of statisticians and econometricians, is the wrong tool—at least, less promising. For example, a well-crafted war game or set of war games might create data and results with greater predictive power and more credibility in the eyes of presidents and other decision makers. Computer-simulated war games have been used by the military and by civilian experts for several decades. See Reuters (1990).

29 The textbox in this section presents one of presumably many improbable events during World War II on which hinged the defeat of the Allies, or their survival and ultimate victory. The textbox’s example encapsulates a small part of the wartime history of the U.S. Department of State’s Board of Economic Warfare. The textbox summarizes my conversations with my father, Sidney Ratner, an economist in that agency, whose detective-like, speedy research triggered events that led to Sweden resuming the flow of ball bearings to the U.S. war industry. This example is one of a thousand, perhaps a hundred thousand, events—practically or literally invisible to journalists and historians—on which an important battle, campaign, and the war itself hinged. In that sense, the stochastic path of a war is Manichean: the devil—or God—is in the details.

A Kingdom Lost – All for Want of a Nail?

In 1942 and early 1943, the Nazis were winning the war and the Allies were struggling to resist successfully, let alone strike a decisive blow. In this period, over a relatively short period of time, the U.S. faced a baffling and critical supply shortage. The flow of an essential and unique type of ball bearing, used by American factories to produce tanks and tracked vehicles, dried up; the sole supplier, a Swedish company, said its manufacturing processes were in crisis. No alternative supplier was available. A dire situation was imminent: The Allies soon would lack enough functioning tanks to conduct effective ground operations. This would make it likely that the Nazis’ panzer divisions and troops would crush Allied forces.

Remarkably, the U.S. found a hidden exit from this cul de sac. (See footnote 28.) That it did so seems random and unpredictable. Fortunately, the war was not lost for want of a ball bearing. But that eventualty came astonishingly close to being realized.

To model the vector of outcomes of the decision trees (even as seen from a distance) would seem to be a daunting task. An intrepid President Kennedy evidently did not share that view:

There are risks and costs to a program of action. But they are far less than the long-range risks and costs of comfortable inaction.

John F. Kennedy, 1961

Nonetheless, I am not aware of a quantitative literature that shows this has been done successfully in most cases of discretionary wars and that it can be applied in the real world quickly enough for decision makers to use it.

Fourth, how reliably can multiple counterfactuals be delineated? Given the preceding point, forecasting a war’s future benefits also seems daunting. A future war’s benefits would seem to depend in part on the war’s conclusion: victory, defeat, or stalemate. By the same token, those benefits depend on the counterfactual that is posited.

Indeed, multiple counterfactual states of the world are plausible. For example, the outcome of the Cuban Missile Crisis of 1962 avoided a war, quite possibly a nuclear war. If President Kennedy had followed the hardline views of most of his advisors, he would have launched some type of discretionary war. What is known about United States, Soviet, and Cuban decision making indicates how readily events might have unfolded in at least several different ways. Applying what we know about an actual historical case of almost-discretionary war, we can see how difficult it would be to imagine future counterfactual situations,
against which the imminent war’s expected benefits would have to be measured.

3.1.1. Pessimism: A Summation. The fact that wars typically unfold at least somewhat unpredictably seems hard to deny. At each day, week, month, or even year, a war’s path arrives at perhaps several major decision nodes and a multitude of seemingly small decision nodes. Each decision—chosen or forced upon one or both sides to a conflict—creates new initial conditions for the next iteration. Are ball bearings still being supplied for tracked vehicles? Has the president fired a commanding general, who was intent on a major expansion of the war’s objectives? Did the leader of a member of the UN Security Council decide against sending his representative to vote at a crucial Security Council meeting? On larger matters, and seemingly much smaller, the course of wars changes. (The illustrative decision nodes above are all taken from 20th-century U.S. history.) These uncertainties bedevil the forecasting of a war’s course and costs, as Anthony Cordesman’s observation, prior to the start of the Second Gulf War (the Iraq War), illustrates:

Anyone who looks seriously at this list of independent variables will quickly see that it is impossible to predict when and how the United States will use decisive force, the Iraqi response to a U.S.-led coalition, the nature of a U.S.-led coalition, how long Iraq can endure, and what strategy Iraq will actually pursue if it does use its CBRN weapons.30 As Nordhaus observes:

The historical record is littered with failed forecasts about the economic, political, and military outcomes of wars. It can hardly be a surprise that forecasts about the costs of wars were so far of the mark. When wars occur, this is evidence of some kind of major miscalculation or impaired collective decision-making on a grand scale. With hindsight, would the southerners have gone to civil war if they had known the devastation that would follow? Would the Germans have provoked World Wars I and II? Would Japan have bombed Pearl Harbor? Would the United States have engaged half a million men in Vietnam? The history of war is, as Barbara Tuchman entitled her insightful book, the march of folly.31

3.1.2. Case for Cautious Optimism

Nonetheless, regarding forecasting a war, all is not lost.

- Vietnam. After Dien Bien Phu in Vietnam in 1954, the 1950s dribbled out, with a mix of flawed political leaders in Laos, Thailand, and Vietnam facing various communist insurgencies. When the decision to commit the United States to a course in South Vietnam was made, the failure of the French as a colonial power suggested that resisting Ho Chi Minh and the North Vietnamese, as well as the more assertive and nationalist Vietminh in South Vietnam, would not be a simple matter. The United States had supported the French heavily; what would make the United States more successful? Moreover, both China (the PRC) and the Soviet Union in different ways were potentially significant allies and sponsors of the North Vietnamese and their Vietminh confederes.

It was not impossible in 1961, and more so in 1963, to see the shadowy outlines of a long, grinding war. As it happened, it was also possible to forecast that, with just this strategy or just that escalation of bombing and troop reinforcements, the tide could turn. In sum, one can imagine forecasting the broadest outcome of the U.S. intervention in Vietnam from the starting point of 1961 or 1963. But which branch in the decision tree would the serious, impartial analyst take—grinding war ending in disaster, or grinding war ending in, if not victory, a painful, bloody equilibrium of stalemate?

Forecasts probably can be made, and quite plausible ones. Accuracy, though, even with a substantial margin of error, may well be a bridge too far in many cases.32

- First Gulf War. Forecasting the First Gulf War’s trajectory, from the vantage point of some weeks or months in advance of U.S. troops landing in Kuwait, might have been a reasonable endeavor. While the precise magnitudes of combat deaths and injuries among U.S. forces presumably were not predictable, war gaming and professional military analysis and judgment surely captured the contours of the outcome—a decisive military advantage to the U.S. and allied forces and a corresponding defeat for Saddam Hussein and the Iraq military. Whether the U.S. and allied military forces overperformed or underperformed, as judged by the number of U.S. combat deaths and injuries, is beyond the scope of this essay.

- The Second Gulf War. Sometimes the broad outlines of the future are discernable, though knowledgeable people at the time might disagree about what those outlines are. Fallows (2002) presents qualitative assessments and future scenarios made prior to this war by various experts. For a notable, successful, quantitative example, consider William Nordhaus’s conditional forecast of the Iraq War (Nordhaus 2002). He costed out two trajectories of the impending war: a best-case scenario and a worse-case scenario (note: worse-case is better than worst-case). The worse-case scenario entailed, by his calculations, a cost of $1.9 trillion. His paper is a masterful counterexample to my gloomy characterization of the enterprise of war-cost forecasting.

3.2. An Iron Law of Discretionary War?

For argument’s sake, stipulate that forecasting costs and benefits of a particular war is not feasible. Decision makers still might be able to use the findings of retrospective CBA. The authors

30Cordesman (2002). “CBRN” refers to “chemical, biological, radioactive, and nuclear” weapons.
31See Nordhaus (2002), pp. 38–39. Also Tuchman (1984).
32Perfect foresight, a convenience in some economic modeling, is an untenable premise for those who want CBA of war to be prospective. How easy is it to forecast the rough trajectory of a war and its consequences 5–20 years after war’s end? Are there rules of thumb that can enable the CB analyst to forecast U.S. lives lost over the course of a war? (There is a rule of thumb about the ratio of combat deaths to disabling combat injuries, though the evolution of military medicine might make historical extrapolation increasingly imprecise.) What about forecasting the gains or losses in soft power, once a war has been concluded? What about foreclosed U.S. lives saved or lost, as the runners approach the starting blocks? As challenging as that exercise is once the race has been run, it seems more difficult when all that is known at war’s end is, before the war starts, conjectural, speculative, and perhaps not even imagined.
may have shown that any future U.S. discretionary war would be a mistake to undertake—if they have found an Iron Law of U.S. Discretionary Wars. Perhaps in the modern, post-World War II era, any U.S. discretionary war will generate cumulative costs in excess of its cumulative benefits.

To defend this claim, three elements are sufficient: First, one must accept the finding that all five discretionary wars studied had negative net benefits. Second, U.S. presidents and decision makers would not undertake a war if expected net benefits were negative. Third, mechanisms are at work that lead to systematic forecasting underestimates: military and political organizations as well as individual leaders exaggerate the chances of success in a new war. These mechanisms and others can impel organizations and leaders to seek to recover sunk costs by escalating the level of forces devoted to a war and increasing the intensity of the warfare. In addition, one important mechanism is competition between political parties, and sometimes within political parties, which creates a strong disincentive for a president to take action that opponents will portray, and voters can perceive, as losing a war.

The evidence for the third element is substantial though partial. Eisenhower and the Republicans in 1952 attacked President Truman for not achieving victory in the Korean War then underway (and Eisenhower won the presidential election). President Johnson felt driven to escalation of the war by his fear that the Republicans would attack him for losing Vietnam as they had attacked Truman over Korea. Defense Secretary McNamara has confessed, long after the Vietnam War ended, that he now sees how he had exaggerated in his own mind the chances of U.S. success in that conflict. More recent examples, outside the sample of U.S. wars that the article studies, reinforce the claim that these mechanisms are at work in modern U.S. decision making regarding discretionary wars. (The Afghanistan and Iraq Wars come to mind.) Whether the U.S. is now (June 2019) moving toward new wars, for example, with Iran and perhaps North Korea, is speculative. But in these cases, the organizational and individual mechanisms discussed above seem to be at work. Nonetheless, the run-up to three of the other wars in the article’s sample—Grenada, Panama, and the First Gulf War—does not appear to display those mechanisms at work.

The evidence for the first element is also mixed. That the Vietnam War was a calamity for the United States is quite clear. That judgment holds, regardless of the CBA finding about this war. However, the article’s finding—that the benefits of some of the other wars were scarcely 20% of their costs—is debatable. (The benefit estimates for the Korean War and the First Gulf War seem less solid.) In general, my confidence in the article’s cost estimates is considerably greater than my confidence in its estimates of benefits.

These difficulties, particularly in delineating the benefits of wars and monetizing those benefits, make the Iron Law morph into a presumption: U.S. discretionary wars risk generating costs that become substantial and ever-growing while realizing benefits that may well underperform expectations. For an insightful discussion of the mechanisms that bias political leaders and war planners toward overconfidence and, regarding war costs, underestimates, see Nordhaus (2002). One notable, potential source of the U.S. public’s tolerance of various discretionary wars is the federal income tax system’s progressive character. As Hu et al. observe, “War is expensive.” To an individual, a cost of $60 billion probably sounds large. This number is the order of magnitude that the G.W. Bush Administration advanced as its estimate of the cost of the Second Gulf War (the Iraq War). For comparison, consider the 2001 federal tax cut of about $1.2 trillion over six years. By that yardstick, $60 billion might have well have seemed modest.

Once the observer decides that a war’s cost crosses the threshold of “expensive,” though, my conjecture is that interest in the cardinal measure of “expensive” is slight. Contrast Stiglitz and Bilmes’s $3 trillion estimate of the Iraq War’s cost to the Congressional Budget Office’s $1.2 trillion to $1.7 trillion estimate. While the CBO estimates are 40–57% of the Stiglitz–Bilmes estimate, introspection suggests that decision makers’ and citizens’ support for the Iraq War, or opposition to it, at best varies weakly with the size of the estimate of that war’s cost. That said, estimates of costs that are large—and estimates of benefits that are low—are likely to energize opponents of an existing war and of imminent ones.

3.3.1.1. Price-Sensitivity and War-Support. True, critics of a war argue that its costliness is much greater than its proponents

33For an insightful discussion of the mechanisms that bias political leaders and war planners toward overconfidence and, regarding war costs, underestimates, see Nordhaus (2002).

34One notable, potential source of the U.S. public’s tolerance of various discretionary wars is the federal income tax system’s progressive character.
acknowledge. I suggest, though, that the causal arrow generally runs from a person’s view of a war as justified, ill-advised, or morally repugnant to the size of the cost estimate a person favors. For example, would many opponents of the Iraq War have changed their view to support of that war if they were convinced that its true cost was $1 trillion, not $3 trillion? A similar argument can be made regarding Iraq War proponents had they become convinced that its cost was in fact $3 trillion, not, say, $1 trillion, as they might previously have thought. I hypothesize that their support of the war was price-inelastic—insensitive to the size of the price tag that analysts might attach to it. Of course, systematic empirical investigation might not support my hypothesis.35

3.3.1.2. Anecdotes Versus Statistics. Another factor may well be at play: Large estimates of costs are less likely to register with voters and decision makers if the cost estimates refer to expenditures on services (e.g., veterans’ health care). The same point likely holds if the cost estimates are not tied to an object that can be easily visualized (e.g., a $696 toilet seat famously purchased years ago by the Defense Department). In contrast, deaths of military personnel and the disabilities of wounded warriors have a visceral quality that the typical voter can grasp. As a result, just as voters may be displeased to hear about a trillion dollar federal budget deficit, they may be displeased to hear a large cost estimate attached to a war. Nonetheless, national election outcomes do not appear to be swayed by large dollar estimates of a war’s cost. Statistical models of presidential election outcomes report one war-related measure as statistically significant and material in impact: the body count of military personnel (For analysis of geographic differences within the U.S. regarding war losses, see Althaus, Bramlett, and Gimpel 2012).

Regarding U.S. voter and elite response to numerical estimates of a war’s monetized benefits, I am not aware of pertinent data. Until the Hu et al. article, estimates of monetized benefits of a war have been almost nonexistent, or at least not well-publicized. Consequently, statements about how a president or other senior decision makers would respond to estimates, prospective or retrospective, of a war’s monetized benefits would be speculative. On reflection, though, caution seems warranted. Prior beliefs about whether a proposed or imminent war is warranted seem to be held strongly. Cognitive dissonance reduction tends to neutralize prior beliefs against revision in light of new information.

In addition, estimates of monetized benefits have characteristics that create barriers to their acceptance. First, abstractness: In general, the gains or losses in the prestige/influence dimension of benefits are relatively abstract. Prestige and influence are qualitative phenomena perceived by voters and elites, who base their judgments (e.g., “the U.S. increased its prestige in Europe”) on news reports; social media (in the internet era); statements by governments, pundits, and advocacy groups; and (for some members of an elite) internal government intelligence reports and briefings. Second, lack of yardstick: Regarding a war’s benefits, an accepted yardstick for assessing whether estimates are reasonable, let alone accurate, is typically absent. As a result, voters and elites presumably would have difficulty assessing the merits of any particular estimate of the monetized value of a war’s noneconomic benefits. With regard to the article, even those who have read the methods used in constructing such an estimate would likely have difficulty making that assessment.

Regarding the credibility of estimates of benefits, David Gold (author of a CBA of the U.S. war on terror) offers an observation:

The most difficult issue is that there is no accepted definition as to what constitutes victory, or success, so that there is no way to identify the ultimate benefits. Available evidence does suggest that while there are numerous identifiable sources of costs, it is far less clear where the benefits are located.36

Even when dimensions of benefits can be identified and agreed upon, measurement of them tends to be problematic.37 This reduces their credibility to an audience not already certain that the benefits and net benefits are small.

3.4. If One or All of the Five Discretionary Wars Represent “Bad Decisions,” Is That Equivalent to a Determination That Not Undertaking These Wars Is the Sole Alternative and That Not Doing So Would Have Been “Good”?

To explore this question, consider the Second Gulf War—the US-led war against Saddam Hussein’s Iraq. (This war is outside the article’s scope, but the example is convenient.) Whatever one’s assessment of the foreign policy/national security gains from this war, abundant evidence underlines its enormous human and economic costs. In counterfactual history, not launching the attacks that defeated the Iraqi army and unseated Hussein is the obvious alternative. It was not the only alternative, though.

Before the war, foreign policy analyst Kenneth Pollock outlined five conditions for the conduct of a war with Iraq that he considered essential if it were to have a reasonable chance of a successful, longer-term outcome. In counterfactual history, one could imagine that President Bush had listened to Pollock—rather than to Cheney, Rumsfeld, and Wolfowitz—and planned a different war strategy. (Needless to say, as the sorry history of the war shows, from its early weeks on, those conditions were never met.) Another option rejected the Bush Administration case for war and, a fortiori, Pollack’s case for a “better,” less costly, more effective war: John J. Mearsheimer and Stephen M. Walt made a case for “vigilant containment.”38,39

35Larson and Savych (2005). On p. 218 ff., Larson and Savych explore “casualty-phobia” and “defeat phobia.” They identify circumstances under which U.S. citizens are casualty-phobic versus disaster-phobic. In their empirical analysis, aversion to casualties is generally more salient. However, beliefs about the prospect of success in the war (a future-oriented criterion) is critical in determining whether citizens respond to casualties by wanting to cut U.S. losses versus doubling-down via escalating U.S. involvement when U.S. casualties mount.

36Gold (2007).

37This is the Rashomon effect at work.

38Mearsheimer and Walt (2002).

39Several analysts and commentators advocated an inspection regime for weapons of mass destruction (WMD) that might be termed “intrusive” or “coercive.” Wright, R. (2002), “Legalizing War Against Iraq,” Slate, February 7. A much more fully articulated inspection regime, which called for use of foreign troops to support weapons inspectors, facilitate intelligence gathering regarding possible WMD locations, and deter interference by
We cannot know how a war run on Pollock’s terms would have turned out; it plausibly could have turned out much less costly in lives and disruption than the war we know all too well. Furthermore, when considering the counterfactual trajectory of a particular war, it is not difficult to imagine alternative strategies and other might-have-beens, which could well have led to less costly outcomes. (The Mearsheimer–Walt containment option is an example of such a might-have-been.) Whether such alternative tracks for history would have changed the net cost calculations is even more speculative, though still possible.

In sum, an ex post determination that a particular war had negative net costs does not constitute a definitive argument that the status quo (one version of “no military campaign”) would have been the unambiguously best choice. Stating that X was a bad decision implies that Not-X would have been a better decision, if the two options are mutually exclusive and exhaustive. However, the set Not-X might contain more options than the status quo ante bellum, that is, a state of “no war” if not “peace.” The reader deserves to be alerted to this. As Lincoln might have observed, an ongoing war can seem to be terribly costly and to threaten defeat—until you find the right general (in his case, Grant). For better or for worse, the alternatives to a war fought with the prevailing strategy and decisions include a war fought with a different strategy and different decisions (e.g., in post-Saddam Iraq, not firing all Ba’athists from the Iraqi officer corps).

4. Conclusions

As an effort in applied economics and statistics, the effort to improve the identification of potential benefits of a war as well as the practical measurement of these benefits is reasonable and worth pursuing. The same judgment holds for the CBA of war in general. In practice, the strongest case for the use of CBA is for retrospective evidence. Specifically, the historical record, framed in CBA terms, can serve as context for understanding choices that include a new discretionary war. Moreover, if further research led to CBA results that were consistent with the article’s decidedly negative results regarding past discretionary wars, then such results can establish a presumption that proponents of a new war should have to rebut.

However, as an analytic tool to analyze wars prospectively, CBA should not be the first choice at present. In particular, two difficulties stand out: first, the problematic state of identifying potential benefits of a war, as well as the similarly problematic state of finding practical and sensible ways to monetize those benefits; and second, the considerable difficulty of forecasting, in many cases, an imminent war’s costs and benefits.

What alternatives might there be? Examination of case studies of discretionary wars suggests that the most potent analytical weapon, in terms of affecting decisions to go to war, is logical reasoning, a command of facts and current intelligence about the international political situation and internal conditions in the adversary nation, knowledge of relevant history, and the ability to communicate crisply and effectively. Complementary skills include an ability to address gaps in intelligence, distortions on both sides, ideological motivations, and political interests (domestically and in the adversary’s country). The Iraq War of 2002 offers various good examples of largely qualitative analysis of the merits and demerits of an invasion and the alternatives to it.40 In addition, some analytical tools can be useful. One is war gaming.41 A second is multi-criteria analysis, which unlike CBA does not reduce different criteria to a single denominator (money).42 A third is cost-effectiveness analysis, which is more modest than CBA. (Cost-effectiveness can be used to compare a war to one or more alternatives; the analysis compares the incremental improvement (or change) in an outcome (due to a war) to the incremental increase in cost that that war generates.) But these tools are likely to be useful largely for a motivated, educated audience who want assistance in improving their grasp of the crisis situation. In the government, such an audience might include military leaders and analysts, civilian defense officials, elected officials and their staff, and executive branch officials. Outside the government, this audience might include journalists, academics, leaders and staff of nonprofit organizations involved with foreign policy and national security, activists focused on foreign affairs, and concerned citizens. The effect of these and other analytical tools probably depends in part on the extent to which skilled translators of research are involved in disseminating its findings.

Regardless of such analytical endeavors, the decision process regarding a war is political. Analysts can have a chance of influencing that process if they contribute reasoning and evidence that speaks the language of the audience. Rigorous reasoning and credible evidence, conveyed clearly and simply, might make their way into the live debate when a war is contemplated. Marx said (loosely translated), “The point is not merely to understand the world, but to change it.”43 Analysts who want to both understand and effect change face significant challenges regarding analysis and evidence from both professional and lay audiences, as well as regarding effective communication to policy elites and to the public.

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40Examples include: Mearsheimer and Walt (2002), Pollack (2002), and Rogers (2002). Rogers’s (2002) essay is a prescient analysis and prediction of the likely contours of the impending 2003 Iraq War.

41War games are in part a response to Thomas Schelling’s observation: “One thing a person cannot do, no matter how rigorous his analysis or heroic his imagination, is to draw up a list of things that would never occur to him.” The following works offer a taste of a large literature: Kahan, Jones, and Darilek (1985), Barzashka (2019), and Banks (2019).

42Ackerman (2008).

43Karl Marx. Eleven Theses on Feuerbach. “The philosophers have only interpreted the world, in various ways. The point, however, is to change it.”
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