
12 The long-term costs of conflict: the case of the Iraq War

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12.1 OVERVIEW

The history of war is a cycle of people destroying and then repairing. Fighting, killing, exhausting armies, depleting treasuries and razing buildings . . . followed by taking care of the wounded, reconstructing, repaying war debts and recruiting fresh troops. The repercussions of war persist for years and decades after the last shot is fired.

Despite this well-worn path, the inevitable costs, the economic consequences and the likely difficulties are seldom mentioned at the start of a conflict. Even when they are mentioned, the costs and risks are systematically understated. The result is that the burden of financing the war, the social cost of lives lost, quality of life impaired, families damaged, the expense of caring for veterans, not to mention investments forgone and alternative policies not pursued – none of these are aired in the run-up to war.

There are several reasons for this failure, besides a genuine miscalculation. First, political leaders seldom portray war as a matter of choice, but rather as a necessity – to protect the homeland, the country's citizens or the country's honor. When the threats are less imminent, they are inflated by talking of the risks of appeasement: the battle is portrayed as inevitable, and to wait would only increase the eventual costs. In such a situation, exemplified by the Second World War, talk about costs is beside the point.

The truth, however, is that frequently there is some element of choice. There is a broad consensus that the war in Iraq, and to a large extent also that in Afghanistan, was a war of choice. In these situations, the public has to be persuaded, and politicians need to maximize public support for the war, so they minimize the risk of failure and underestimate the expected duration. The drumbeat for war is enhanced by demonizing the 'enemy' in order to galvanize widespread support. Leaders appeal to raw emotion, and this emotional support would be undermined by sober talk of risks and costs.

Moreover, elected officials are incentivized to focus nearly all their attention on the short term. The tyranny of the electoral cycle is especially acute in the United States, where all the top cabinet, sub-cabinet and departmental positions are occupied by political appointees who serve for short periods. They have every reason to obsess about the present and near-future results and virtually no motivation to weigh the long-term financial and economic consequences of their actions. Even among those who oppose military action, their arguments are weighted more toward the immediate consequences than on the long-term ramifications.

A final explanation for why war costs are always understated is that government accounting systems make it very difficult to track and report on the true costs of war, and provide an easy way for a government to conceal the truth when costs turn out to be greater than had been anticipated. The US government primarily utilizes cash,

rather than accrual, accounting. So at best, government financial accounts track inflows and outflows of funds within a fiscal year, ignoring the long-term costs of depreciating equipment, purchasing complex weapons systems or caring for disabled veterans. Expenditures are fragmented among many different departmental budgets and programs, making it laborious to piece together a complete picture.

The US government makes no attempt to capture the economic costs (including those associated with deaths or quality of life impairment of those injured), much less any tracking of how the economy might have fared in the absence of any conflict. Consequently, the estimate of budgetary costs that is presented to the public and the press is a partial snapshot, based on faulty accounting and incomplete data. Moreover, attention is focused on the upfront budgeted expenditures – projections of what the war is estimated to cost at the beginning. Additional amounts are appropriated little by little, through supplementary budgets, making it all the more difficult to tally up the total costs.

The Iraq War illustrates all of these factors. The combination of a stridently pro-war President, an administration and Congress fixated on the initial combat phase of the mission, and the lack of transparent and auditable accounting systems in the Pentagon, together meant the true costs of the war were hidden from the American public. Beyond that, there were some in the administration who attempted to obscure information that was crucial to understanding the full costs of the conflict, including both the budgetary costs and the broader economic effects. These full costs are not transparent anywhere in the system. Throughout the nine years of conflict in Iraq and Afghanistan, the non-partisan Congressional Budget Office (CBO) has continued to use accounting frameworks that focus mostly on the near-term budgetary costs, even as the long-term accrued costs of the wars and their impact on the economy have grown more apparent.

It may be hard to believe, but we still do not know how much the war in Iraq has cost even on a very rudimentary level. The basic information about outlays – what has actually been spent – is not readily available. The accounting systems at the Pentagon are notoriously poor at tracking expenditures; the Department of Defense has consistently flunked its annual financial audit for the past decade, and this makes it almost impossible to determine where funds are being spent. Expenditures are consolidated into massive 'catch-all' categories. For example, the Department lumps more than \$25 billion of its annual operations and maintenance budget into 'other services and miscellaneous'. The Congressional Budget Office, the Congressional Research Service (CRS), the General Accounting Office (GAO), the Iraq Study Group and the Department's own auditors and Inspector General, have all found numerous discrepancies in the Pentagon's figures. The most detailed analysis of war costs has been conducted by the CRS. The CRS has noted that none of the known factors in the increasing war costs, including the operating tempo of the war, the size of the force, and the use of equipment, training, weapons upgrades and so forth, 'appear to be enough to explain the size of and continuation of increases in cost'.¹

Our work documenting the costs of the war, which is based entirely on government data,² was intended to fill this void. To ensure the credibility of our analysis, we deliberately used conservative assumptions. As we will show in this chapter, the empirical data that have come to light since the publication of *The Three Trillion Dollar War* demonstrate that our cost projections were indeed very conservative, and the total long-term costs of the Iraq and Afghanistan conflicts will exceed our earlier estimates.³

12.2 UNDERESTIMATES DUE TO POLITICAL MISJUDGMENT

The run-up to the Iraq War provides an especially vivid example of how leaders underestimate costs in order to mobilize public support. The invasion of Iraq was a war of choice, in that the United States was not attacked by Iraq, nor was there any serious threat of an imminent attack. Rather, the invasion was justified as a way to pre-empt any possibility that Iraq might acquire the means with which to threaten the US. The administration, accordingly, had considerable leeway to make decisions on the timing of the invasion, the preparations for the war, and how to pay for it. Nevertheless, the 'shock and awe' campaign of Operation Iraqi Freedom was launched in March 2003 without waiting for the full analysis of the UN weapons inspectors, without fully equipping US military forces with protective combat gear, and despite the vociferous opposition of many of America's closest allies.

In these circumstances, it was not surprising that the strongest supporters of the war were also the most optimistic about the likely costs.⁴ Defense Secretary Donald Rumsfeld estimated that the war would cost less than \$60 billion. Deputy Secretary Paul Wolfowitz predicted that the war might 'pay for itself', as the Gulf War had allegedly done.⁵ Those who sought to question this rosy viewpoint were banished or ignored. The President's chief economic advisor, Lawrence Lindsey, was fired for speculating that the war might cost as much as \$200 billion. In an interview with the *Wall Street Journal* in September of 2002, Mr Lindsey estimated that the invasion and regime change in Iraq could reach 1–2 percent of gross national product (GNP), or about \$100 billion to \$200 billion.⁶ Defense Secretary Donald Rumsfeld immediately dismissed Lindsey's estimate as 'baloney'.⁷ Mitch Daniels, the Director of the Office of Management and Budget, said Lindsey's estimate was 'very, very high' and projected that the costs would likely be between \$50 billion and \$60 billion.⁸

Writing in *Fortune* Magazine in 2008, Mr Lindsey noted that the administration had engaged in a deliberate effort to suppress any discussion of war costs – a strategy that he believed backfired on President Bush. He wrote:

The real problem for my colleagues in the White House was not my analysis but that I mentioned a hypothetical cost of the war that might be sufficiently high to raise budgetary objections in Congress. But there was a high cost to their strategy. Five years after the fact, I believe that one of the reasons the [Bush] administration's efforts are so unpopular is that they chose not to engage in an open public discussion of what the consequences of the war might be, including its economic cost. I think that having done so not only would have been good government, but would also have been good politics . . . Putting out only a best-case scenario without preparing the public for some worse eventuality was the wrong strategy to follow. Long-term credibility is the best asset any President has, and it is too bad for the country that his credibility was squandered by the White House not being upfront about what the war might cost.⁹

Even those in the military who were skeptical that the war could be waged quickly and cheaply were rebuffed by the pro-war ideologues in the administration. The Army Chief of Staff, General Eric K. Shinseki, testified before the Senate Armed Services Committee that post-war Iraq would require 'something on the order of several hundred thousand soldiers'. Mr Wolfowitz said the General's estimate was 'wildly off the mark'.¹⁰

While the run-up to the invasion was filled with discussions about the policy implications of the war and the dangers of not invading Iraq, there was an acute shortage of

planning for 'winning the peace'. Very little attention was paid to what would happen after coalition forces had succeeded in toppling Saddam Hussein, even though given the lopsided balance of military power, the outcome of a military campaign was never in serious doubt. There was an astonishing failure to plan for the management of the occupation of the country, and what it would cost.

These issues were raised in reports and analysis produced by the RAND Corporation, the Army War College, the United States Institute of Peace, and the Institute for National Strategic Studies of the National Defense University, as well as in the State Department's 'Future of Iraq' Project. All concluded that success in post-war Iraq would require large numbers of troops for an extended period, which would be needed in to maintain law and order, prevent sectarian strife and reconstruct the country. The only serious scholar to study the full costs if the war went badly, William Nordhaus of Yale, came up with a figure of \$2 trillion¹¹ which was entirely ignored. But as Larry Diamond, a former senior advisor to the Coalition Provisional Authority in Iraq, wrote in his book *Squandered Victory*:

These warnings were not heeded by the administration, because those numbers did not fit in with its willfully optimistic assumptions that 'American troops would be welcomed as liberators by an Iraqi population joyous at their deliverance from the clutches of Saddam's regime, that resistance would be limited, and that the Iraqi state would remain intact'.¹²

As the war dragged on through the decade, the early cost estimates for the invasion became increasingly untenable. The administration reacted by resorting to various devices to hide the escalating bill. These included financing part of it from the regular defense budget, where it was less visible to Congressional and other observers. To be fair, it is always difficult to separate out some of the costs associated with peacetime defense and war. But there were many items primarily related to the war, such as increased recruitment costs, higher base pay, greater amounts of medical aid for troops, increasingly generous retirement benefits, and greater strategic planning resources to manage military operations, and these contributed to spending increases. However, these expenditures were buried in hundreds of regular budgetary line items, and were not being counted as war costs.

Along with this, there was a concerted effort to suppress information about the true number of wounded troops. By the end of 2007, there were more than 64000 US troops who had been wounded, injured, or had contracted an illness severe enough to require medical evacuation from the battle zone.¹³ However, the official tally was only 30400 – less than half that number. What accounted for the difference was that the Pentagon had adopted a very narrow definition of 'wounded' that included only those injured directly in hostile actions. This method for tracking casualties was in contrast to the system for reporting fatalities, in which the Pentagon reported all deaths due to hostile and non-hostile causes.

Consequently the official tally that was reported to Congress, and widely reported in the media, excluded troops injured during transportation to and from the battlefield, during routine exercises, vehicle crashes, construction accidents, field work, or who suffered mental breakdowns, self-inflicted injuries or contracted exotic diseases. We compared the number of non-hostile injuries during the war to the level of such injuries during peacetime, and found that such injuries were approximately 75 percent above the peacetime level.¹⁴

Since all troops receive the same treatment regardless of how they are injured, the main consequence of this under-reporting was a vast underestimate by the Department of Veterans Affairs (VA) of the resources it would require, resulting in huge delays in providing disability compensation and widespread shortages of medical care for discharged veterans. The VA actually ran out of funding for two years in a row, causing enormous problems for troops returning from Iraq and Afghanistan. Those in the administration controlling the data had, in effect, not only misled the public, but provided incorrect information to other parts of the administration, making it impossible for the VA to serve its constituents.¹⁵ In fiscal year 2005, the VA was forced to request an additional \$1 billion in emergency funding, which it admitted was due in large part to underestimating the needs of returning Iraq and Afghanistan troops. In fiscal year 2006, the VA had to ask for an additional \$2 billion, much of which was due to an 'unexpected' increase in the number of returning veterans requiring care.¹⁶ The VA was so poorly equipped to serve the returning wounded that many troops ended up in limbo, unable to transition from military status into the veterans care system. In 2007, the plight of these veterans finally burst into view at Walter Reed Army Hospital, where seriously injured troops were found languishing for months in squalid outpatient conditions because the Veterans Department did not have the capacity to accept all of them.

One plausible theory is that the military tried to limit publicity about the full number of casualties because the Army and the Marines were facing a major challenge in recruiting. Enlistment rates had fallen to their lowest levels since the beginning of the All-Volunteer Force. The priority for the leadership in the Defense Department was to recruit new troops, not funding for veterans. As David Chu, the Undersecretary of Defense for personnel and readiness, told the *Wall Street Journal*: 'The amounts [of veterans' benefits] have gotten to the point where they are hurtful. They are taking away from the nation's ability to defend itself.'¹⁷

However, by 2007 the issue of direct casualty figures was overtaken by the overwhelming numbers of veterans seeking medical treatment. Hundreds of thousands of returning veterans had flooded into the VA's hospitals and clinics and filed for disability compensation and other benefits. The medical community was reporting an epidemic of post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI). The folly of the early projections based on a quick, cheap war was manifest. Apart from Vice President Dick Cheney, the political leadership that had been most bullish about the war, and most dismissive of the potential costs, had been replaced by a more sober team, which was forced to deal with the military, medical and economic fall-out of the war.

12.3 SHORT-TERMISM

The short-termism of elected officials during the Bush administration played a significant role in distorting war expenditures. The administration continued to cling to the notion of a rapid conclusion even when the facts on the ground pointed in precisely the opposite direction. In November of 2003, as the violence was escalating, President Bush said that Iraq had reached 'a great turning point'.¹⁸ In June, 2004, following worsening violence, the President declared that: 'A turning point will come two weeks from today'.¹⁹ In January 2005, on the day before the Iraqi elections, Bush predicted that: 'Tomorrow the world will

witness a turning point in the history of Iraq'.²⁰ But the election was boycotted by Sunnis, and the post-election turmoil resulted in a takeover by sectarian-minded Shiites, which led to sectarian strife. In May 2005, as the bloodshed was escalating into full-blown civil war, Vice President Cheney announced that: 'they're in the last throes, if you will, of the insurgency'.²¹ He repeated this opinion in March 2006. Casualties and attacks against US and coalition troops, and civilian casualties in Iraq, reached an all-time high in the summer of 2006. Cheney, however, stated that: 'we're making steady progress'.²²

The President's confidence was enduring, but the attitude that victory was 'just around the corner' led to repeated instances of officials opting to minimize or defer current spending. This 'penny-wise, pound foolish' approach was responsible for many human tragedies, and led to decisions that increased the long-term costs of the war.²³ The costs were not only financial; the toll in deaths and injuries was unnecessarily increased.

At the outset of the war, the military was short on body armor, helmets and armored vehicles for the conflict and the ensuing occupation. But the United States went to war anyway. The philosophy that underlay this decision was apparent in Secretary Rumsfeld's comments to troops in Kuwait in December 2004. When asked by a soldier why there was insufficient material to up-armor their vehicles, the Pentagon chief famously replied: 'You go to war with the army you have – not the army you might want or wish to have at a later time.'²⁴

This attitude persisted throughout the Rumsfeld era. In 2004, the Marines urgently requested that the Pentagon order 'Mine Resistant Ambush Protected' (MRAP) vehicles to transport troops in the field, after testing found that the MRAPs offered near-total defense against improvised explosive devices (IEDs) that were devastating the armed forces. But the MRAP vehicles, at \$1 million apiece, were deemed too expensive. The military continued to rely on Humvees, resulting in a tragic increase in deaths and serious injuries in 2005–06, notably from improvised explosive devices, which were implicated in two-thirds of the combat deaths in Iraq and 50 per cent of casualties in Afghanistan.²⁵

The temporary cost savings were achieved at the price of a huge rise in expensive medical care and in long-term disability compensation for the veterans. It was not until May 2007 that the Pentagon reversed this decision and ordered the Humvee fleet to be replaced with MRAPs as a 'highest priority', earmarking more than \$3 billion for the acquisition of these vehicles. The production of the MRAPs was slow, and it was another year before they were deployed on key routes. Since then, the introduction of MRAPs has been widely credited with reducing deaths and injuries from roadside explosives.²⁶

Another example of the costly 'short-termism' is the ongoing subcontracting of maintenance for military vehicles to inexperienced private operators. This decision saved on short-run maintenance costs but resulted in a significant shortening of the vehicles' expected lives. As we will see below, in this respect the government accounting system conspired with political expediency because it was not apparent to Congress that these decisions were adding significantly to the long-term cost of the war.

Viewing the war as a transient phenomenon caused enormous damage to the troops. The war planners did not consider that the all-volunteer force lacked the manpower to sustain a long-term conflict. Consequently, the war has featured multiple tours, reduced dwell time (the amount time at home between deployments), heavy reliance on Reservists and National Guards, much higher deployment of parents of young children, and an unprecedented reliance on private contractors in the field. Of the 2 million Americans

deployed to Iraq or Afghanistan since 2001, 40 percent have been deployed more than once, 28 percent are Reservists and Guards, and 38 percent are parents of young children.²⁷ This has led to an epidemic of mental health disorders, including depression, anxiety and post-traumatic stress disorder, all of which have long-term budgetary and economic costs to society.²⁸

In turn, the need to rely so heavily on Reservists and Guards increased the total cost of the war. Regular active-duty troops are already paid for in the regular Pentagon budget. But the cost of activating Reservists and Guards and paying them on a full-time basis is an extra, incremental expense.²⁹ These troops were also older than active-duty troops (five years older, on average) and therefore entitled to higher levels of special adjustment pay, combat pay, parental and other benefits. There is evidence that they have experienced higher rates of mental health and readjustment problems, leading to high long-term costs as well.

Short-termism also permeated the decision to finance the war through increased borrowing. Previous wars, most recently Vietnam under President Johnson and the Cold War defense build-up under President Reagan, have primarily been financed through taxes. But the Bush administration shunned this notion, persisting with its policy of tax-cutting just as war spending was getting into full swing. The administration's second round of tax cuts in 2003 (targeted to the top of the income bracket) coincided with the decision to invade Iraq at the same time that the US military was already committed in Afghanistan. The tax cuts created the short-term illusion of prosperity, but in reality the policy adopted by the Congress and the President was simply to pay for the spiraling war costs through increased deficits and, in that manner, to pass those costs on to future generations.

In one way or another, it was inevitable that these debts would impose serious costs on the economy in the future – taxes would have to be raised or other expenditures cut. One cannot fight a war for free, and the additional burden imposed by the interest payments would result in additional tax burdens. But the costs of the war are now likely to interact with the additional debt burdens arising out of the Great Recession of 2008 and the associated bailouts and stimulus measures. These have led to large additional liabilities without commensurate assets (except in the case of some of the spending on infrastructure, education and technology). Already there is evidence that, as a result of worries about these cumulative debt burdens, government will curtail some public investments including some yielding high returns, and growth will, as a result, be lower than it otherwise would have been.

12.4 UNDERESTIMATES DUE TO POOR ACCOUNTING SYSTEMS

Government accounts are intended, at their most basic level, to provide accurate information, compiled under generally accepted accounting rules, showing taxpayers and their elected representatives where tax revenues came from, and where they were spent. Good accounting and honest projections are an essential part of good governance. Deceptive accounting, however, has real costs.

Perhaps the most glaring complication in accounting for war spending is that the vast majority of funding was secured through supplemental 'emergency' appropriations.

These special appropriations, which totaled around \$900 billion in more than 25 special 'emergency' supplemental laws between 2001 and 2009, are exempt from the normal process of Congressional budgetary oversight. The 'emergency' funding vehicle is supposed to be used only rarely – to fund needs that are 'unforeseen, unpredictable, and unanticipated' such as natural disasters, when the overriding need is to provide funds quickly. This means that the funding is outside the regular budget caps and the regular oversight mechanisms, and that the budget staff on the relevant committees has less time to examine the funding proposals in detail. It is perhaps understandable that the Bush administration did not know how much money it would need at the beginning of the war, and that it requested the initial funding for Afghanistan in this manner. But the administration and Congress funded the war in this manner from 2001 until 2010, when President Obama, who criticized this policy during the election campaign, finally requested war funding for 2011 through the regular budget process.³⁰ (He had, however, continued the policy during his first budget cycle in 2010.)

This trick allowed the administration to maintain the pretence that the budget deficit was not permanently altered by the war. Congress was happy to be complicit in this 'accounting conspiracy' since the self-same lack of oversight turned the dozens of emergency war appropriations into veritable Christmas trees for pork-barrel projects and earmarks – many quite unrelated to the war or defense.

In addition, the emergency supplemental funding bills led to the area of most confusion in understanding war funding, which is that ordinary defense spending was mixed in with the supplemental requests, and vice versa. Excluding the visible cost of the wars, the Pentagon's regular budget grew by 25 percent between 2001 and 2009 – another trillion dollars.³¹ But in large part due to war-related spending, the Department of Defense (DoD) was able to push through hundreds of billions of dollars in items that were not directly related to the war as part of the emergency supplemental process.

The CRS and the CBO have found it difficult to untangle this record. For example, a recent CBO study found that more than 40 percent of the Army's spending for reset, which is the repair and replacement of war-worn equipment, was not for replacing lost equipment or repairing equipment sent home. Instead, Army funds were spent 'to upgrade systems, to increase capability, to buy equipment, to eliminate longstanding shortfalls in inventory, to convert new units to a modular configuration, and to replace equipment stored overseas for contingencies'. It is unclear, the CBO stated, how much of this reflects the stress on equipment from war operations as opposed to the Department of Defense's longstanding wishes to upgrade in these areas. The GAO recently testified that the Army: 'could not track reset or ensure that funds appropriated for reset were in fact spent for that purpose, making it more difficult to assess the accuracy of the DOD's requests'.³² In addition, the CRS has reported that much of the equipment being repaired now – ostensibly due to the war – was originally slated for repair or replacement at a later date, and so is being repaired or replaced sooner than anticipated.³³

To be fair, there are often no 'clean lines' for separating out war from other defense expenditures (a problem known more generically as joint costs). Equipment and personnel used for the war are often used partially for other purposes. Standard accounting conventions for allocating such joint costs may not be appropriate for capturing all the nuances of war spending.

However, the accounting errors for the war are pervasive and ongoing. For example,

in December 2009, the Defense Contract Audit Agency examined \$5.9 billion in Afghanistan troop support contracts – and reported that \$950 million of the costs were unreasonable or lacked enough documentation to support them.³⁴ The Special Inspector General for Iraqi Reconstruction, who was appointed in 2004 to oversee the reconstruction program, has published dozens of reports detailing problems with how funds associated with the \$50 billion reconstruction program have been accounted for.³⁵

Moreover, the incremental costs of the war extend to expenditures of the Department of Defense that are not war related. The war and the way it has been conducted (with repeated tours of duty, with troops being forced by 'stop-loss' policies to be deployed beyond the time specified in their contracts, and with other involuntary extensions) has made joining the armed forces and reserves less attractive. To meet recruiting goals, compensation has been increased and standards lowered. The Department of Defense bears these costs even when troops are not engaged in combat.

12.4.1 Future Costs

Of course, current spending on the war represents only a small portion of the final cost. Most expenditures remain in the future, in the form of veterans' health and disability benefits and the replacement of vast quantities of expensive military hardware that will simply be abandoned in Iraq once the war is over.

In a private company, these types of contingent liabilities would be reflected in its accounts through the company's balance sheet, through 'accrued liabilities'. This provides a snapshot of the company's financial health through a complete tally of its assets and liabilities. A few countries such as New Zealand have attempted to compile a national balance sheet. But the United States does not have such a system. As a result, changes in future or 'accrued' liabilities are not captured in government accounts. This makes the full cost of the war very hard to discern. Although this problem exists in many areas of public spending, the military budget has a disproportionate share of such expenditures. Weapons systems, planes, ships, helicopters, vehicles and the technological systems that power them are all long-term capital expenditures that are paid for over many years, and that have costs and benefits that extend over many years.

The problem of 'accrued liabilities', while always present in government programs, is especially acute in the case of war. We know from the evidence of previous wars that the costs of caring for veterans extend well into the future. The peak year for paying veterans disability compensation to First World War veterans was 1969 – more than 50 years after Armistice. The largest expenditures for Second World War veterans came in 1982. Payments to Vietnam and first Gulf War veterans are still climbing.³⁶ The magnitude of these future expenditures will be even higher for the current conflict, partly because of the changes in technology which enable many who might have died in earlier conflicts to survive – but to bear life-long disabilities. The Iraq and Afghanistan wars have a much higher ratio of wounded to fatalities than earlier wars: there have been 6.8 troops³⁷ wounded in hostile action for every US military death, compared with 1.3 in Vietnam, and 1.17 in the Second World War. Yet the inevitable disability payments to US veterans, which have already been incurred but not yet paid, are not recorded anywhere by the US accounting system.

Even if we overlook the deficiencies of the accounting system, the budgetary accounts

by themselves cannot in any sense be a full reckoning of the economic (as opposed to the purely financial) impact of the war. For example, the accounting system cannot capture the economic cost to society of lives lost or disabilities incurred in combat (see the discussion below). Nor can they measure the impact of broader instability caused by the war, such as the fourfold rise in oil prices that took place between 2003 and 2008, at least a portion of which was due to increased political instability in the region.

12.5 ECONOMIC COSTS

Governments naturally focus on budgetary costs. But what really matters are the overall costs to the economy. These typically exceed budgetary costs by a considerable margin. They are also even more difficult to estimate. In our study of Iraq we quantified only a fraction of the microeconomic and macroeconomic costs, yet even these amounts proved very substantial.

12.5.1 Microeconomic Costs

Microeconomic costs include costs borne by individuals and their families. Some examples of these are: (1) families who were obliged to pay for veterans' medical treatment as a result of insufficient funding for the VA; (2) families who paid for body armor for their sons and daughters serving in the armed forces; (3) families where a family member has been obliged to give up paid employment in order to take care of a disabled veteran; (4) the 'economic value of a lost life' or the 'economic value of an injury', such as a lost limb, which are far greater than the cash compensation received in the form of death or disability benefits; (5) the wages and benefits paid to many troops, especially guardsmen and reservists, may be markedly lower than their opportunity costs of working at home; (6) the social costs of not having reservists on hand to fulfill their traditional responsibilities (these can be very high – for example, the lack of first responders available in Louisiana and Mississippi during the Hurricane Katrina disaster, while thousands of National Guardsmen from those states were stationed in Iraq). Amongst this list (and the longer list provided in our book), the easiest to quantify are costs associated with (3) and (4): these numbers alone turn out to be in the hundreds of billions of dollars.³⁸

12.5.2 Macroeconomic Costs

Wars have all kinds of effects on the overall economy, in the short term and the long term. When the economy has a high level of unemployment, wars are often argued to be beneficial, because they return the economy closer to full employment. This argument is wrong. Government spending of any kind will typically restore the economy to full employment, but spending on investment provides for future growth, whereas spending on wars does not. Compared to spending on investment in education and infrastructure, for example, war spending unambiguously leads to lower long-term economic performance. Even if non-war spending is not directly invested, it normally still has a direct economic benefit; if there is excess capacity and unemployment, non-war spending typically stimulates the economy more than war spending (per dollar spent).

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Macroeconomic consequences of financing the war

The full costs of the war may depend on the way that it is financed. The Iraq War was unusual in that it was financed almost entirely by debt. At the time the United States went to war, the US was already running a government deficit; then taxes were cut, increasing the deficit further.

Deficit financing imposes budgetary costs (in the form of higher interest payments) long after the crisis is over. But it also can impose broader economic costs. Government borrowing can 'crowd out' private borrowing. The additional demand for funds can lead to higher interest rates, and the higher interest rates can discourage investments, including investments in research and development (R&D), implying a lower rate of economic growth.

There is a standard argument for why an unusual event, such as a war, that yields long-term benefits (whether these wars actually did that is more problematic) should be financed largely by debt. Since taxation is distorting, and the magnitude of the distortion increases disproportionately with the size of the levy, it is economically more efficient (and in some sense, fairer) to share the burden over time and across generations.

It is clear that these concerns were not paramount in the financing decisions made under the Bush administration. The administration chose to finance the war using debt because it was unprepared for the magnitude, duration and intensity of the conflict. It continued using debt finance even when it was clear that the original projections for the war were far too optimistic. Relying on debt finance made it appear that America could wage the war without incurring a high cost, by passing the cost on to future generations.

Because so much of the costs of the war are borne by those not making the decisions – not even by voters – there is a strong argument that it is dangerous for society to finance a war in ways which seemingly absolve current voters from bearing any or much of the costs. Indeed, there is a compelling case not only that countries that go to war should employ accounting conventions that make the costs apparent, but that at least a substantial fraction of the costs should be paid by a 'war' tax, so that citizens can express a view of whether perceived benefits are commensurate with at least the costs borne by the citizens of the country waging war.

Studies of the budgetary impact of a war (like the Iraq War) that is funded largely by borrowing naturally focus on the interest costs: anyone who buys a house or car on credit knows that the interest payments may easily be far larger than the purchase price. But critics say that including the interest costs is double counting. One simply wants to know the (expected) present discounted value of the payments (that is, converting future payments into present dollars).

If it were costless to raise money, then imposing future costs on the budget through borrowing (necessitating raising more tax revenues in the future) would be of no concern. The timing of financing would be irrelevant. But in reality the costs can be substantial, so that there is a 'distortionary' cost associated with these future budgetary payments. The magnitude of such costs depends on the magnitude of the distortions associated with a country's tax system. However, economists differ markedly in their judgments about the magnitude of these costs.³⁹

Even if the war had been paid for through increased taxation or reduced spending, there still would have been costs in addition to those associated with the actual resources used. Taxation is always distortionary – discouraging work or savings depending on

where the taxes fall. And where other spending is reduced, there are large costs, especially where those foregone expenditures yield high economic returns.

Different types of spending will produce more or less 'bang for the buck'; that is, for each dollar of spending, there may be a greater expansion of gross domestic product (GDP) or more job creation. But much of war spending (for instance, on hiring foreign contractors in Iraq) has particularly low benefits in terms of either jobs or GDP. Overall the economic impact of war spending largely rests on the benefits from increased security, which are far from certain and very difficult to quantify.

Incidental macroeconomic costs

The Iraq War generated another major macroeconomic cost by almost certainly contributing to the dramatic rise in oil prices. Prior to the war, oil was selling at \$23 a barrel. At its peak, the price hit more than \$140 a barrel. It is difficult to be sure how much of this increase was driven by the war.⁴⁰ Certainly oil futures (which provide a market perspective on how the balance of future demand and supply is expected to play) gave no hint of rising prices prior to the war, even though it was clear that there would be increasing demand from China and elsewhere. The expectation was that there would be a concomitant increase in supply, mainly from the Middle East, to compensate. The war upset that calculation; not only was the supply of oil from Iraq curtailed, but the war introduced new uncertainties concerning the reliability of supply from the Middle East in general. Our study employed extremely conservative assumptions, that only \$5–\$10 of the enormous increase was attributable to the war, even though many of the industry experts with whom we consulted suggested that the price impact was far greater.

The rise in the oil price had a series of both short-term and long-term effects. The high oil price reduced real incomes in the US and other industrial countries. Consequently, domestic aggregate demand was weaker than it otherwise would have been, necessitating looser monetary policy to maintain the economy's growth. This loose monetary policy contributed directly to the housing bubble which, when it eventually burst, imposed costs on the American and global economy in the trillions of dollars. Assessing what fraction of these multi-trillion dollar costs should be attributed to the war is inevitably contentious. At the time we wrote our book, the bubble had not yet burst, though we clearly identified the risks, and we did not attempt to assess either the total costs or the fraction of those costs attributable to the war. Needless to say, they would have been significant – almost surely of equal magnitude to the other costs discussed so far.

One of the reasons it is difficult to make such assessments is that the costs are a result not only of the war's impact on oil prices but of how the government responded.⁴¹ Different policy responses that would have mitigated the costs – for example, stimulating the economy through investment tax cuts rather than monetary policy, or increasing public investment spending – would have raised the long-run productivity of the economy.

To avoid these tangles, in our study we took a different tack, designed to provide a lower bound of the costs. We simply assessed the direct cost to the United States of the increased transfer of resources to oil-producing countries and the indirect impact on GDP through the 'multiplier' (the fact that if Americans spend less on US goods, national income will be lower).⁴² These impacts on the macro-economy have, in turn, adverse effects on tax revenues, which should have been included in the full analysis of the budgetary impacts.

12.5.3 Interaction between Broader Economic Costs and Budgetary Costs

Our analytic framework separates out economic costs and budgetary costs, but the two are interlinked in complex ways. For instance, a weaker economy leads to lower tax revenues, with large budgetary implications. And, as we have noted elsewhere, the large budgetary costs lead to a crowding out of public investments, impairing future growth.

Another important set of interactions involves the price of oil. One of the biggest drivers of the operating budgetary cost of the war is the price of fuel. The Pentagon is the largest single purchaser of fuel in the world, and Iraq was especially fuel-intensive due to heavy vehicles, transport and generators for all the military bases built by the USA. Afghanistan is even more fuel-intensive; recent research shows that 23 percent of the estimated \$1 million cost per soldier per year is for fuel.⁴³

Longer-run economic costs

Government responds to increased war spending in one of three ways, each with its own consequences: (1) increased taxes; (2) reduced public expenditures; and (3) increased borrowing. In the case of the Iraq War, as we have noted, the responses focused on reducing other public expenditures from what they otherwise would have been, and increased borrowing.

To the extent that it is public investment that gets crowded out, future growth is lowered. To the extent that there is more borrowing, there is a risk (especially once the economy is restored to full employment) that private investment will be crowded out. Savers who would otherwise have held corporate debt, for instance, hold government bonds. Whether it is private or public investment that is crowded out, future output will be lower. (There are, in addition, budgetary impacts: the lower GDP generates lower tax revenues, with second-round effects on, for example, public investment.)

Again, quantifying these costs is not easy; especially once 'second-round' general equilibrium effects are taken into account. Assume, for instance, that the government, instead of cutting back on public investment, cuts back on public consumption. Individuals will respond to these cutbacks. If they respond, for instance, by attempting to maintain their standards of living, they will reduce savings, and if the economy is near full employment, private investment will decrease.⁴⁴

To the extent that public investment is crowded out, the costs can be quite large, because most studies suggest that the returns to public investment are far higher than those to private investment.⁴⁵

12.6 UPDATED ESTIMATES OF THE COST OF THE IRAQ AND AFGHANISTAN WARS

The conflict in Iraq and Afghanistan is now the second-longest conflict in US history (after Vietnam) and the second most expensive (after the Second World War). Two million Americans have served more than 3 million tours of duty.

We estimated that the budgetary and economic cost of the wars to the US would reach \$3 trillion dollars. As predicted, the USA has already spent \$1 trillion in operating costs. But our estimates of costs going forward have proven far too low.

The final cost is likely to exceed our original estimate for three main reasons. First is the long-term cost of providing medical care and paying disability compensation for veterans. Our estimate of \$700 billion was based on assumptions derived from patterns of medical claims and disability claims experienced in previous wars. Veterans are filing more disability claims and filing them more quickly than we assumed. For example, we assumed that by 2010 between 31 percent (best-case scenario) and 33 percent (moderate scenario) of veterans would have filed claims. In reality, by September 2010 more than 41 percent of returning veterans had already applied for disability benefits, with the average number of disabling conditions per claim also exceeding our estimates. Similarly, we expected that 32–35 percent of returning veterans would be treated in the VA health system by 2010. The actual number is running at more than 48 percent.⁴⁶ Most significantly, perhaps, we projected that 15–20 percent of veterans would be diagnosed with mental health issues, whereas numerous medical studies estimate that anywhere from 25–33 percent of returning veterans are suffering from anxiety disorders, depression, and/or post-traumatic stress disorder (PTSD).⁴⁷ The suicide rate in the Army has more than doubled, with many failed suicides suffering serious injuries that require lifetime care.⁴⁸ The mental health epidemic will increase both immediate and long-term costs. In addition to the need to expand mental health clinics, hire psychiatric personnel and pay higher disability benefits, research from previous wars has shown that these veterans are at higher risk for lifelong medical problems, such as seizures, decline in neurocognitive functioning, dementia and chronic diseases.⁴⁹

For all these reasons our estimates for the total cost of providing care and treatment for these veterans were substantially too low. Other veterans' costs will also be markedly higher than we had estimated. One of our core recommendations in the book was that Iraq and Afghanistan veterans should be able to receive full education benefits, on a par with those provided to Second World War veterans in the GI Bill. Congress and the administration finally enacted a new GI bill in 2008. This is an investment that will yield significant economic benefits. However, it will also add to the budgetary cost of the war.

The second reason for the higher-than-anticipated cost is the escalation of the conflict in Afghanistan. Our central assumption for Iraq – that combat troops would pull out by 2011 leaving behind a significant presence of non-combat troops – looks likely to occur. (The current schedule is for US troops to withdraw from Iraq entirely by December 2011, but a large residual non-combat presence will remain nearby in Kuwait.⁵⁰) But what we did not consider was the trajectory in Afghanistan. From 2002 to 2004, the US war budget for Iraq was five times higher than its spending in Afghanistan. One of our (and others') criticism of the Iraq War was that it had resulted in neglect of the war for which there was some justification – that in Afghanistan. This neglect has led to a resurgence of fighting and now, the commitment of 30 000 additional US troops in Afghanistan (bringing the total US forces to 70 000 and total NATO forces to more than 100 000). The US–NATO combat presence is likely to persist to at least 2015. Support costs per soldier are at least 25 percent higher in Afghanistan than in Iraq because of the remote and mountainous terrain, which necessitates airlifting supplies or transporting them over narrow and dangerous land bridges.

In addition, the US has made extensive commitments to Afghanistan beyond combat. For example, it has pledged to train and equip 100 000 new Afghan soldiers and 100 000 new policemen by 2013. Afghanistan in 2010 had around 50 000 troops, who earned less

than the wage of Taliban fighters. To recruit, train and better compensate the new army and police force, and to avoid defections to the Taliban, will cost upwards of \$10 billion a year. Given that Afghanistan is one of the poorest countries in the world, it is widely expected that the US will continue to pay for the upkeep of this army and police force for the foreseeable future. According to President Hamid Karzai, the US will continue paying this cost until 2024 – adding another \$150 billion to the US tab.⁵¹

The third area where costs have outstripped our initial estimates is the economic costs of the war. Just as we underestimated the budgetary costs of providing for the health and disability benefits of the large number of injured troops, so we also underestimated the economic costs. As we noted, the budgetary costs are but a fraction of the total economic costs. Most significantly, to the extent that one believes that the weaknesses of domestic aggregate demand caused by the high oil prices contributed to loose monetary and regulatory policies that fueled the housing bubble, one must attribute to the Iraq War part of the costs of the Great Recession which followed the bursting of the bubble. With those costs likely to amount to trillions of dollars, even attributing a moderate fraction of 'blame' to the war adds hundreds of billions of dollars to the ultimate costs of the war.

12.7 CONCLUDING REMARKS

As we emphasized in our book, there is no such thing as a 'war for free'. Wars are expensive and it is important to know more precisely just how expensive. This is especially true for wars of choice. Politicians, as we have noted, have incentives to underestimate and under-report the costs of war. That task is made easier by standard public sector accounting frameworks. Here (and more extensively in our book) we have outlined some of the obstacles (including conceptual and empirical problems that need to be resolved) to constructing more accurate estimates and to including some of the key budgetary and economic costs that were omitted from earlier government estimates. It is obvious now that this war has been far more costly (in terms of both blood and treasure) than the Bush administration suggested at the outset. Even with more realistic estimates, we might have come to the same decision about going to war. But the absence of reliable estimates meant there was no opportunity for a meaningful debate.

This is important as a matter of democratic accountability; but it is also a matter of 'efficiency', and protecting the lives of troops. The large disparity between budgetary and the full economic costs of war means there is a need for a comprehensive reckoning of the cost to the economy as a whole. Paradoxically, the misguided attempt to keep budgetary costs down has increased overall economic costs that are not captured by budgetary accounting.

The fact that we have been able to construct estimates of both underlines the fact that this exercise can be done once there is a will to do it. There are plenty of data and many skilled economists in various branches of government. Going forward, it is important that major decisions in the military arena, especially when they are decisions of choice, are subject to the same sort of rigorous analysis, both budgetary and economic. No estimate and no accounting system will be perfect. But the discipline that comes from applying these techniques routinely should increase the quality of debate and enable the US as a country and a government to make more informed decisions in the future.

NOTES

1. Belasco, Amy (2009), 'The cost of Iraq, Afghanistan, and other Global War on Terror operations since 9/11', Congressional Research Service, 28 September.
2. Much of the data were obtained using the Freedom of Information Act, with the help of veterans and other groups who identified the data sources and filed requests for us.
3. Our book, *The Three Trillion Dollar War: The True Cost of the Iraq Conflict*, was published in February 2008 (New York: W.W. Norton). The book estimates that the total budgetary and economy cost of the wars in Iraq and Afghanistan will exceed \$3 trillion, depending on the duration and scale of US involvement. A number of economists have attempted to project the costs of the war, and most of these studies, adjusting for different methodologies and timing of the work, have projected costs in a similar range. These include Nordhaus, William (2002), 'The economic consequences of a war with Iraq', *New York Review of Books*, 49 (19), 9–12; Kosec, Katrina and Scott Wallsten (2005), 'The economic costs of the War in Iraq', AEI Brookings, Joint Center Working Paper 05-19, September; and Joint Economic Committee of the US Congress (2007), 'War at any price? the total economic costs of the war beyond the Federal Budget', <http://malaloney.house.gov/documents/economy/20071113IraqEconomicCostsReport.pdf>, accessed 2 September 2010. An exception was the work of Steven J. Davis, Kevin M. Murphy and Robert H. Topel from the University of Chicago: Davis, Steven J., Kevin M. Murphy and Robert H. Topel (2006), 'War in Iraq versus containment', National Bureau of Economic Research Working Paper 12092, March, (based on the 2003 perspective).
4. We do not know, of course, what they really thought the war would cost – their public pronouncements may not have been in accord with their private estimates. But, to date, there is no evidence that they thought the costs would be substantially in excess of the numbers that they publicly announced.
5. This was in itself an error of accounting because although the US allies paid for the majority of the combat costs during the Gulf War of 1991, the US government continues to this day to pay more than \$4 billion per year in disability compensation to veterans of that war.
6. Davis, Bob (2007), 'Bush economic aide says cost of Iraq War may total \$100 billion', *Wall Street Journal*, 16 September, p. 1.
7. Interview with George Stephanopoulos on *ABC This Week*, 19 January 2003.
8. House Budget Committee transcript, 'Hearing on FY 2004 Defense Budget Request', 27 February 2003.
9. Lindsey, Lawrence (2008), *Fortune Magazine*, 11 January.
10. Mr Wolfowitz testified at a hearing of the House Budget Committee on 28 February 2003.
11. Nordhaus, William D. (2002), 'The economic consequences of a war with Iraq', Yale University, 29 October.
12. Kakutani, Michiko (2006), 'Review of *Squandered Victory* by Larry Diamond.', *New York Times*, 11 May.
13. Defense Manpower Data Center, Statistical Information Analysis Center, 'Global War on Terrorism – Operation Iraqi Freedom: by casualty category within service, March 19, 2003 – December 8, 2007' (for Iraq), and 'Global War on Terrorism – Operating Enduring Freedom; by casualty within service, October 7, 2001 – December 8, 2007' (for Afghanistan). Information obtained by Veterans for Common Sense under the Freedom of Information Act.
14. Therefore in our cost estimates we only included the marginal cost of the troops who were injured and wounded in non-hostile situations above and beyond what would be the peacetime level. This analysis was conducted by comparing the level of such injuries in the US Army during the five years prior to the 2001 invasion of Afghanistan, to the five years subsequent.
15. At this juncture, we do not know exactly where in the line of communication this system failed.
16. GAO-06-430R September 2006, 'VA health care budget formulation'.
17. *Wall Street Journal* interview with Under Secretary of Defense for Personnel and Readiness Dr David Chu, January 2005.
18. Whitehouse.gov/news/releases/2003/11/20031106-2.html.
19. Whitehouse.gov/news/releases/2005/12/20051212-4.html.
20. Whitehouse.gov/news/releases/2004/06/20040616-4.html.
21. transcripts.cnn.com/TRANSCRIPTS/0505/30/lkl.01.html.
22. Whitehouse.gov/news/releases/2006/08/20060815-2.html.
23. For example, the decision not to order 'Mine Resistant Ambush Protected' (MRAP) vehicles in 2005 led to thousands of additional serious injuries that will require the government to pay disability compensation and to provide complex medical care for these veterans over the next five decades. Another example was the decision to forego routine maintenance on a number of the 40000 light vehicles used in Iraq, which will shorten their useful lifespan and require the military to buy more expensive repairs or replacements.

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24. Secretary of Defense Donald Rumsfeld's answer to a question by Army specialist Thomas Wilson of the 278th Regimental Combat Team, in December of 2004, during a town hall meeting with 2000 US troops in Kuwait. The question posed by Wilson to Rumsfeld was: 'Why do we soldiers have to dig through local landfills for pieces of scrap metal and compromised ballistic glass to up-armor our vehicles? And why don't we have those resources readily available to us?'
25. Wilson, Clay (2007) 'Improvised explosive devices in Iraq and Afghanistan: effects and countermeasures', Congressional Research Service, 28 August.
26. During 2007, the Defense Department purchased an initial order of 1500 MRAP vehicles for Iraq. In December 2007, DOD announced the award of an additional \$2.6 billion to purchase 3126 additional MRAP vehicles. US Department of Defense News, American Forces Press Service, 19 December 2007.
27. Defense Manpower Data Center (2009), 'Profile of Service Members Ever Deployed, June 29', as cited in Committee on the Initial Assessment of Readjustment Needs of Military Personnel, Veterans, and Their Families (2010), *Returning Home from Iraq and Afghanistan: Preliminary Assessment of Readjustment Needs of Military Personnel, Veterans, and Their Families*, Washington, DC: National Academies Press.
28. These findings have been reported in numerous studies by the Institute of Medicine (National Academy of Sciences) the American Psychiatric Association and the Centers for Disease Control.
29. Of course, there is a real opportunity cost of using regular active-duty troops, even if there is no incremental budgetary cost: they are unavailable for use elsewhere; these troops were part of the US 'security system', an insurance policy; those deployed to Iraq and Afghanistan are not (as) available for service elsewhere, thereby diminishing overall US security.
30. The full record of the emergency appropriations to date can be found in numerous reports by Amy Belasco of the Congressional Research Service.
31. CRS *ibid*.
32. In theory, this would suggest that the US taxpayer could expect to see a reduction in the regular defense budget to offset the repairs inappropriately allocated to the conflicts. But the accounting system is so inadequate that it is not feasible to pin the amounts down with any degree of accuracy.
33. CRS, Belasco September 2009.
34. <http://hlog.taragana.com/business/2009/12/17/findings-by-pentagon-auditors-heighten-worries-in-congress-over-wasteful-afghanistan-spending-12805/>.
35. The Office of the Special Inspector General for Iraq Reconstruction (SIGIR) is the successor to the Coalition Provisional Authority Office of Inspector General (CPA-IG). SIGIR was created in October 2004 by a congressional amendment to *Public Law 108-106*. SIGIR has published more than 120 reports on different aspects of the management and financial integrity of the reconstruction program.
36. Data include both living veterans and deceased veterans whose dependents received survivor benefits. Source data derived from Annual Report of the Secretary of Veterans Affairs, VA's Annual Accountability Report, US Census Bureau's Statistical Abstracts of the United States, and Institute of Medicine studies.
37. Including all wounded, injured or diseased troops, the ratio in the current wars is 16 to 1. Data source is 'DOD Personnel and Military Casualty Statistics', Defense Manpower Data Center.
38. See Stiglitz, Joseph E. and Linda J. Bilmes (2008), *The Three Trillion Dollar War: The True Cost of the Iraq Conflict*, New York: W.W. Norton, Chapter 4, 'Costs of war that the government doesn't pay', for a fuller discussion of these costs.
39. Estimates for the United States (at the margin) range from a small percentage of the amount raised to 20 percent or more.
40. This is especially so since the oil market is far from a competitive market.
41. This is, in a sense, another aspect of the standard 'counterfactual problem': what would have happened if the given policy (war) had not occurred? The fact that there might have been other ways of conducting the war that would have lowered the costs simply says that this war (like any war, or indeed any project) was not conducted in the most efficient way possible; by the same token, the fact that the war was not financed in the ideal way may have increased the long-term costs. What is difficult in this case is that the war did in fact affect taxes and other expenditures, but in ways that cannot be ascertained with certainty. We cannot be sure what expenditures, say, would have been in the absence of the war; the necessity of paying for the war at some time inevitably affects voters' and politicians' support for other kinds of expenditures.
42. The fact that, throughout the relevant period, the US economy was operating below capacity meant that there were substantial effects on GDP. Had the economy been at full employment, we would have had to focus on the 'substitution' effects, the fact that war expenditures crowded out other expenditures. See the discussion below.
43. Harrison, Todd (2009) 'Estimating funding for Afghanistan', *Center for Strategic and Budgetary Assessments*, 1 December.
44. This is a variant of what is called the 'Ricardian equivalence' theorem which says that private actions partially or largely offset public actions. See, for example, Barro, Robert J. (1989), 'The Ricardian approach

- to budget deficits', *Journal of Economic Perspectives, American Economic Association*, 3 (2), 37-54; and Stiglitz, J. (1988), 'On the relevance or irrelevance of public financial policy', in K.J. Arrow and M.J. Boskin (eds), *The Economics of Public Debt*, Proceedings of the 1986 International Economic Association Meeting, London: Macmillan Press, pp. 4-76.
45. There is a rationale for this: it is costly to raise funds in the public sector (that is, transferring money from the private to the public sector is not costless).
 46. As of November 2009, 1.95 million US troops had served in the Global War on Terror (GWOT) in Iraq and Afghanistan and there were 1.15 million veterans who were discharged. The number who had filed claims for compensation in connection with their service disabilities was 442,413 (Veterans Benefits Administration Office of Performance Analysis and Integrity, 11/18/09). The number of GWOT veterans who had been treated at VA hospitals and medical facilities was 508,152 (Veterans Health Administration).
 47. Seal, Karen T.J., Metzler, K.S., Gimu, D., Bertenthal, Shira Maguen and Charles Marmar (2009), 'Trends and risk factors for mental health diagnoses among Iraq and Afghanistan veterans using Department of Veterans Affairs health care', *Journal of Public Health*, 99 (9), 1651-8.
 48. Department of the Army (2009), 'Army releases October suicide data', 30 November, <http://www.army.mil/newsreleases/2009/11/13/30396-army-releases-october-suicide-data/?ref=news-releases-title1>.
 49. See Hoge, C.W., S.E. Lesikar, A. Guevara, J. Lange, J.F. Brundage, C.C. Engel, S.C. Messer and D.T. Orman (2002), 'Mental disorders among US military personnel in the 1990s: association with high levels of health care utilization and early military attrition', *American Journal of Psychiatry*, 159 (9), 1576-83.
 50. The administration adopted a withdrawal plan for Iraq under which the number of US troops in-country would be reduced from about 140,000 in February 2009 to between 35,000 and 50,000 by 31 August 2010, with all US troops slated to be out of Iraq by 31 December 2011, to comply with the US-Iraq Security Agreement that came into effect on 1 January 2009. It is expected that some 50,000 non-combat troops will continue to be stationed nearby, most likely in Kuwait.
 51. Oppel, Richard A., Jr. and Elisabeth Bumiller (2009), 'Afghan says army will need help until 2024', *New York Times*, 8 December, <http://www.nytimes.com/2009/12/09/world/asia/09gates.html>, accessed 29 October 2010.

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Handbook on the Economics of Conflict

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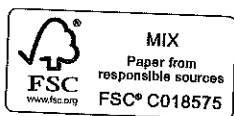
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