1 A century of war

The sinews of war are infinite money.

Roman statesman and philosopher, Cicero

This book is about the economic causes and consequences of the wars that the United States fought in the twentieth century. Although the general public and professional historians focus considerable attention on wars, economists tend to neglect them. To be sure, there is a small group of economic historians who have diligently worked to increase our knowledge of the economics of war – one of the purposes of this book is to bring their findings to the attention of a larger audience – but it is fair to say that economists as a whole tend to think of peace as the norm and war as an exception to be ignored. But the idea that war can be regarded as a rare outlier belies the truth: America was at war somewhere in the world during a significant portion of the twentieth century.

The wars that opened the century, the Spanish–American and Philippine–American wars, required relatively small fractions of the nation's resources. The two world wars that followed required much larger fractions, and brought in their train far-reaching networks of government control. The post-World War II conflicts in Korea, Vietnam, and Iraq again were "limited wars," similar to the wars that opened the century, rather than to the world wars. Indeed, there is a sense in which we have come full circle: the wars which America is now fighting in Iraq and Afghanistan bear a strong and often unsettling likeness to the Spanish–American and Philippine–American wars. Each war presented unique military, political, and economic challenges, but there were many common elements. In this volume I will try to summarize these elements by answering some of the most familiar questions about the economics of America's wars, starting with questions about how the country got into the wars, moving on to questions about how they were fought, and ending with questions about their legacies. The answers to most of these questions cannot be laid down with certainty. In this chapter I will provide only a few facts to illustrate the nature of the issue and to suggest my main conclusion. Hopefully, the discussions of individual wars in subsequent chapters will provide more compelling evidence.

Were America's wars fought for economic reasons?

Economic forces were not the main cause of America's involvement in wars, but economic forces often played an important secondary role in pushing the nation toward war. Special interests that definitely favored war, or at least had an economic interest in doing so, could be identified for every war. These interests frequently added their voices to the chorus demanding war, often offering economic justifications. Before the Spanish–American War, for example, some Americans with business interests in Cuba were deeply concerned about the ongoing insurrection on the island and called for an American intervention to restore order. Once the United States was engaged militarily in the Philippines merchants concerned about access to China called for American control of the Philippines – "an American flag only 500 miles from China." Special economic interests, however, were never enough to push the United States into war. For one thing, some special interests opposed wars. Many bankers, for example, opposed the Spanish–American War because they thought it would produce inflation (as had happened in the Civil War and earlier wars) that would hurt bank balance sheets and, conceivably, undermine the gold standard, which had just been firmly ensconced after the long battle with the bimetallists. Indeed, important segments of the banking community were opponents of most wars.

Determined groups in the executive branch, typically in the State Department or Department of Defense, with allies in Congress, who believed that it was in the interest of the United States to use its military power to achieve foreign policy goals were more important to the launching of wars than were special economic interests. During the Spanish–American and Philippine–American wars, Theodore Roosevelt in the Navy Department and his allies in Congress, especially Senator Henry Cabot Lodge, saw the ability of the United States to project its naval power by building ships, constructing an isthmus canal, and acquiring colonies and naval bases, as crucial to American prosperity in an increasingly imperialist world. They were willing to take bold actions to push America into war and into taking possession of the Philippines and other colonies. US entry in World War I was pushed in some quarters because the neutral trading rights of the United States were being violated by the German submarine campaign, but also because its long-time allies, Britain and France, were nearing exhaustion. US entry in World War II was the result, of course, of the Japanese attack on Pearl Harbor, but the path of conflict between the USA and the Axis had been taken not only for economic reasons, narrowly understood, but also because of opposition to the depredations of Japan in China and Germany in Europe. The Korean War was entered to protect South Korea from North Korean aggression, but that aggression was part of the worldwide struggle by the United States to contain Communism, an economic system violently opposed to its own. Similarly, in Vietnam, a long list of State Department and government officials argued that letting the Communists succeed in that country would lead to Communist takeovers throughout Southeast Asia (the domino effect), and weaken American influence throughout the world.

However, even the power of special interests and foreign policy experts combined was limited. In the end, going to war required massive public support. That meant appealing to America's sense of honor and justice, and usually that entailed some dramatic event that was, or could be portrayed as, a direct military attack on the United States or its allies, a *casus belli*. The Spanish–American War required an American public outraged by Spanish attempts to suppress the Cuban independence movement and the explosion of the battleship *Maine* in the harbor at Havana. The Philippine–American War required the outbreak of fighting between Americans and Filipinos in Manila. World War I required German submarine attacks. World War II required Pearl Harbor. The Korean War required the North Korean invasion of South Korea. The Vietnam War required the naval battles that produced the Tonkin Gulf Resolution. The Cold War required attempts at a Communist takeover in Greece. The Persian Gulf War required the Iraqi invasion of Kuwait. And the Afghan and Iraq wars required the attack on the World Trade Center on September 11.

How did America fight its wars?

Inevitably, whatever the initial intentions, wars became cruel as financial costs and casualties mounted. When the war in the Philippines began, few Americans would have believed that the "water cure," forced concentration of the population, burning of crops, and other brutal tactics would be used by the United States. When World War II began, few Americans would have believed that it would lead to the firebombing of cities, to two nuclear bombs, and to millions of civilian deaths. Mass bombing of civilian targets was used again in the Vietnam War, and few Americans would have thought that a likely outcome when the war began. Of course, most nations fight wars ferociously. But the number of casualties America inflicted on its enemy's civilian population was often high because America's armed forces employed a high ratio of capital to labor. In other words, the United States at war behaved much like a private firm faced with low interest rates relative to wages and substituted capital for labor.

The twentieth century saw the development of many new capital-intensive weapons, but above all it was the airplane that allowed the United States to exploit its lead in capital and technology. World War I saw the beginnings of air warfare, but aircraft could play only a supporting role; after all, that war began in August 1914, just eleven years after the Wright brothers' first successful flight at Kitty Hawk. But progress in utilizing this new technology was rapid. By the end of the war, as we will see, the United States was producing airplane engines at a rate approaching 50,000 per year. In World War II, of course, the airplane became a major component in America's campaigns against Germany and Japan, and then it was a mainstay of US forces in Korea, Vietnam, and the Persian Gulf War. Unmanned drones have become a major tool in the ongoing wars in Afghanistan and Iraq. The airplane is the ultimate expression of America's capital-intensive way of war and the destruction of civilian populations that was a consequence.

How did America finance its wars?

There are many ways of financing wars. For example, civilian spending can be cut or the government can rely on gifts: contributions by America's Mideast partners defrayed a substantial part of the costs of the Persian Gulf War. Indeed, one of the purposes of this book is to explore the ways in which the financing of wars influences and is influenced by almost every aspect of a war economy. Policies that at first sight seem far removed from finance, such as price and wage controls and the draft, I will try to show, are closely tied to the process of war finance. Nevertheless, economists tend to focus on three methods – taxes, borrowing, and printing money – because, typically, these were the most important. Printing money, of course, has a bad name, because it produces inflation. But in World War I, World War II, and during the Vietnam era, America relied in part on the printing press. There were several reasons. One was simply that the wars were costly and the government was reluctant to push tax finance and bond finance to the extent necessary to finance the entire war. The establishment of the Federal Reserve, moreover, hid the process of money creation. In the nineteenth century the connection between the printing press and inflation was visible to the naked eye because new forms of currency were introduced. In the twentieth century the connection was much harder to see: the Federal Reserve would purchase government bonds, creating new balances for the Treasury. When these were spent the additional competition for goods would bid up prices. But it was harder for the public to see the connection. Inflation might well be blamed on war profiteers rather than monetary policy. It was not always necessary to resort to inflation to finance the war. Most of the smaller wars – the Spanish–American, Philippine–American, Korean, and Persian Gulf Wars – were financed without inflation.

Debt finance was an important source of financing for the world wars and the Vietnam War. The American capital market was sufficiently broad, and the credit of the US government sufficiently good, for it to finance smaller wars without having to pay significantly higher interest rates. But in the world wars interest rates might have risen if the Federal Reserve had not stepped in and created additional liquidity in financial markets. Rising interest rates would be a sign to the public that the war was costly. They also might be a sign to enemies that the war was straining the country's resources.

In the world wars the government tried to encourage private purchases of bonds with patriotic campaigns that included bond rallies and now famous posters: "Get in the Scrap, Buy War Bonds Now." How much the campaigns really contributed in terms of broadening the market for bonds and holding rates on them below what they otherwise would have been is debatable. However, they must have had some effect, and they strengthened support for the war, and eased anxieties, by giving people a way of demonstrating their support. They also helped suppress the increase in interest rates that might have signaled the cost of the war.

Finally, the cost of each of the United States' wars was, until the most recent war in Iraq, defrayed in part by raising taxes. It was an honorable tradition. Raising taxes, of course, communicated the cost of the war to the public. So most governments did what they could to mitigate the political fallout. One strategy was to press for a tax bill as soon as a war began. In this way the government could take advantage of the early enthusiasm for the war. In the Spanish–American War the government relied in part on "sin" taxes, such as those on alcohol, tobacco, and chewing gum. In the First World War it increased income tax only for the very wealthy. In World War II and Korea, however, a combination of liberal administrations and broad-based support for the war led to broad-based increases in taxes. Indeed, a kind of high point was reached during the Korean War, when under the indefatigable Harry S. Truman the government financed most of the war with taxes. The Vietnam War, however, was a different story, and marked a return to an earlier form of war finance. President Lyndon Johnson was deeply concerned that a tax increase would reveal the cost of the Vietnam War to the public and undermine support for his Great Society program. Despite rising inflation and recommendations from his economic advisors Johnson refused, for a long time, to call for higher taxes. Eventually, however, he relented and called for a limited tax "surcharge."

Did wars stimulate the economy?

The idea that in economic terms wars are "good" because they stimulate the economy derives mainly from the US experience in World War II. However, while the mobilization did play a part in returning the economy to full employment, the idea that it took a full-blown world war to lift the United States out of the Depression is an exaggeration. By December of 1941, when the United States entered World War II, unemployment was close to the 1929 level and falling steadily: 1942 would have been a boom year even in the absence of Pearl Harbor. Other forms of spending, moreover, could have taken the role played by spending on armaments in the late 1930s and early 1940s. And the highly expansionary monetary policies followed during World War II could have been followed in any case.

Does economics have anything useful to say about wars?

Many scholars, including some economists, reject the idea that economics – based on self-interested consumers, profit-maximizing firms, supply and demand, and so on – is of much value at any time. For them it is obvious that wartime economies are even less susceptible to traditional economic analysis. They would argue that the idea that people are simple, self-interested, and rational calculators surely does not apply in wartime when national interests borne on waves of patriotism take center stage.

Indeed, in empirical studies wars are often treated as "outliers," periods that can be neglected because they have little in common with peacetime. This attitude, I believe, is a mistake. Wars often provide better evidence about how the economy works than peacetime experiences. Milton Friedman put it this way:

> The widespread tendency in empirical studies of economic behavior to discard war years as "abnormal," while doubtless often justified, is, on the whole, unfortunate. The major defect of the data on which economists must rely – data generated by experience rather than deliberately contrived experiments – is the small range of variation they encompass. Experience in general proceeds smoothly and continuously. In consequence, it is difficult to disentangle systematic effects from random variation since both are of much the same order of magnitude.
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> From this point of view, data for wartime periods are peculiarly valuable. At such times, violent changes in major economic magnitudes occur over relatively brief periods, thereby providing precisely the kind of evidence that we would like to get by "critical" experiments if we could conduct them. (Friedman 1952, 612)

To be sure, waves of patriotism were important. They were important in the decision to go to war and in the willingness of people to bear the costs of war. One would not begin to think about the economics of war without putting patriotism center stage. But the student of the economic history of America's wars cannot fail to be struck by how often the basic tools of economics help us understand how America's wartime economies worked. Whether it's bankers opposing the

Spanish–American War because the war might produce inflation and weaken their balance sheets, or candymakers in World War II adding fillers to candy bars in order to evade price controls, the traditional economist will find plenty of grist for his or her mill.

Economics, moreover, is inevitably brought into the fray when public debate moves on from whether to go to war, an issue often debated in lofty ethical and philosophical terms, to the practical issue of how to pay for war. Economists approached the Spanish–American and Philippine–American wars with the tools and values of classical economics. War was a matter of public finance; and public finance, like private finance, meant balancing the budget. The problem for economists was to recommend the fairest and most efficient way of raising the money the government needed. The view of the economists was widely shared. Taxes, such as sin taxes were raised, but little thought was given to monetary policy or explicit wage and price controls. There was no central bank that could stealthily finance the war by purchasing government bonds, and no reason to engage in the actual printing of new money, the policy adopted during the Revolution, the War of 1812, and the Civil War.

The financing of World War I was very different. Taxes were raised, including income tax, which was now in place as a result of a recent constitutional amendment. But despite higher taxes, deficit spending produced a rapid increase in the public debt. The newly established Federal Reserve was able to finance the purchase of a substantial portion of that debt by printing new money. Perhaps most at variance with classical ideas of war finance, the United States instituted a far-reaching set of price and wage controls. All of these policies were quickly abandoned after the war ended. Although some economists began to embrace this mix of policies as appropriate in peacetime, most regarded them as a temporary departure from sound policy forced on the United States by the exigencies of war.

The Great Depression, and the analysis of it in John Maynard Keynes's *General Theory* (1936), profoundly changed macroeconomics: deficit spending was no longer anathema in peacetime, a rising money stock and low interest rates were desirable, and wage and price controls could be used to stem inflation. Keynesian economics was, to some extent, war economics. The difference was that in World War I most mainstream economists had viewed this mix of policies as an aberration – something that had to be tolerated during the war, but then would be removed afterwards. Keynesian economics, although it was seldom explicitly acknowledged, was simply the argument that these policies would be useful in peace as well as in war.

This mix of policies was adopted again in World War II. And the speed with which they restored full employment helped convince most economists of the correctness of Keynesian economics. The influence of Keynesian economics during the Korean War, however, was limited. President Truman held traditional views about finance and demanded and got tax increases that went a long way toward financing the war. And the Federal Reserve, concerned about a temporary surge in inflation, was able to assert its independence, including the right to raise interest rates as an anti-inflationary measure.

World Wars I and II helped establish Keynesian economics, but the Vietnam War undermined it. To be sure, Keynesian economists, including those at the Council of Economic Advisors, recommended tax increases to fight the inflation that began to emerge in the late 1960s as the Vietnam War intensified – tax increases that had been delayed and then limited mainly for political reasons. But inflation still posed a major theoretical problem for Keynesian economics, which by that decade had been augmented by the Phillips Curve, the idea that there was a stable negative relationship between unemployment and inflation. But in the late 1960s inflation began to rise without unemployment falling to the low levels that had prevailed in World War II and the Korean War. Macroeconomists now began to listen more to Milton Friedman and his monetarist colleagues who argued that there was no permanent tradeoff between inflation and unemployment, and that controlling the money supply, a policy considered of secondary importance in Keynesian macroeconomics, was in fact the key to controlling inflation.

In the ensuing years a third school of economics, what might be called the Minnesota School, came to prominence. Sometimes also called the Freshwater School to differentiate it from the Neo-Keynesian views dominant on the coasts, the Minnesota School emphasized the potential negative effects of tax increases on work effort, even in wartime. Lee E. Ohanian (1997) importantly drew the conclusion that the heavy reliance on taxes to finance the Korean War was a mistake. It would have been better to "smooth" taxes over time, that is, increase taxes less and rely more on debt finance during the war. In that way productivity during the war years would not be discouraged by high taxes. By the time of the wars in Iraq and Afghanistan the tradition of raising taxes in wartime had largely disappeared.

Did the United States rely on central planning to reallocate resources in World War I, World War II, and the Korean War?

It is sometimes assumed that wars prove that central planning is a more efficient mechanism for allocating resources than the incentive system used by the market, at least in national emergencies. In both World War I and World War II, and to a lesser extent during the Korean War, the United States imposed a comprehensive system of wage and price controls, and created federal agencies charged with controlling and maximizing war production. In fact, for better or worse, the United States relied mainly on incentives, "throwing money at the problem," to achieve the desired reallocation of resources from the civilian sector to the military sector. In both World War I and World War II the most celebrated attempts to impose a more centralized system for allocating resources, such as the Controlled Material Plan of World War II, came too late to have much effect on the crucial reallocation of resources.

Did wars alter the financial system?

Wars have produced the most important reorganizations of the world's financial system. The major industrial nations, with the exception of the United States, left the gold standard during World War I. Most returned during the 1920s. But the major industrial nations, including the United States, abandoned gold once again during the Great Depression. After World War II a new financial system, the Bretton Woods system, was established, with fixed exchange rates and the dollar as the world's central currency. As part of this agreement, the International Monetary Fund and World Bank were established to help maintain global financial stability and promote growth. This system appeared to work well for a time. But increases in US inflation and deterioration in its balance of payments, in part consequences of the Vietnam War, led to America's decision to abandon the Bretton Woods system and to adopt the modern system of fluctuating exchange rates.