

CAPITALISM AT WAR

By Mark Harrison

Presented at the XVIth World Economic History Congress, 9-13 July 2012, Stellenbosch University, South Africa

SUMMARY

The nineteenth century witnessed the triumph of capitalism; the twentieth century saw the bloodiest wars in history. Is there a connection? The paper reviews the literature and evidence. It considers first whether capitalism has lowered the cost of war; then, whether capitalism has shown a preference for war. Both questions are considered comparatively. Neither question receives a clear cut answer, but to simplify: Yes; No.

KEYWORDS

Capitalism; Corporate Political Action; Keynesianism; Public Finance; State Capacity, Trade; War.

CONTACT DETAILS

Professor Mark Harrison, Department of Economics, University of Warwick, Coventry CV4 7AL, United Kingdom.

Email: mark.harrison@warwick.ac.uk

Capitalism at War*

“Capitalism means war.” Béla Kun, cited by Guérin (1938).

The nineteenth century witnessed the triumph of capitalism; the twentieth century saw the bloodiest wars in history. Both war and society were transformed; what was the link? In what ways did capitalism transform warfare? Was the capitalist system responsible for spreading or facilitating war, or for the rising toll of war deaths?

To some, the connection is so obvious that it has required only illustration. Table 1, from a classic work by the Soviet demographer Boris Ulanis, is an example; the pattern of interest is the rising trend in the final column.

Table 1. Capitalism, wars, and deaths in Europe over four centuries, from Ulanis

Period	Years	Number killed and died in wars (millions)	Duration of period (years)	Annual average number killed and died (thousands)
I. Pre-monopoly capitalism: Formation of the capitalist mode of production	1600-1699	3.3	100	33
	1700-1788	3.9	89	44
	Industrial capitalism	1789-1897	6.8	109
II. Imperialism	1898-1959	More than 40	62	About 700

Source: This translates a table compiled by Ulanis (1960/1994, p. 405).

Modern scholarship would qualify this picture in three ways. First, it captures only a narrow band in the overall spectrum of violence in society. This spectrum runs all the way from ordinary homicide through the violence associated with organized

* Mail: Department of Economics, University of Warwick, Coventry CV4 7AL, United Kingdom. Email: mark.harrison@warwick.ac.uk. This paper is in preparation for *The Cambridge Economic History of Capitalism*, edited by Larry Neal and Jeff Williamson. An earlier version was presented at the German Historical Institute in Moscow as one of “Ten Lectures about the War,” June 17 and 18, 2011. I thank Sergei Kudriashov, Richard Overy, and other participants for discussion; Sascha Becker and Michael S. Bernstam for advice; Larry Neal and Jeff Williamson for inspiration and guidance; the University of Warwick for research leave and financial support; and the Hoover Institution for generous hospitality.

crime to social and political strife, civil war, and inter-state conflict. The data generated for Table 1 omit a large part, and possibly the larger part of this spectrum. Estimates of the incidence of deaths from violence of all types in society over the last ten thousand years are suggestive of a great decline that continues to the present day (Gat 2006; Pinker 2011).

Second, if we limit our focus to conflicts among states, the two World Wars of the first half of the twentieth century continue to be recognized as the greatest wars in history. The second half of the century was much more peaceful, however, on a variety of measures (Kristian Gleditsch 2004; Nils Gleditsch 2008; Hewitt 2008; Pinker 2011; Goldstein 2011). The annual number of wars involving fatalities and the number of military fatalities in each year declined. These downward trends continued through the turn of the century, despite conflicts associated with the breakup of the Soviet and Yugoslav states in the early 1990s.

Third, not all indicators have been pointing in the same benign direction. While the intensity of conflict appears to be in decline, the global propensity for inter-state confrontation appears to be rising (Harrison and Wolf 2011). What this means is that, while the probability that any pair of countries in the world would find themselves in conflict in a given year fell slowly (Martin, Mayer and Thoenig 2008), there was a great increase in the number of countries. More countries have meant more state actors claiming sovereignty over the use of force in global society, and more borders over which to quarrel. While the quality of disputes may have been changing for the better, their quantity has been changing for the worse. Perhaps we are moving into an era of “new wars” (Münkler 2005).

What does all this have to do with capitalism? The question is more complicated than would appear at first sight. First, it raises important issues of identification: what is “capitalism” and what can it mean to say, as some have claimed, that “capitalism means war”? I will consider these questions next. After that, I will go one step at a time. In the second part of the chapter I will ask whether capitalism has affected our choices over war and peace by changing opportunity costs. Specifically, have we had more wars, not because we wanted them, but because we could? In the third part I will ask whether the structure of the capitalist economy has led the owners of capital to show some systematic preference for war by comparison with the elites of other systems. The fourth part concludes.

1. Capitalism, Anti-Capitalism, and War

Ricardo (1817) used the word “capitalist” to distinguish the owners of capital from the owners of land and labour. But the mere existence of capitalists falls short of implying “capitalism,” an entire economic and social system with private capital ownership at its foundation. In fact, the identity of capitalism was created by its critics, Proudhon (1861) and Marx (1867). Marx, before anyone else, argued that capitalism’s defining features allow us logically to infer distinct and general attributes of capitalism (such as alienation) and propensities (such as the declining rate of profit). To inquire in this sense into whether “capitalism” as such has a

propensity for anything, let alone something as emotive as war, is to enter a debate on conceptual territory chosen by the enemies of capitalism.

Second, the histories of capitalism and warfare are certainly intertwined, but not uniquely. War is as old as history; capitalism is not. All societies that have given rise to organized government have engaged in warfare (Tilly 1975). The slave and serf societies and city states of the ancient, classical, and medieval eras made war freely. Turning to modern times, the socialist states of the twentieth century were born in wartime, prepared for war, and did not shrink from the use of military power to achieve their goals. Thinking comparatively, it will not be easy to identify any causal connection between capitalism and war. At most, we will look for some adaptation or propensity for war under capitalism, relative to other systems.

Third, if there is a story here, who are the actors? Capitalism is an economic structure; war is a political act. War can hardly be explained by structure alone, for there is no war without agency, calculation, and decision. Given this, our search must be for aspects of capitalism that may have created incentives and propensities for the political actors to choose war with greater frequency, and made them more willing to impose the increasing costs of war on society, than under alternative conditions, real or counterfactual.

To be clear at the outset, I'll follow the definition of capitalism set out by Larry Neal (2011): "1) private property rights, 2) enforceable contracts, 3) markets with prices responsive to supply and demand, 4) supportive governments." Here, "supportive" means supportive of the first three features, not supportive of wealthy individuals, rich corporations, or other special interest groups.

If that is capitalism, it implies the existence of both pre-capitalism and anti-capitalism. First, in nearly all countries before the seventeenth century there was private property and markets existed, but much production was not marketed and many prices were not free. Contracts were insecure. Rulers tended to be more concerned with their own prerogatives than with accepting and upholding the rule of law. Whatever you call it, it was not capitalism.

In the twentieth century we have anti-capitalism. Most obvious was communism: where they could, the communists abolished private business ownership, suppressed markets, and imposed dictatorship over the law. Communism, also, was clearly not capitalism.

More contested is the case of fascism. Was fascism somewhere within the spectrum of capitalisms, or outside it and antithetical to it? "Fascism is war," wrote Dimitrov (1936/1972, p. 176). If fascism is capitalism, and fascism means war, then capitalism means war. So this is important to get right. Under fascist rule there was dictatorship. The courts upheld the interests of the state, not the rights of the citizen or the rule of law. Private property existed, but property rights were maintained if the government allowed, not otherwise (Overly 1994). Often the government did wish it, viewing contracts with capitalist proprietors as creating the right incentives for efficient procurement (Buchheim 2006). Whether this was a deep conviction or an instrumental motivation is debated; Hitler himself declared on one occasion that family property was a productive institution but joint-stock shareholders were parasites whom the state should expropriate (Trevor Roper 2000, pp. 362-363).

There were markets, but many prices were regulated and the government often rationed goods to producers and consumers (Milward 1965).

Was fascism closer to socialism or communism than to capitalism? In Italy, the fascist Mussolini came out of the Socialist Party. In Germany, Hitler called his followers National Socialists. When they railed against capitalism, brawled in the streets, and promoted mass mobilization, a politicized and militarized economy, and dictatorial rule, the fascists did not look very different from the communists, who struggled to differentiate themselves. Left socialists and communists emphasized fascism as an extreme variant of capitalism to cover the resulting embarrassment. The canonical example is Stalin's infamous *Short Course* (CPSU 1941, pp. 301-2), according to which fascism was "the dictatorship of the most reactionary, most chauvinistic, most imperialistic capitalist elements," taking the name of national socialism only "in order to hoodwink the people."

The communists portrayed fascism as pro-capitalism in disguise. I do not find this convincing. The Nazis did not try to disguise anything else; they were not ashamed to advocate racial hatred and war, for example. Compared with these, being in favour of capitalism would seem a small thing; why would they have wished to hide it? Perhaps we should take them at their word: if this was still capitalism, it was captured by an anti-capitalist political agency. Fascism made property, prices, and contracts conditional on the will of the government. This does not mean that fascism and communism were the same. But the superiority of the state over private interests was something they held in common.

As for capitalism and war there is already a large literature, so we do not start from a blank page. I will mention some highlights as we proceed. I will organize the discussion in the following order. Has the existence of capitalism, in some morally neutral and quite general sense, promoted the capacity for war in global society? Then, does the structure of the capitalist economy exhibit some systematic preference for war in comparison to other systems?

2. The Capacity for War

Has capitalism promoted the capacity for war? Before 1914, many observers of the rise of international business would have answered this question decisively in the negative. Writers like Norman Angell (1911) and Jean de Bloch (1914) believed that modern capitalism had driven up the opportunity cost of war to a point where the industrial and commercial powers would no longer fight major wars. They were both right and wrong. In the twentieth century the costs of war were unprecedented. As it turned out, however, the costs of not being prepared for war and of not fighting had risen even more rapidly. Moreover, the heavy costs of warfare proved to be unexpectedly sustainable; it turned out that major industrial economies could bear them for years on end without collapsing. How did this come about?

Military innovation

The relative price of destruction has been falling for centuries. The headlines we pay most attention to may be the big ticket items like interceptor aircraft and warships; when we do that, we may forget that their destructive power is rising more rapidly

than the price. Today, you can destroy a city in a flash, and the means will fit in a suitcase. Two generations ago you could do it in a night, but it required not less than a thousand bombers. A few generations before that, to ruin a city took an army weeks or months of unceasing effort, with uncertain results.

It is almost too obvious to say that capitalist industry has hugely affected this process, primarily through mechanization. Capitalism mechanized the weaponry, the production and projection of weapons, and the transportation of armies. This is so obvious that it may seem impossible to overstate. Yet, it can be overstated, for several reasons.

First, the long term decline in the real price of weaponry did not start with industrial capitalism; the industrial revolution prolonged and speeded up a tendency that was already in place. Philip Hoffman (2011) has shown that the real price of weapons was falling in the late Middle Ages, long before capitalism. It fell faster in Europe than elsewhere. Its driver was the battlefield rivalry of princes, not the market competition of capitalist firms. Europe's lasting comparative advantage in what Hoffman calls the "gunpowder technology" was conditioned on its political divisions, its lack of natural frontiers, and princely competition. Capitalism continued this trend, and was well suited to accelerate it. But capitalism did not start it.

Second, the mechanism of improvement was largely the competition of private producers, but government provided the market, and in the few countries that maintained large defence industries competition was (and remains) highly imperfect. Military-technical innovation is subsidized. Pre-contract lobbying and collusion, among firms and between buyer and seller, and post-contract renegotiation are normal (Rogerson 1994). These standard features of capitalist defence markets were largely replicated under both national socialism and communism (Milward 1965; Overy 1994; Buchheim 2006; Markevich and Harrison 2006; Harrison and Markevich 2008a,b).

If we limit ourselves to the qualitative improvement of military technologies in the twentieth century competition between different social systems, it would appear that the capitalist economies had the edge. But it is hard to tell whether this is because capitalism was better than other systems at this specifically, or whether capitalist economies were just richer and so better than other economies at everything, including military-technical innovation.

Fiscal capacity

A more original contribution of capitalism was enormously to enhance the fiscal capacity of the state. This innovation arose from the commercial revolution of the seventeenth and eighteenth centuries. Spreading from the Dutch Republic to England, this revolution separated the economy from politics, and public finance from the money of the king; it subjected property rights, contracts, and exchange to the rule of law, even when one of the contracting parties was the king. The result was a dramatic increase in the willingness of the wealthy to pay taxes and in the ability of the government to borrow (Hoffman and Rosenthal 1997; Bonney 1999; Ferguson 2001; O'Brien 2005, 2011).

Fiscal revolution gave unprecedented power to governments to extract resources from the economy. This power grew to the point where, during World War I, it could put the viability of the “home front” at risk. For the first time, a relatively developed economy such as Germany’s might exhaust itself because the government spent too much on the war (Feldman 1966).

Fiscal revolution was delayed, in contrast, in the agrarian states in central and southeastern Europe (Karaman and Pamuk 2010). In World War I, a clear gap emerged between the French and German economies, with half of GDP allocated to the war or more, and Austria-Hungary and Turkey, which struggled and failed to reach one third (Broadberry and Harrison 2005). The inability of the Habsburg and Ottoman rulers to raise and centralize revenues and spend them on the war was an important factor in their eventual defeat (Schulze 2005; Pamuk 2005).

The fiscal advantage of liberal capitalism, clearly marked at the beginning of the twentieth century, proved temporary. The 1930s saw the rise of states intent on promoting industrial power where property was less private, contracts less enforceable, prices less responsive to supply and demand, and governments more intent on supporting their own geopolitical agendas than the rule of law and free enterprise. In short, these states were less “capitalist”; we know them as varieties of fascism and communism. During World War II, Britain and America could once again drive their fiscal ratios to half of national income or more, but Germany, Japan, and the Soviet Union could go higher, to 60 or even 70 percent (Harrison 1998), at least for short periods. This was a second fiscal revolution.

If the first fiscal revolution was based on transparency and the rule of law, the second revolution was based on modern nationalism and modern repression. A nationalist police state proved an effective substitute for transparent legal regulation. Nationalism and repression gave Hitler, Stalin, and the Japanese military a coercive power to mobilize society and centralize resources not only far beyond the traditional bureaucracies that they succeeded, but even greater than liberal capitalism. Fascism and ultra-nationalism did not survive 1945, but communism did. The capacity to pour resources into a privileged and prioritized defence sector was the basis of the Soviet Union’s postwar superpower status, achieved despite mediocre economic performance (Harrison 2001, p. 81).

There was another way in which capitalism promoted fiscal mobilization. This was by transforming agriculture. Agriculture was an important source of rents for traditional agrarian bureaucracies, but collecting and centralizing direct revenues from small scale subsistence farmers generally involved high transaction costs and payoff to intermediary landlords and tax farmers. Urbanization and the spread of urban-rural exchange created the possibility of taxing farmers indirectly by turning the terms of trade against them. In fact, such a shift in the terms of trade was an inevitable result of war mobilization, which diverted the production capacities of industry to the supply of war and curtailed supplies to the countryside. Faced with this, pre-capitalist or proto-capitalist farmers still had an “inside” option: to retreat into autarky and feed themselves alone, leaving the food needs of the industrial workers and soldiers unmet (Offer 1989; Broadberry and Harrison 2005). In much of central and eastern Europe in two world wars, a large part of the domestic economy

proved able to withhold resources from the grabbing hand of the state. There were local famines and spreading general hunger.

In Britain and America, capitalist farms, fully integrated into the economy as a whole, no longer had the inside option. They proved to be as responsive as any other business to wartime incentives and controls. Agricultural production was quickly expanded (in the British case) and restructured to increase the calorie yield per hectare. There was less butter and meat, and more cereals and potatoes; nobody starved.

The dictators, governing countries with large peasant populations, arrived at contrasting solutions. The Axis powers aimed to avoid having to squeeze their own farmers by imposing starvation on the foreign territories they occupied. Starvation followed, but with disappointing results for domestic food availability (Collingham 2010). Stalin found a more durable solution in collective farming, which was designed to rule out the Soviet peasant's inside option (Harrison 2011). To enforce collectivization required violence of the level of a civil war, leading to millions of famine deaths. The result was an agricultural system that was less productive but more amenable to government control. It did not prevent further famine deaths in wartime, but it did ensure that the Soviet wartime economy did not disintegrate.

In short, capitalism proved to have advantages in mobilizing resources for warfare. These advantages arose, paradoxically, from the ability of the government to bind itself by the laws of the state, just like a private person. The advantage was temporary, and was lost when modern dictators learned to break traditional constraints on authoritarian rule.

Managing war risks

Angell (1911) and his followers, such as Cordell Hull (1948), expected globalized capitalism to inaugurate lasting peace because of the interdependence it enforced upon trading states. International trade, they believed, created complementarities in the world economy, powerful enough to turn national rivals into international partners in a global network of stable, durable supply chains. In the language of risk management, they would have said that war threatened modern economies with universal breakdown; because this was an aggregate risk, there would be nowhere to hedge it or lay it off. Risk-averse governments would therefore back away.

The real historical relationship between war and trade is different. Since the eighteenth century, the economies that were most open to multilateral trade proved also to be strategically more secure. Far from being a source of war risk, long distance trade turned out to be an instrument for managing it. In two world wars, the alliances that were better placed to maintain external economic integration also better managed food resources across countries and fighting power across the theatres of combat (Harrison 1998; Broadberry and Harrison 2005). The countries that had resisted globalization in peacetime suffered local famines and generalized hunger in wartime (Collingham 2010). In short, the "commercial" capacity for war

deserves to be ranked alongside the technological and fiscal capacities that made modern mass warfare possible (Harrison and Wolf 2011).¹

Martin, Mayer, and Thoenig (2008) show how globalization has helped to manage war risks. Using data from 1970 to 2000, they show that trade has a double effect on the propensity for war. Consider any pair of countries. The more a country traded with its pair, they show, the more likely were the two to remain at peace. But as trade increased with third countries, the less likely was peace to persist. Bilateral trade reduced the frequency of bilateral war; multilateral trade increased it.

At the root of the historical process was falling trade costs (Jacks, Meissner, and Novy 2008). Suppose the leaders of a country have some reason to fight their neighbour. Under high trade costs, the adversary is the only trading partner. There is no substitute for the food and fuel previously imported, so war leads to autarky. The peacetime supply chain is broken; the home prices of food and fuel must rise. The duration of autarky is uncertain, since it depends on how quickly the war can be concluded, which is a matter of chance. As a result, the risk of persistent trade disruption and economic losses is high. When trade costs are low, in contrast, the home country can lay off its war risks in the rest of the world; for example, it can easily substitute away from the neighbour for the source of its imports. The broken supply chain can be replaced with others. Thus, low trade costs enable the home country to fight its neighbour while continuing to trade with the rest of the world.

Falling trade costs, the economic aspect of globalization, reduced the market risks that countries faced as they contemplated war. Did capitalism do this? The modern era is not the first in which trade costs have fallen. Long before modern capitalism, Mediterranean trade was repeatedly transformed by innovations in agriculture, shipping, and contractual institutions. The greatest revolution in global trade, the opening up of the Atlantic economy, came on the eve of the capitalist era (Açemoglu, Johnson, and Robinson 2005). The most that may be said is that the rise of capitalism continued a process that was already under way.

¹ The strategic advantage that goes along with being able to trade across the world is still not well understood in public policy debate. This is shown by the discussions that our societies continue to have about “food security” and “energy security.” Despite two centuries of evidence to the contrary, many people continue to identify security with self-sufficiency. In a bipartisan spirit, here are two recent examples. On December 19, 2007, U.S. President George W. Bush signed into law the Energy Independence and Security Act, which aims to “move the United States toward greater energy independence and security.” And, in a widely cited speech on United Nations World Food Day, October 16, 2008, former U.S. President Bill Clinton said: “Food is not a commodity like others. We should go back to a policy of maximum food self-sufficiency. It is crazy for us to think we can develop countries around the world without increasing their ability to feed themselves.” In fact autarky and security are unrelated or even inversely related. It was long distance trade based on specialization that made the major capitalist economies rich, and trade also made them secure – even in wartime.

War as a free lunch

There is a persistent view that, without wars, capitalism would fall into depression (e.g. Steindl 1952; Baran and Sweezy 1966). The philosophy of “military Keynesianism” maintains that capitalist economies tend to suffer from a deficiency of demand, and will stagnate without frequent injections of demand into the circular flow of income. The deficiency can be made up by debt-financed military spending combined with the Keynesian multiplier. If so, it does not follow that “capitalism means war.” Rather, it implies one more way in which capitalism has reduced the costs of war. In this case, it is suggested that capitalism can supply war free of charge. If the weapons and armies were not bought up by the government, the resources they represent would be unused; this would make war a free lunch. The lunch will then be eaten, not because we are hungry, but because it is free.

Three historical examples are frequently cited. One is the German recovery from the Great Depression under Hitler’s four-year plans; there, unemployment fell from 29.9 percent of the working population in 1932 to 1.9 percent in 1938. Joan Robinson (1972, p. 8) started the legend of a Keynesian recovery by proposing that “Hitler had already found how to cure unemployment before Keynes had finished explaining why it occurred.” Another was the vast war boom that followed U.S. entry into World War II; U.S. unemployment fell from 9.5 percent in 1940 (or 14.6 percent, if we include those on “emergency government employment”) to 1.2 percent in 1944. So strong was the connection that afterwards Paul Samuelson (in 1948, cited by Rockoff 2005) likened fiscal policy to the atomic bomb: “Too powerful a weapon to let men and government play with.” And third is the generally higher level of NATO countries’ military spending at the height of the Cold War compared with previous norms, illustrated in Table 2.

Table 2. Military spending, 1870 to 1979, percent of GDP, in four countries

Country	1870 to 1913	1920 to 1938	1960	1970	1979
USA	0.7	1.2	8.9	7.9	5.2
UK	2.6	3.0	6.5	4.8	4.8
France	3.7	4.3	6.3	4.2	3.9
Germany/West Germany	2.6	3.3	4.0	3.5	3.2

Sources: 1870-1913 and 1920-1938 from Eloranta and Harrison (2010); later years from Murdoch and Sandler (1984).

More detailed investigations of these episodes have given little support to the Keynesian interpretation. In the German case, recovery had already begun when Hitler took power. Reconstructing fiscal aggregates from the German archives, Ritschl (2002) shows that full-employment budget deficits were modest until 1936, and too small to account for recovery. Multiplier effects cannot be identified with any confidence because (as modern macro would predict) current household income was one of the least important determinants of consumer spending. Rather than exploiting the multiplier to promote recovery, National Socialist policies repressed consumption to make room for public investment and rearmament.

As for the U.S. experience, Robert Higgs (1992) pointed out that between 1940 and 1944 the government pulled the equivalent of 22 percent of the prewar working population into the armed forces. “No one needs a macroeconomic model,” he wrote, “to understand this event.” What happened after the war is of greater interest. Between 1944 and 1947 U.S. military outlays fell by 37 percent of GDP, yet in the same period 3.9 million civilian jobs were created (Rockoff 1998, pp. 83, 101). In the same way, the postwar demilitarization of western Germany did not lead to stagnation but was the prelude to the *Wirtschaftswunder*.

More generally, the hypothesis that postwar capitalism has stabilized itself by means of military spending finds no support in the data. In the 1960s, military spending shares across NATO countries were strongly correlated with GDP, and not at all with GDP per head (Olson and Zeckhauser 1966; Smith 1977); in other words, defence allocations reflected income constraints and butter-guns trade-offs, not underconsumption. During the “great moderation” that began in the 1970s, western economic growth became smoother, and unemployment fell, but this owed nothing to military spending, national shares of which continued to decline (Smith 2009, pp. 99-102) along the trend already visible in Table 2. In the recent global recession, conservative voices (e.g. Feldstein 2008) called for military spending to be used countercyclically, but there is no evidence that they were heard.

As for theory, modern macroeconomics tends to the conclusion that, in a competitive capitalist economy, a stable inflation target (for the central bank) and stable tax-and-spending rules (for the fiscal authority) will assure full employment in the medium term. Whatever the implications of the recent recession, it is hard to find anyone who seriously thinks capitalism cannot recover without a boost from military spending. There is nothing military spending can do for capitalism that cannot be done more efficiently by civilian spending, tax cuts or monetary easing.

3. Preferences for War

Up to this point, we have considered whether capitalism lowered the costs of going to war. Preferences for war have been left outside the story so far. Even if preferences were strongly biased towards peace, and were stable, and had not changed, lower opportunity costs could be expected to make war more frequent. Beyond this point lie more radical questions. Motivating them is the possibility that capitalism – or capitalists – might have derived specific benefits from war, such that war might have become the systematically preferred means of resolving internal or external problems.

Lobbies for war

On the face of it, capitalism and war would seem to be a surprising association. It was of the era before capitalism that Charles Tilly (1975, p. 42) wrote, “War made the state and states made war.” As late as the eighteenth century, Prussia was “not a country with an army, but an army with a country” (Friedrich von Schrötter, cited by Blackbourn 2003, p. 17). The rise of capitalism separated the economy from politics and decentralized economic power. The accumulation of industrial, financial,

human, and social capital reduced the importance of natural resources and the territory on which they could be found. And modern commerce gave the state so much more to think about than soldiers and guns. These are all visible reasons why one might expect capitalist societies to have lost the taste for war.

The idea that capitalism not only means war but *wants* war persists on two main foundations. One is a simple post-hoc-propter-hoc argument: first, global capitalism, then global war. The other is a dark view of the world that disputes what is visible on the surface: that capitalism decentralizes economic decisions, and that democratic government truly governs. Instead, it views the separation of business from the state as a façade behind which lobbying and conspiracies go on invisibly, to the detriment of both property rights and democracy.

Writing during the Great War, Lenin (1916) thought he observed the first transnational companies competing with each other for shares of the world market, while colluding to drive governments to re-divide the world's colonial spheres to private advantage. Between the wars, radical commentators in both Germany and America argued that national business elites had promoted war as a source of war profits (for the accusations against the "merchants of death," see Engelbrecht and Hanighen 1934). In the postwar period U.S. President Dwight D. Eisenhower (1961) warned again of the political danger arising from a large peacetime "military-industrial complex." More recent variants of this tradition include the "oil wars" of Pelletière (2004) and Naomi Klein's (2007) "disaster capitalism."

We will go step by step through this complex topic. Does the corporate sector expect to profit from war? Does it actually profit from war? Do corporate owners value connections to power? Do they use these connections to lobby for war contracts? Do such activities have analogues under anti-capitalist and non-capitalist regimes?

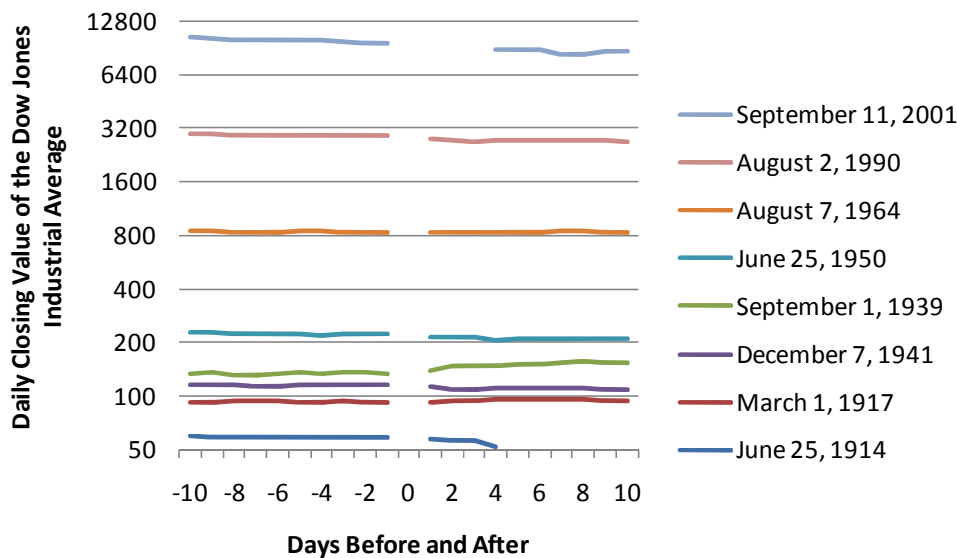
To start with profit expectations, if war is a capitalist conspiracy, it turns out that the capitalists were generally not too happy when the conspiracy worked. As Niall Ferguson and others have documented, on the outbreak of World War I, European bond prices fell and unemployment rose in London, Paris, and Berlin (Lawrence, Dean, and Robert 1992; Ferguson 1998, pp. 186-197). The panic on Wall Street was so great that the New York Stock Exchange was closed for the rest of the year.

More generally, think of stock prices as embodying the probabilistic profit expectations of the owners of capital. There is no evidence that stockholders see the realization of war probabilities in a positive light. Figure 1 shows closing values of the Dow Jones Industrial Average in New York for the ten working days before and after eight twentieth-century crises (the value on the day itself is omitted). Only two events saw stock prices climb; in five they fell, and two cases the stock market was closed (for more than four months after the outbreak of World War I in Europe, and for four days after 9/11). The median change in stock prices over the eight crises was a 5.2 percent decline.

After realized war come realized war profits. Have wars provided private business with direct benefits? The Great War saw widespread discontent in both Britain and Germany over industrial war profits and war profiteers (Carsten 1982). In most countries, major wars reduced incomes and weakened the family-based or

social safety net, so that poor and vulnerable people suffered harm. It was a short step from this to the idea that the rich had exploited the opportunity of war in order to tilt the distribution of income in their own favour (and a short further step to the proposal that the rich had promoted the war with this in mind).

Figure 1. Daily Closing Values of the Dow Jones Industrial Average



Source: <http://measuringworth.com/datasets/DJA/>, accessed on June 8, 2011.

Key:

- July 25, 1914: Russia mobilizes against Germany.
- March 1, 1917: The Zimmermann telegram published.
- September 1, 1939: Germany invades Poland.
- December 7, 1941: Japan attacks Pearl Harbor.
- June 25, 1950: North Korea invades South Korea.
- August 7, 1964: Gulf of Tonkin Resolution.
- August 2, 1990: Iraq invades Kuwait.
- September 11, 2001: Al-Qaeda attacks American cities.

With regard to World War I, it was Hardach (1977, pp. 106-107) and Kocka (1984) that originally made the case that war profits destabilized the distribution of income among the German social classes. Hardach concluded: "These findings point, not so much to the harnessing of big business to the machine of state, as to the reverse." Baten and Schulz (2005) and Ritschl (2005) have re-examined these claims. Baten and Schulz found that the appearance of rising inequality is explained by two errors, a failure to account for inflation in measuring profits, and a selection bias in the profits reported. A wider sample of big businesses shows the real profits of German large-scale industry declining *pari passu* with returns to labour, so that the labour share in national income, after initial improvement, was more or less the same in 1917 as it had been in 1913. Ritschl reached similar results independently by comparing real wage and real output data.

The claim that corporate owners were able to exploit war conditions to increase their profit incomes acquired its hold on the popular imagination in association with

the image of an organized, secretive, military-industrial lobby at work behind the scenes. Therefore, we turn to consider corporate political action, on which there is a large literature. Adam Smith (1776) remarked on the propensity of “people of the same trade” to meet and conspire against the public. In fact, do corporate owners lobby politicians and make self-interested political donations? Yes, all the time (Hillman et al. 2004). Do they value these connections? Again, yes. In countries that are relatively corrupt, such as Indonesia and Malaysia, connections to the ruling party add market value to the firm (Fisman 2000, Johnson and Mitton 2003). In the 2000 U.S. presidential election, when Bush beat Gore, oil and tobacco firms gained value and legal firms lost (Knight 2007). And German firms that were linked to the Nazi Party before 1933 by donations or open support gained value when Hitler took power (Ferguson and Voth 2008).

In capitalist societies there is lobbying behind the scenes. Who holds the initiative in this relationship: the corporate owners looking for influence, or venal politicians looking for money? Evidence on this can be found in historical narratives. For example, it is well known that a meeting of German industrialists provided Hitler’s March 1933 election fund, but Hitler decided whom to invite to the meeting, and he opened it with a blackmail threat to those present (Tooze 2006, pp. 99-106). In other words, his corporate sponsors took the opportunity to support him, but Hitler created the opportunity and conditioned the incentives to participate.

Two world wars left German capitalism with a bad press, much of it deserved. Even so, the relationship between the industrialists and war aims was more complex than is often assumed. The German industrialist Hugo Stinnes, for example, was a militarist and imperialist in the Great War, but an economic liberal and a free-trader before and after. The reason, Feldman (2000) argues, was circumstances: “The war had created a new situation for Stinnes and, like strikes, which he would also just as soon have seen disappear, one had to adjust to them and to their periodic reappearance ... this meant placing oneself in the best position for the next occurrence, and that was the goal, exaggerated and uncontrolled as it was, of Stinnes’s war-aims policies.”

Studies of German industry and industrialists under the Third Reich point us in the same direction. Many German business interests were “willing partners” in the expansionist plans of the Third Reich (Tooze 2006, p. 134). Not all fell into line, although most did. As Hitler’s plans unfolded, the compliant majority of business leaders adapted easily to new perspectives, such as the idea that foreign forced labour would become a permanent resource (Mommssen 2005, p. 182). In this way they adapted to the growing inevitability and then the fact of war. But the plan for war and the decision to execute it belonged to the political actors.

Gustav Krupp, for example, whose furnaces forged Hitler’s victories and whose facilities exploited up to 100,000 slaves, was an early adherent to the Hitler regime. But until 1933, Richard Overy (1994, pp. 119-143) has shown, he was a traditional conservative. His chief aim was to keep his firm intact under family control, avoiding the fate of Hugo Junkers whose opposition to Nazi plans led to a state takeover. Like Hugo Stinnes, he accommodated to the realities that he could not alter.

Amongst German business, open opposition to Nazi plans was rare. This makes Hermann Göring's confrontation with the steel industrialists in 1937 all the more revealing (Overy 1994, pp. 93-118). In the pursuit of autarky, Göring wished to reorient the steel industry away from imported iron ores. In December 1936 he demanded investments in facilities to exploit inferior domestic deposits. The Ruhr industrialists resisted for a variety of reasons including the fear that, once they had committed the investments, the National Socialist state would hold them up for lower steel prices. While their united front was quickly broken, the outcome was a state-owned steel giant, the Reichswerke Hermann Göring, which later became the major conglomerate vehicle for German investments in occupied Europe (Overy 1994, pp. 144-174).

In prewar Japan, the business class was conservative and patriotic but not reckless. Its leaders were embedded in the political system through both party representation and networks (von Staden 2008). In the 1930s, however, their influence was threatened and increasingly limited, by the rise of Japanese "ultra-nationalism," which was hostile to private property and industrialization. Radical militarists established a political base in the countryside on plans to colonize East Asia, and mounted attacks on those conservative leaders that preferred financial orthodoxy to paying for military adventures (Collingham 2010). Representatives of the armed forces increasingly took over the government.

While the zaibatsu ("money cliques," the leading Japanese conglomerate corporations) were afterwards reviled for supporting Japanese militarism, the range of their behaviours under this threat is consistent with that of their German counterparts. Japanese business leaders took the opportunities that seemed profitable, shouldered the obligations to support the war effort that they could not refuse, and accepted the government funding that aligned their incentives with the war effort. As Takao Shiba (1994) has shown, for the Mitsubishi Corporation in the 1930s this meant repeatedly postponing plans to expand civilian automotive engineering in favour of instructions for war production received from the Army. Kawasaki, in contrast, was ready to build ahead of military demand, but was relieved of the risk after the event by government capital. As all-out war approached the Army and Navy took legal measures to bring private owned industrial facilities under direct supervision. These measures were resisted until it became clear that only firms that accepted military supervision would receive allocations of supplies and labour. While cooperating fully with the war effort, both Mitsubishi and Kawasaki took steps to preserve the basis of postwar independence.

The common feature of these stories is the "primacy of politics" (Mason 1968). In Japan and Germany, the political leaders held the initiative. Corporate behaviour was reactive, defensive, and opportunistic. It is not a pretty picture, but it does not show a capitalist lobby for war. Overy (1994, p. 94) concludes the Krupp story: "Nazi political hegemony in the end prevented German capitalists from acting as capitalists." From this we learn not about how big business changed government, but how big government diverted business from competitive profit seeking to rent seeking and dependence on government contracts and subsidies.

Interwar evidence on the influence of military-industrial lobbies in other countries is thin. Wilson and Eloranta (2009) have carefully examined the military procurement practices of four interwar democracies (the UK, USA, Sweden, and Finland). They show that democratic institutions created effective barriers to profiteering from rearmament. Edgerton's (2006) revisionist history finds the first exemplar of a modern military-industrial complex in interwar Britain's "warfare state," but this one was led by efficient technocrats, not greedy capitalists or venal politicians. Robert Higgs (1993) has shown that, on the eve of World War II, American business people were distrustful of the Roosevelt administration, reluctant to undertake war investments, suspicious of the government interference that would follow if they did, and fearful that they would not be allowed to make money on them.

If capitalist money has observable influence on politics anywhere, it must surely be in the postwar United States. Robert Higgs has modelled the strategic interaction among American voters, defence producers, and politicians in the Cold War (Higgs and Kilduff 1993; Higgs 1994). Defence firms provided jobs for voters and campaign funding for politicians seeking election. They were rewarded by a swollen military budget that overprovided both national defence and private profit. The losers were the taxpayers and the armed forces, whose budget was diverted to purchasing lines of equipment that they did not want and could not use. The gains to defence corporations and labour were concentrated and obvious; the efficiency losses were diffuse and opaque, a recipe for status-quo bias (Fernandez and Rodrik 1991).

Even in this model, the carousel did not go round forever. In the end, voter opinion could still bring it to a halt. Empirically, the balance of public sentiment on whether defence spending should rise or fall was the single most important factor in whether it did so. Successive generations of politicians worked to persuade the public to accept the existence of security threats and shortfalls, but ultimately they could not control voter sentiment. In an open society, two things limited public support for the military and kept the defence budget in check: the tax increases necessary to pay for defence resources, and the war casualties that followed from using them in war. "Deaths and taxes," Higgs argues, set the ultimate constraints on the power of the military industrial complex.

How do such outcomes compare with those of non-capitalist arrangements? The Soviet defence market differed from the American defence market most obviously in the lack of transparency and public accountability. The postwar Soviet defence sector took a consistently larger share of national resources than the American one (Firth and Noren 1998). If American corporations lobbied for development funding, so too could Soviet weapon designers; they did have to be more careful, knowing Stalin's capacity for suspicion (Harrison and Markevich 2008; Harrison 2008). The Stalin-era state agencies responsible for the construction of defence plants were prolific and willing users of forced labour (Harrison 1994; Simonov 2000). These rough comparisons do not point to a moral deficit in capitalism. Rather, the transparency and accountability of democratic political processes placed limits on the power of American military-industrial interests that did not exist under communism.

David Holloway (1980, p. 158) once considered the proposition that “The Soviet Union does not *have* a military-industrial complex, but *is* such a complex. This is too sweeping a statement,” he commented, “but it does make the point that the history of the Soviet Union is so bound up with military power that it seems wrong to speak of a separate military-industrial complex acting within the state.”² More recently Kontorovich and Wein (2009) have asked: “What did the Soviet rulers maximise?” Based on revealed preferences in resource allocation (“a high share of military spending in GNP, a low share of consumption, and a high share of investment directed primarily into heavy industry”) their answer is not “socialism” or economic growth or even modernization but military power. In other words, no one needed to lobby for it; it was a fundamental preference of the communist regime.³

To summarize: Are capitalist corporations interested in politics? Yes, unquestionably. Do they lobby politicians and make self-interested political donations? Yes, all the time. But do they lobby in favour of external confrontation or conflict? Yes, if the opportunity appears to offer profit, but such opportunities are infrequent, and an open society appears to place automatic limits on this. Do they willingly exploit the spoils of conquest or enslavement? Yes, if the opportunity to do so presents itself. Do they do these things systematically? There is no evidence of that. In fact, the character of the state and the agency of politicians appear to be the decisive factors. It seems to be communism, not capitalism, that has been more conducive to a militarized economy and the accumulation of military power.

Diversionsary wars

In the concept of diversionary wars, political leaders seek and exploit conflict with external adversaries in order to rally domestic support. The idea is well established in the literature, perhaps because the theoretical case is quite intuitive, and narrative support is not hard to find. In fact, it may be too easy; as Jack Levy (1989) pointed out, few wars have *not* been attributed to political leaders’ desire to improve domestic standing.

² In the same spirit the appointment of former defence minister Raúl Castro as President of Cuba, where the armed forces control as much as 60 percent of the economy (Gershman and Gutierrez 2009, p. 68), prompted Christopher Hitchens (2006) to comment: “As was once said of Prussia, Cuba is not a country that has an army but an army that has a country.”

³ While Stalin undeniably placed high priority on rearmament and military power, it was still possible to overstate the case. According to Viktor Suvorov (1990), Stalin’s rearmament was motivated by a plan for aggressive war (see also Raack 1995; Weeks 2002). On this view, in 1941 Stalin intended to use Hitler as his “icebreaker” to the West; the Soviet plan was to exploit the opportunity presented by Germany’s war with the Anglo-French alliance by launching an aggressive war to occupy Europe; Hitler struck first to preempt this plan. This idea, if true, had far reaching implications, because it would have transferred political (and moral) responsibility for the opening of the Eastern front from Hitler to Stalin. For refutations see Glantz (1998), Uldricks (1999), and Gorodetsky (1999).

The idea of diversionary wars is directly relevant to a discussion of capitalism only if it can be shown that capitalist polities are more likely to exploit foreign adventures. One reason might be advanced from a Marxist perspective: perhaps capitalist societies, being class-divided, are more likely to give rise to wars intended to divert the workers from the cause of socialism. A longstanding interpretation of the origins of World War I in domestic German politics conveys exactly this message (Berghahn 1973).

This view does not sit well with the equally traditional idea that a class-divided society is less able to go to war. The official Soviet histories of World War II used to claim that, under capitalism, divided class interests made the working people reluctant to fight for the nation. Because of this, the workers could be motivated to take part only by “demagogy, deception, bribery, and force” (Grechko et al., eds 1982, vol. 12, p. 38; Pospelov et al., eds 1965, vol. 6, pp. 80-82).

Quantitative empirical work has lent little support to the idea (Levy 1989). Exceptions include studies of the use of force by U.S. and British postwar governments by Morgan and Bickers (1992) and Morgan and Anderson (1999). They conclude that the use of force is more likely when government approval is high but the government’s supporting coalition is suffering erosion. They also suggest that force is unlikely to be used at high intensities under such circumstances (because likely costs are high, eroding political support) or when domestic conflict is high (because conflict would then be polarizing rather than consolidate support).

Another line of research suggests that new or incompletely established democracies are particularly vulnerable to risky adventures in nation-building (Mansfield and Snyder 2005). One inspiration for this view was the record of the new democracies born out of the former Soviet Union and Yugoslavia. More recently, Georgia seems to have provided out-of-sample confirmation.

Suppose diversionary wars exist. Is capitalism somehow more internally conflicted than other societies, and so disproportionately likely to externalize conflict? As a comparator, the case of fascism seems straightforward. Fascism did not produce diversionary wars because, for fascists, war was not a diversion; it was the *Schwerpunkt*.

The more interesting case is that of communism. Communists do not seem to have pursued diversionary wars. But the domestic legitimacy of Soviet rule visibly relied on the image of an external enemy, and thrived on tension short of military conflict. Soviet leaders used external tension to justify internal controls on movement, culture, and expression, and the associated apparatus of secrecy, censorship, and surveillance. When they tolerated trends towards détente in the 1970s, they subverted their own controls. An East German Stasi officer told his boss, repeating it later to Garton Ash (1997, p. 159): “How can you expect me to prevent [defections and revelations], when we’ve signed all these international agreements for improved relations with the West, working conditions for journalists, freedom of movement, respect for human rights?”

If Soviet foreign policy was sometimes expansionist, it sought expansion only up to the point where the desired level of tension was assured. Bolsheviks of the 1917 generation knew well that too much too much conflict abroad encouraged defeatist

and counter-revolutionary sentiments at home. Oleg Khlevniuk (1995, p. 174) noted: “The complex relationship between war and revolution, which had almost seen the tsarist regime toppled in 1905 and which finally brought its demise in 1917, was a relationship of which Stalin was acutely aware. The lessons of history had to be learnt lest history repeat itself.” Stalin did all he could to avoid war with Germany in 1941 (Gorodetsky 1999). Postwar Soviet leaders risked war by proxy, but avoided direct conflict with the “main adversary.” Faced with unfavourable odds, they tended to withdraw (from Cuba) or do nothing (in Poland) or accepted them with great reluctance (in Hungary, Czechoslovakia, and Afghanistan).

Diversionsary tension must fall short of diversionsary war. From this follows an acceptance that capitalism, because of its tendency to give rise to democratic structures and political competition, has been more open to diversionsary wars than other systems. But the empirical research and analysis that underpin this conclusion also imply that such wars would generally be small scale and short lived, and the circumstances that give rise to them would be exceptional or transient.

We should place this in the wider context of the “democratic peace.” As Levy (1988) wrote: “Liberal or democratic states do not fight each other ... This absence of war between democracies comes as close as anything we have to an empirical law in international relations.” Since all liberal democracies have also been capitalist on any definition, it is a finding of deep relevance.

Capitalism’s wars

America is the world’s preeminent capitalist power. According to a poll of more than 21,000 citizens of 21 countries in the second half of 2008, people tend on average to evaluate U.S. foreign policy as inferior to that of their own country in the moral dimension.⁴ While this survey does not disaggregate respondents by educational status, many apparently knowledgeable people also seem to believe that most wars in the modern world have been caused by America; this impression is based on my experience of presenting work on the frequency of wars to academic seminars in several European countries.

According to the evidence, however, these beliefs are mistaken. We are all aware of America’s wars, but they make only a small contribution to the total. Counting all bilateral conflicts involving at least the show of force from 1870 to 2001, it turns out that the countries that originated them come from all parts of the global income distribution (Harrison and Wolf 2011). It is not the countries that are richer (measured by GDP per head) that tend to start more conflicts. It is the countries that are economically larger (measured by GDP). America is both large and rich, but it turns out that sheer size is what matters. In fact, controlling for size,

⁴ Specifically, 24 percent of respondents rated their own country’s foreign policy as morally above average, and 21 percent rated it below average; the equivalent ratings for U.S. foreign policy (with U.S. respondents excluded) were 20 percent (above average) and 32 percent (below). “Most People Think Their Nation’s Foreign Policy Is Morally No Better Than Average,” January 22, 2009, available from <http://www.WorldPublicOpinion.org> (accessed October 18, 2011).

America has been less warlike than some other countries. We rank countries by the numbers of conflicts they initiated over the period. The United States, with the largest economy, comes only in second place. Third place belongs to China. In first place is Russia (the USSR between 1917 and 1991).

What do capitalist institutions contribute to the empirical patterns in the data? Erik Gartzke (2007) has re-examined the hypothesis of the “democratic peace” based on the possibility that, since capitalism and democracy are highly correlated across countries and time, both democracy and peace might be products of the same underlying cause, the spread of capitalist institutions.

It is a problem that our historical datasets have measured the spread of capitalist property rights and economic freedoms over shorter time spans or on fewer dimensions than political variables. For the period from 1950 to 1992, Gartzke uses a measure of external financial and trade liberalization as most likely to signal robust markets and a *laissez faire* policy. Countries that share this attribute of capitalism above a certain level, he finds, do not fight each other, so there is capitalist peace as well as democratic peace. Second, economic liberalization (of the less liberalized of the pair of countries) is a more powerful predictor of bilateral peace than democratization, controlling for the level of economic development and measures of political affinity.

Why, then, with more capitalism and more democracy, do we have more wars? One possibility is that we have more wars because the quality of war is changing. Münkler (2005) suggests that “new wars” are more like the Thirty Years War (1618-1648) than the great-power territorial conflicts of the twentieth-century world wars. Behind the new wars, he argues, lie deep forces of globalization including world markets awash with cheap Kalashnikov rifles and unemployed young men. The new wars are small scale and protracted; the opposing forces may prefer maintaining a state of conflict over victory, so that new wars smoulder without coming to a definite conclusion. In new wars, conflict is exploited by private causes for private ends. New wars lose the distinction between combatants and civilians; they substitute massacre for battle; they erode rather than build state capacity. By implication, modern states are losing control of violence.

Münkler’s vision can be compared with the perspective of Harrison and Wolf (2011). In both perspectives trends in globalization and the relative cost of means of destruction are underlying forces. For Harrison and Wolf these forces are changing the number of wars, not their quality. “If the frequency of conflict has been increasing,” they conclude, “it may be not because we want it; more likely, it is ‘Because we can’.”

4. Conclusion

I have compared capitalism and its historical alternatives. Has capitalism helped to lower the costs of war? Yes, but not uniquely. The technological and trade costs of war began to fall before the capitalist era; capitalism certainly continued this trend. A distinctive contribution of capitalism came from the fiscal revolution of the eighteenth century that opened the way for mass warfare in the twentieth. By the

twentieth century, however, the capitalist fiscal revolution had been all but overtaken by the repressive mobilization capacities of fascism and communism. As for the idea that capitalism reduced the costs of war by making it a Keynesian “free lunch,” I reject it.

Does capitalism prefer war; that is, is war in the private interest of big business? Yes – conditionally. History shows the government can put in place incentives that align the private interests of big business with war, but this is a politically (not economically) determined outcome. The interest of business in war is opportunity, not strategy. There is no evidence that private business has had any greater interest in war, conquest, exploitation, or enslavement than the private or bureaucratic interests that have operated in other forms of society.

Are capitalist polities particularly liable to undertake foreign wars to divert attention from conflicted issues at home? Yes, but only weakly: the circumstances under which this happens are narrowly defined and the level of conflict is likely to be low. Moreover, there is strong evidence that since 1945 capitalist democracies have formed a “peace club” among themselves.

The determinants of wars involve both structure and agency. Agency must have a role, because wars are conceived, planned, declared, and waged by human actors. On the historical evidence, capitalism has gone to war only when captured and driven by a determined political enterprise. The fact remains that of all social systems liberal capitalism seems to have least in common with war. This is because of the primary emphasis that capitalism gives to private interests, decentralized decisions, and personal freedoms. It is true that even liberal capitalism has allowed the temporary subordination of the individual to the interests of the state in wartime. In communist and fascist societies, in contrast, the supremacy of the state over the individual was a permanent condition. Thus, communism and fascism seem to have had more in common with states at war than with capitalism.

References

- Açemoglu, Daron, Simon Johnson, and James Robinson. 2005. The Rise of Europe: Atlantic Trade, Institutional change, and Economic Growth. *American Economic Review* 95:3, pp. 546-579.
- Angell, Norman. 1911. *The Great Illusion: A Study of the Relation of Military Power to National Advantage*. Third edition. London: Heinemann.
- Baran, Paul A., and Paul M. Sweezy. 1996. *Monopoly Capital: An Essay on the American Economic and Social Order*. New York: Monthly Review Press.
- Baten, Joerg, and Schulz, Rainer. 2005. Making Profits in Wartime: Corporate Profits, Inequality, and GDP in Germany during the First World War. *Economic History Review*, 58:1: 34–56.
- Berghahn, Volker R. 1973. *Germany and the Approach of War in 1914*. London: Macmillan.
- Blackbourn, David. 2003. *History of Germany, 1780-1918: The Long Nineteenth Century*. Oxford: Blackwell.
- Bonney, Richard, ed. 1999. *The Rise of the Fiscal State in Europe, 1200-1815*. Oxford: Oxford University Press.
- Broadberry, Stephen, and Mark Harrison, eds. 2005. *The Economics of World War I*. Cambridge: Cambridge University Press.

- Buchheim, Christoph, and Jonas Scherner. 2006. The Role of Private Property in the Nazi Economy: The Case of Industry. *Journal of Economic History* 66:2, pp. 390-416.
- Carsten, F. L. 1982. *War Against War: British and German radical movements in the First World War*. Berkeley and Los Angeles: University of California Press.
- Collingham, Lizzie. 2011. *The Taste of War: World War Two and the Battle for Food*. London: Allen Lane.
- CPSU. 1941. *History of the Communist Party of the Soviet Union: Short Course*. Moscow: Foreign Languages Publishing House.
- de Bloch, Jean. 1914. *The Future of War*. Boston: World Peace Foundation.
- Dimitrov, Georgi. 1972. *Selected Works, vol. 2*, Sofia: Sofia Press.
- Edgerton, David. 2006. *Warfare State: Britain, 1920-1970*. Cambridge: Cambridge University Press.
- Eloranta, Jari, and Mark Harrison. 2010. War and Disintegration, 1914-1945. In *The Cambridge Economic History of Modern Europe, Volume 2: 1870-2000*, pp. 133-155. Edited by Stephen Broadberry and Kevin O'Rourke. Cambridge: Cambridge University Press.
- Engelbrecht, H.C., and F.C. Hanighen. 1934. *Merchants of Death: Study of the International Armament Industry*. New York: Dodd, Mead & Co.
- Feldman, Gerald D. 1966. *Army, Industry and Labor in Germany, 1914-1918*. Princeton: Princeton University Press.
- Feldstein, Martin. 2008. Defense Spending Would Be Great Stimulus: All Three Service Branches are in Need of Upgrade and Repair. *Wall Street Journal*, December 24.
- Ferguson, Niall. 1998. *The Pity of War*. London: Allen Lane.
- Ferguson, Niall. 2001. *The Cash Nexus: Money and Power in the Modern World, 1700-2000*. London: Allen Lane.
- Ferguson, Niall. 2006. Political Risk and the International Bond Market Between the 1848 Revolution and the Outbreak of the First World War. *Economic History Review* 59:1, pp. 70-112.
- Ferguson, Thomas, and Hans-Joachim Voth. 2008. Betting on Hitler – The Value of Political Connections in Nazi Germany. *Quarterly Journal of Economics* 123:1, pp. 101-137.
- Fernandez, Raquel, and Dani Rodrik. 1991. Resistance to Reform: Status Quo Bias in the Presence of Individual-Specific Uncertainty. *American Economic Review* 81:5, pp. 1146-55.
- Findlay, Ronald, and Kevin O'Rourke. 2007. *Power and Plenty: Trade, War, and the World Economy in the Second Millennium*. Princeton: Princeton University Press.
- Firth, Noel E., and James H. Noren. 1998. *Soviet Defense Spending: a History of CIA Estimates, 1950-1990*, College Station, TX: Texas A & M University Press.
- Fisman, Raymond. 2000. Estimating the Value of Political Connections. *American Economic Review* 91:4, pp. 1095-1102.
- Garton Ash, Timothy. 1997. *The File: A Personal History*. London: Atlantic.
- Gartzke, Erik. 2007. The Capitalist Peace. *American Journal of Political Science* 51:1, pp. 166-191.
- Gat, Azar. 2006. *War in Human Civilization*. Oxford: Oxford University Press.
- Gershman, Carl, and Orlando Gutierrez. 2009. Can Cuba Change? Ferment in Civil Society. *Journal of Democracy* 20:1, pp. 36-53.
- Glantz, David M. 1998. *Stumbling Colossus: The Red Army on the Eve of World War*. Lawrence, KS: University Press of Kansas.

- Gleditsch, Kristian S. 2004. A Revised List of Wars Between and Within Independent States, 1816-2002. *International Interactions* 30:3, pp. 231-262.
- Gleditsch, Nils P. 2008. The Liberal Moment Fifteen Years On. *International Studies Quarterly* 52:4, pp. 691-712.
- Goldstein, Joshua. 2011. *Winning the War on War: The Decline of Armed Conflict Worldwide*. New York: Penguin.
- Gorodetsky, Gabriel. 1999. *Grand Delusion: Stalin and the German Invasion of Russia*. New Haven, CT: Yale University Press.
- Grechko, A. A., et al., eds. 1982. *Istoriia vtoroi mirovoi voiny*, vol. 12. Moscow: Voenizdat.
- Guérin, Daniel. 1938. Fascism and Big Business. *The New International: A Monthly Organ of Revolutionary Marxism* 4:10, pp. 297-300. Available from <http://www.marxists.org/history/etol/writers/guerin/1938/10/fascism.htm> (accessed June 9, 2011).
- Hardach, Gerd. 1977. *The First World War, 1914-1918*. Berkeley, CA: University of California Press.
- Harrison, Mark, and Andrei Markevich. 2008a. Hierarchies and Markets: the Defense Industry Under Stalin (with Andrei Markevich). In *Guns and Rubles: the Defense Industry in the Stalinist State*, pp. 50-77. Edited by Mark Harrison. New Haven: Yale University Press.
- Harrison, Mark, and Andrei Markevich. 2008b. The Soviet Market for Weapons. In *Guns and Rubles: the Defense Industry in the Stalinist State*, p. 156-179. Edited by Mark Harrison. Yale-Hoover Series on Stalin, Stalinism, and the Cold War. New Haven: Yale University Press.
- Harrison, Mark, and Nikolaus Wolf. 2011. The Frequency of Wars. *Economic History Review*, forthcoming
- Harrison, Mark, ed. 1998. *The Economics of World War II: Six Great Powers in International Comparison*. Cambridge: Cambridge University Press.
- Harrison, Mark. 1994. The Soviet Defense Industry Complex in World War II. In *World War II and the Transformation of Business Systems*, pp. 237-62. Edited by Jun Sakudo and Takao Shiba. Tokyo: University of Tokyo Press.
- Harrison, Mark. 2001. Providing for Defense. In *Behind the Facade of Stalin's Command Economy: Evidence from the Soviet State and Party Archives*, pp. 81-110. Edited by Paul R. Gregory. Stanford, CA: Hoover Institution Press.
- Harrison, Mark. 2008. The Market for Inventions Under Stalin: Experimental Aircraft Engines. In *Guns and Rubles: the Defense Industry in the Stalinist State*, pp. 180-209. Edited by Mark Harrison. New Haven: Yale University Press.
- Harrison, Mark. 2011. Stalinizm i ekonomika voennogo vremeni [Stalinism and the Economics of Wartime]. In *Istoriia stalinizma: Itogi i problemy izucheniia*, pp. 546-565. Edited by E. Iu. Kondrashina et al. Moscow: Rosspen.
- Hewitt, J. Joseph. 2008. Unpacking Global Trends in Violent Conflict, 1946-2005. In *Peace and Conflict 2008*, pp. 107-118. Edited by J. Joseph Hewitt, Jonathan Wilkenfeld, and Ted Robert Gurr. Boulder, Co., and London: Paradigm.
- Higgs, Robert V. 1992. Wartime Prosperity? A Reassessment of the U.S. Economy in the 1940s. *Journal of Economic History* 52:1, pp 41-60.
- Higgs, Robert V. 1993. Private Profit, Public Risk: Institutional Antecedents of the Modern Military Procurement System in the Rearmament Program of 1940-41. In *The Sinews of War: Essays on the Economic History of World War II*. Edited by Geoffrey T. Mills and Hugh Rockoff. Ames, Iowa: Iowa State University Press.
- Higgs, Robert V. 1994. The Cold War Economy: Opportunity Costs, Ideology, and the Politics of Crisis. *Explorations in Economic History* 31:3, 283-312.

- Higgs, Robert V., and Anthony Kilduff. 1993. Public Opinion: A Powerful Predictor of U.S. Defense Spending. *Defence and Peace Economics* 4:3, pp. 227-238.
- Hillman, Amy J., Gerald D. Keim, and Douglas Schuler. 2004. Corporate Political Activity: A Review and Research Agenda. *Journal of Management* 30:6, pp. 837-857.
- Hitchens, Christopher. 2006. The Eighteenth Brumaire of the Castro Dynasty: Cuba's Military Coup Marks the End of the Revolutionary Era. *The Slate*, August 7. <http://www.slate.com> (accessed October 11, 2011).
- Hoffman, Philip T. 2010. Prices, the Military Revolution, and Western Europe's Comparative Advantage in Violence. *Economic History Review*, 64:51, pp. 39-59.
- Hoffman, Philip T., and Jean-Laurent Rosenthal. 1997. The Political Economy of Warfare and Taxation in Early Modern Europe: Historical Lessons for Economic Development. In *The Frontiers of New Institutional Economics*, pp. 31-55. Edited by John N. Drobak and John V. Nye. San Diego: Academic Press.
- Holloway, David. 1980. War, Militarism, and the Soviet State. In *Protest and Survive*, pp. 129-169. Edited by E. P. Thompson and Dan Smith. London: Penguin Books.
- Hull, Cordell. 1948. *The Memoirs of Cordell Hull*. Vols 1-2. New York: Macmillan.
- Jacks, David S., Christopher M. Meissner, and Dennis Novy. 2008. Trade Costs, 1870-2000. *American Economic Review* 98:2, pp. 529-534.
- Johnson, Simon, and Todd Mitton. 2003. Cronyism and Capital Controls: Evidence from Malaysia. *Journal of Financial Economics* 67:2, pp. 351-382.
- Karaman, K. Kivanç, and Şevket Pamuk. 2010. Ottoman State Finances in European Perspective, 1500-1914. *Journal of Economic History* 70:3, pp. 593-629.
- Khlevniuk, Oleg. 1995. The Objectives of the Great Terror, 1937-38. In *Soviet History, 1917-1953: Essays in Honour of R. W. Davies*, pp. 158-176. Edited by J. M. Cooper, Maureen Perrie, and E. A. Rees. New York: St Martin's.
- Klein, Naomi. 2007. *The Shock Doctrine: The Rise of Disaster Capitalism*. London: Allen Lane.
- Knight, Brian. 2007. Are Policy Platforms Capitalized into Equity Prices? Evidence from the Bush/Gore 2000 Presidential Election. *Journal of Public Economics* 91:1, pp. 389-409.
- Kocka, Jürgen. 1984. *Facing Total War: German Society, 1914-1918*. Leamington Spa: Berg.
- Kontorovich, Vladimir, and Alexander Wein. 2009. What did the Soviet Rulers Maximise? *Europe-Asia Studies* 61:9, 1579-1601.
- Lawrence, Jon, Martin Dean, and Jean-Louis Robert. 1992. The Outbreak of War and the Urban Economy: Paris, Berlin, and London in 1914. *Economic History Review* 45:3, pp. 564-593.
- Lenin, V. I. 1916. *Imperialism – The Highest Stage of Capitalism*.
- Levy, Jack S. 1988. Domestic Politics and War. *Journal of Interdisciplinary History* 18:4, pp. 653-673.
- Levy, Jack S. 1989. The Diversionary Theory of War. In *Handbook of War Studies*, pp. 259-288. Edited by Manus I. Midlarsky. Boston: Unwin Hyman.
- Mansfield, Edward D., and Jack Snyder. 2005. *Electing to Fight: Why Emerging Democracies Go to War*. Cambridge, MA: MIT Press.
- Markevich, Andrei, and Mark Harrison. 2006. Quality, Experience, and Monopoly: the Soviet Market for Weapons Under Stalin. *Economic History Review* 59:1, pp. 113-142.
- Martin, Philippe, Thierry Mayer, and Mathias Thoenig. 2008. Make Trade Not War? *Review of Economic Studies* 75:3, pp. 865-900.
- Marx, Karl. 1867. *Capital*, vol. 1.

- Mason, Timothy. 1968. The Primacy of Politics: Politics and Economics in National Socialist Germany. In *The Nature of Fascism*, pp. 165-195. Edited by Stuart J. Woolf. London: Weidenfeld & Nicolson.
- Milward, Alan S. 1965. *The German Economy at War*. London: Athlone Press.
- Mommsen, Hans. 2005. The Impact of Compulsory Labor on German Society at War. In *A World at Total War: Global Conflict and the Politics of Destruction, 1937-1945*, pp. 177-188. Edited by Roger Chickering, Stig Förster, and Bernd Greiner. Cambridge: Cambridge University Press.
- Morgan, T. Clifton, and Christopher J. Anderson. 1999. Domestic Support and Diversionary External Conflict in Great Britain, 1950- 1992. *Journal of Politics* 61:3, pp. 799-814.
- Morgan, T. Clifton, and Kenneth N. Bickers. 1992. Domestic Discontent and the External Use of Force. *Journal of Conflict Resolution* 36:1, pp. 25-52.
- Münkler, Hartfried. 2005. *The New Wars*. Cambridge: Polity.
- Murdoch, James C., and Todd Sandler. 1984. Complementarity, Free Riding, and the Military Expenditures of NATO Allies. *Journal of Public Economics* 25:1-2, pp. 83-101.
- O'Brien, P. K. 2005. Fiscal and Financial Preconditions for the Rise of British Naval Hegemony, 1485-1815. Working Paper No. 91/05. London School of Economics, Department of Economic History.
- O'Brien, P. K. 2011. The Nature and Historical Evolution of an Exceptional Fiscal State and its Possible Significance for the Precocious Commercialization and Industrialization of the British Economy from Cromwell to Nelson. *Economic History Review* 64:2, pp. 408-446.
- Offer, Avner. 1989. *The First World War: An Agrarian Interpretation*. Oxford: Clarendon Press.
- Olson, Mançur. 1963. *The Economics of the Wartime Shortage: A History of British Food Supplies in the Napoleonic War and in World Wars I and II*. Durham, NC: Duke University Press.
- Overy, Richard J. 1994. *War and Economy in the Third Reich*. Oxford: Oxford University Press.
- Pelletière, Stephen C. 2004. *America's Oil Wars*. London: Praeger.
- Pinker, Steven. 2011. *The Better Angels of our Nature: Why Violence has Declined*. New York: Viking.
- Pospelov, P. N. et al., eds. 1965. *Istoriia Velikoi Otechestvennoi voiny Sovetskogo Soiuzu 1941-1945*, vol. 6. Moscow: Voenizdat.
- Proudhon, Pierre-Joseph. 1861. *La guerre et la paix : recherches sur le principe et la constitution du droit des gens*. Vols 1-2. Paris : Collection Hetzel.
- Raack, Richard C. 1995. *Stalin's Drive to the West, 1938-1941: the Origins of the Cold War*. Stanford: Stanford University Press.
- Ricardo, David. 1817/1971. *On the Principles of Political Economy and Taxation*. Edited by R. M. Hartwell. London: Pelican.
- Ritschl, Albrecht. 2002. Deficit Spending in the Nazi Recovery, 1933-1938: A Critical Reassessment, *Journal of the Japanese and International Economies* 16:4, 559-582.
- Robinson, Joan. 1972. The Second Crisis of Economic Theory. *American Economic Review* 62:1-2, pp. 1-10.
- Rogerson, William P. 1994. Economic Incentives and the Defense Procurement Process. *Journal of Economic Perspectives* 8:4, pp. 65-90.

- Shiba, Takao. Business Activities of Japanese Manufacturing Industries During World War II. In *World War II and the Transformation of Business Systems*, pp. 1-25. Edited by Jun Sakudo and Takao Shiba. Tokyo: University of Tokyo Press, 1994.
- Simonov, Nikolai S. 1996. Strengthen the Defence of the Land of the Soviets: the 1927 War Alarm and its Consequences. *Europe-Asia Studies* 48:8, pp. 1355-1364.
- Simonov, Nikolai. 2000. New Postwar Branches (2): The Nuclear Industry. In *The Soviet Defence Industry Complex from Stalin to Khrushchev*, pp. 150-172. Edited by John Barber and Mark Harrison. Basingstoke and London: Macmillan Press.
- Smith, Adam. 1776. *The Wealth of Nations*.
- Smith, Ron. P. 1977. Military Expenditure and Capitalism. *Cambridge Journal of Economics* 1:1, pp. 61-76.
- Smith, Ron. P. 2009. *Military Economics: the Interaction of Power and Money*. Basingstoke: Palgrave Macmillan.
- Steindl, Josef. 1952. *Maturity and Stagnation in American Capitalism*. Oxford: Oxford University Press.
- Suvorov (Rezun), Viktor. 1990. *Ice-Breaker: Who Started the Second World War?* London: Hamish Hamilton.
- Suvorov (Rezun), Viktor. 1990. *Ice-Breaker: Who Started the Second World War?* London: Hamish Hamilton.
- Tilly, Charles. 1975. Reflections on the History of European State-Making. In *The Formation of National States in Western Europe*, pp. 3-83. Edited by Charles Tilly. Princeton: Princeton University Press.
- Tooze, J. Adam. 2006. *The Wages of Destruction: The Making and the Breaking of the Nazi Economy*. London: Allen Lane.
- Trevor-Roper, H. R., ed. 2000. *Hitler's Table Talk, 1941-1944*. Third edn. London: Enigma Books.
- Udlicks, Teddy J. 1999. The Icebreaker Controversy: Did Stalin Plan to Attack Hitler? *Slavic Review* 58:3, pp. 626-643.
- Udlicks, Teddy J. 1999. The Icebreaker controversy: did Stalin plan to attack Hitler? *Slavic Review* 58(3).
- Urlanis, B. Ts. 1994. *Istoriia voennykh poter. Voyny i narodonaselenie Evropy. Liudskie poteri vooruzhennykh sil Evropeiskikh stran v voynakh XVII-XX vv. (istoriko-statisticheskoe issledovanie)*. St Petersburg: Poligon.
- Von Staden, Peter W. 2008. *Business-Government Relations in Prewar Japan*. London: Routledge.
- Weeks, Albert L. 2002. *Stalin's Other War: Soviet Grand Strategy, 1939-1941*. Lanham, MD: Rowman & Littlefield.
- Wilson, Mark, and Jari Eloranta. 2010. Thwarting the "Merchants of Death" Accusation: The Political Economy of Military Procurement in Industrial Democracies before the Second World War. *Essays in Economic and Business History* 28, pp. 91-106.