Economic Warfare in Modern History: Key Issues

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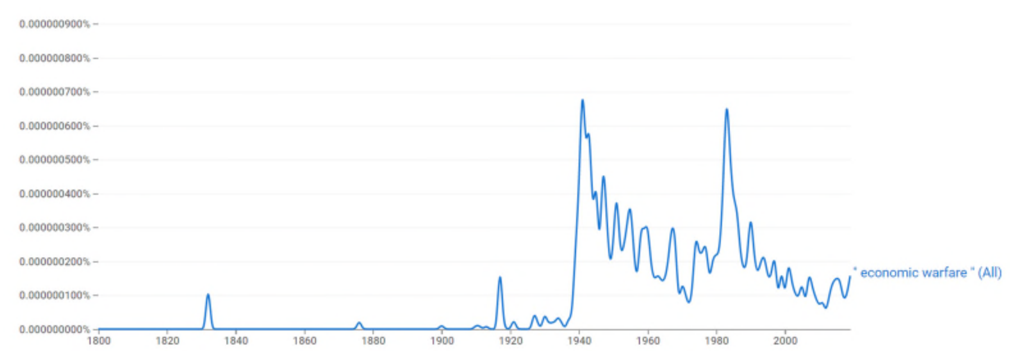
“These sanctions that are being imposed are akin to a declaration of war.” This is how Vladimir Putin (speaking to journalists on 5 March 2022) described the first Western responses to Russia’s invasion of Ukraine. His words pose a question for which scholars of economics, history, and international relations have no generally accepted answer: what is the relationship between economic and military action in conflict among states? When does an attack on the adversary’s economy cross the line from war avoidance or deterrence to war? Our project makes a team effort to look for answers in three centuries of economic history.

We aim to provide a companion to our previous collections on the World Wars (Harrison 1998; Broadberry and Harrison 2005), supplemented recently by eBooks to commemorate the centennial of the end of World War I (Broadberry and Harrison, 2018) and the 75th anniversary of the end of World War II (Broadberry and Harrison, 2020).

Aims, scope, and limits

By economic warfare we have in mind “the attack on the enemy’s economic fighting power: on his power to keep his forces armed, equipped, munitioned, fed, mobile, which is . . . the greatest single element in his power to resist, and therefore the greatest single objective of total war” (Vickers 1943: 14). As a statement of scope, this might seem narrow at first sight. Our project extends it in three directions.

Figure 1. The frequency of “economic warfare” in print, 1800 to 2018.



Source: the Google Ngram viewer at https://books.google.com/ngrams//

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(A) Economic warfare and trade wars

Ours is a mid-twentieth century definition. As Figure 1 implies, economic warfare was practiced long before it was given a name. We do not rule out that economic warfare was understood and practiced differently in earlier (or more recent) times. Teasing out the evolution of the topic is a purpose of the project.

Is the object of economic warfare to interdict supply or demand? Economic warfare as practiced in the twentieth century (Chapters 3, 5, and 6) aimed to weaken the adversary's war effort by disrupting the supply or war. But before the twentieth century, ideas about economic warfare often focused on disrupting market access. In the wars of the eighteenth century (Chapter 1), France and Britain fought for commercial advantage. They attacked each other's exports and access to gold more than their access to imported goods. This seems to foreshadow the twentieth century distinction (Mulder 2022) between "resource draining" and "currency draining" sanctions.

The varied traditions of economic thought offer competing explanations of how economic action on the adversary can affect the outcomes of conflicts. Identifying national power with export surpluses and gold earnings, mercantilist thinkers were more likely to advocate the wartime promotion of exports, enlarging foreign currency revenues, and denial of these to adversaries. Under the influence of Keynesian national income accounting, in contrast, later thinkers placed more emphasis on the net balance of real resources available for wars – a balance that rose with imports and would be depleted by exports. Thus attitudes to exports seem to provide a litmus test for the traditions of understanding the economics of warfare.

Historically, commercial rivalry may seem distinct from real war, but the two forms of conflict might be causally related. Studying conflicts over borders between 1865 and 1914, McDonald and Sweeney (2007: 397) found that bilateral violence was significantly predicted by the erection of tariff barriers (or decoupling?). The reverse did not apply.

(B) Economic warfare and sanctions

How does economic warfare relate to the study of peacetime sanctions? According to Francesco Giumelli (2011), sanctions may be designed to coerce, constrain, and signal. Setting signalling to one side, what is the difference between coercing and constraining? Coercive sanctions are conditional: they seek to force the adversary to change behaviour by structuring incentives (if you do X, we will do Y). Constraining sanctions are unconditional: they seek to weaken the adversary's capability in all directions by limiting the resources at its disposal. This is what economic warfare looks like, whether it is aimed at a country's resources or its currency, so it seems that economic warfare is simply a constraining sanction.

Analytically and historically, however, economic warfare is closely related to other kinds of sanctions. Analytically, the *threat* of economic warfare is a signalling and coercive sanction. It tries to change behaviour in a forward-looking spirit; it does not impose an immediate constraint. Before the US Civil War (Chapter 2), Confederate leaders hoped to deter the North and win British recognition by threatening a raw cotton export embargo. In the interwar period (Dehne 2019, Mulder 2022), based on the experience of economic warfare in the recent World War, the architects of the League of Nations hoped to use the threat of blockade to signal risks to the international order and create incentives for revisionist powers to stop short of aggression. But, if the threat worked on smaller powers, it failed on Italy and Japan Chapters 3 and 5).

In the postwar period, sanctions acquired further coercive ambitions. Chapters 7 and 8 review their applications to apartheid regimes in Southern Africa and communist regimes in Europe and the Caribbean.

(C) Economic warfare and military aid

Analytically, economic warfare has a wartime twin: military aid. Where economic warfare aims to subtract and disrupt, military aid augments and coordinates. In both cases, adaptation is the key. Our focus remains on economic warfare, but we will not lose sight of the parallel (Chapters 3 and 6).

(D) A bias in the literature

In studying economic warfare it is useful to bear in mind a bias in the literature: What we think we know about it is based on a sampling of historical experience highly focused on one country (Germany) and thirty years (1914-1945). Correcting this bias is one purpose of our project.

Preparations—conduct—consequences

Our project aims to study economic warfare in its three phases of preparations, conduct, and consequences. The need to study preparations and consequences may seem obvious: we want to understand the spirit in which policy makers approached conflict and to evaluate the success or failure of their plans.

Comparing the preparations and consequences of economic warfare suggests the need for two supporting models. One is a model of the economy: how might the economy be affected by the adversary's economic action? An obvious requirement of the economic model is to understand what makes for resilience and fragility, because a fragile economy will be more immediately affected than a resilient one. The other is a model of warfare: how might the effects of military and economic action interact to produce victory? An obvious requirement here is to understand whether economic action can take the place of military action or whether the two must be combined. Both models are necessary to allow the arrow of causation to be traced from preparations through the conduct of economic warfare to effects on the war's outcome.

If the need to study preparations and consequences is obvious, during the long peace since 1945 economic historians have paid less attention to the conduct of warfare, leaving it largely to military historians and IR specialists. In the case of economic warfare, however, conduct matters. In many cases, we will find, the impact of economic warfare was not well anticipated. Only the study of conduct can tell us why: was this because the preparations were based on deficient models of the economy and warfare, or was it the conduct of economic warfare that was thrown off course by mistakes or hidden agendas?

Having made the case for the study of conduct, we warn against a preoccupation with the tactics of economic warfare. Taking World War II as an example, Davis and Engerman (2005) provide notable studies of ships and cargoes sunk, and Brauer and van Tuyll (2012) seek to do the same for bombs dropped and production lost. Important as these are for understanding conduct, the study of tactics does not embrace the strategic goal, which was to weaken the adversary's fighting power. A campaign of economic measures might be tactically successful (all the bombs hit their target and all the ships were sunk) yet still fail strategically. While the tactical outcomes need to be established, they are still only intermediate steps to the main purpose, which is the effect on the adversary's fighting power.

The structure of agency

An aspect of conduct that deserves attention is the structure of agency. The directions of economic warfare are decided by states, but states are not unitary actors. Economic warfare has often been poorly understood and its results were often uncertain or contrary to expectations. Learning mattered, and learning was often slow. For these reasons, the scope for political agency in economic warfare has generally been considerable.

On one side, war (including the threat of war) is centralizing, and the centralization of wartime authority was more marked in democracies than in dictatorships (already relatively centralized by definition). Everywhere, secrecy tended to shut interest groups and voters out of the decision loop. To our present knowledge, where historians have recorded how decisions were made for war or during wars, government leaders' strategic outlooks, service loyalties, and career concerns all played bigger roles than commercial interests or voter appeals. For World War I, see the evolution of British thinking about a wartime blockade (Marder 1961) and Germany's vacillation over unrestricted submarine warfare (Hardach 1987). For World War II, see the simultaneous respective decisions of German and Allied leaders to scale up and down the air offensive against the adversary's war industries (Overy 2003).

Secrecy and centralizing factors were less apparent in peacetime. Interwar sanctions against the Axis powers were sometimes driven by voter demands to "do something," or they were designed to send open signals to both adversaries and domestic constituencies. On the side of the Axis powers, something similar might have applied to policies aiming for colonial expansion and autarky. Nonetheless a close analysis suggests that political decision makers usually had the upper hand, leaving business interests with a choice limited to compliance or a rearguard struggle to retain independence (Harrison 2014).

Collateral damage

The indirect nature of economic warfare—attacking fighting power through the adversary's economy—has various consequences. One is to turn civilian lives and property into targets. For anyone concerned for the horrors that war inflicts on civilians, that's how economic warfare worked: by destroying civilian wealth and often lives. The collateral damage associated with economic warfare arose by design, not by mistake.

How was the damage to civilian interests expected to weaken fighting power? There was never much consensus. Before the world wars, thinkers about future war imagined it as a blockade on the civil population. Cut off from imported food, civilians would starve. Or, cut off from sources of materials and export markets, factories would close and workers would be forced into unemployment with the same effect. Either way, society would collapse, and with it the government and the armed forces. Later, this idea was joined by a new one: attacking the adversary's war industries could starve its frontline troops of weapons, leading to their defeat on the battlefield.

Notable in early writing on this subject (e.g. Bloch 1899, Angell 1910) was an unspoken assumption: while bloodshed on the battlefield might drag on, the effects of economic strangulation would be fast and therefore merciful. In recent writing this assumption is maintained, for example, by Lambert (2010), who suggests a lost opportunity for a quick Allied victory in World War I. In public discourse an example is the belief, widespread in the spring of 2022, that Western sanctions threatened Russia's economy with a speedy collapse.

Impact versus adaptation

At first sight, the expected impact of economic warfare or sanctions might be substantial. This was especially the case when those involved failed to anticipate the adversary's adaptation, which aimed to mitigate the effects through economizing and substitution. (Olson 1962 studies the consequences of the 1943 Schweinfurt raids on Germany's ball-bearing industry; Olson 1963 does the same for restrictions on Britain's food supplies in the Napoleonic war and two World Wars). If the aim of economic warfare was to weaken the adversary's economic fighting power, then fighting power could be protected by shifting the most damaging consequences onto the civilian sector. This too might eventually have a cost to fighting power, but the cost would be delayed by short run adaptation.

This suggests a two-period model of the effects of economic warfare. In the first period, the economy loses supply of a good required for war production, but the loss is made up from inventories or from civilian reserves, so that fighting power is maintained. As a result the economy enters the second period with depleted stocks and reserves. In the second period, the economy has reduced substitution possibilities. Only now does the same loss repeated begin to bear on fighting power.

In this model the economy responds to economic warfare in the same way that Mike Campbell (Ernest Hemingway's character in his novel The Sun Also Rises) went bankrupt: "Gradually, then suddenly."

Economic warfare takes time

As we observed in previous work (Broadberry and Harrison 2005b), total war takes time. The same seems to be true of economic warfare. In every case that we can find, and completely against all expectations, economic warfare took years to plan, to overcome the moral and legal barriers to mounting attacks on civilians and their interests, to assemble the means and to organize, train, and deploy them, send them into battle, learn by doing, and then adjust the attack. Moreover, once in operation, economic warfare affected the adversary's fighting power only with long and variable lags (to coin a phrase).

Economic warfare took time. By contrast, it could be argued, the threat of economic warfare could work quickly—and counterproductively. Faced with the threat, revisionist powers could and did prefer to pre-empt it by escalating aggression (Chapters 3 to 5).

The problem of identification

It was always a problem to confidently identify the effects of economic action on fighting power, given the indirectness and delays of cause and effect and the difficulty of holding other things equal over the time required for economic warfare to work.

Economic warfare aimed to disrupt the adversary's war effort. But not all wartime disruption was the result of economic warfare. The problem this creates is to work out the relative importance of economic warfare among the various factors that could have had similar effects.

In wars of attrition, competing processes delivered multiple shocks to the war effort over many months and years. On one side were stimulative processes such as war mobilization and the strengthening of national feeling. On the other side were disruptive factors such as disorganization and demoralization, rival demands for national resources, and enemy action. What happened to fighting power was the net effect of all these things. Economic warfare was one factor among many.

Somehow, the historian who wishes to identify the effects of economic warfare on fighting power has to strain out the other influences. The difficulty of doing so (and sometimes perhaps the failure to see the difficulty) might have contributed to the lack of expert consensus on the effectiveness of economic measures in a wide of range of conflicts.

An example is hunger deaths, diseases, and stunting in blockaded Germany in the later stages of World War I (and after while the Allied blockade continued). It is often claimed or implied that these deaths are attributable to the blockade (e.g. Cox 2015). The blockade was certainly complicit, because it drastically curtailed Germany's import capacity. Yet the blockade was not the only cause of food shortage, for Germany's home production of food also declined, and by an absolutely larger amount, for which the blockade cannot be blamed. Rather, it was the military mobilization that stripped German farms of young men and horses for the army, and diverted supplies of machinery and nitrate fertilizers into the war industries. German civilians died because they were caught between the anvil of the war effort and the hammer of the blockade (Chapter 3). Neither would have had the same effect in the absence of the other.

However, if the purpose of economic warfare was to degrade the adversary's fighting power, the collateral damage to civilians was intermediate to the intended outcome. While the ultimate effect on fighting power has often been claimed, causal identification has rarely been attempted.

Amid numerous narrative accounts, often illustrated with selected statistics, we are aware of only one data-driven exercise, carried out to the standards of the late 1940s rather than of the present day. To analyse the effects of Allied bombing on the German war economy (Chapter 6), the British Bombing Survey Unit (BBSU 1998) used a panel of German towns treated and untreated by heavy bombing in World War II to identify the effects of bombing on total and war production in 1943 and 1944. The geolocation and capacity rating of all German war facilities was used to identify production shortfalls below capacity while stripping out the effects of territorial loss. The effects of the transportation bombing campaign of 1944 and 1945 on railway shipments were found from a panel of treated and untreated mainline railways. The final collapse of the war economy followed the monthly time series of railway shipments with a lag of one to two months.

Working out the impact of economic warfare is made more difficult when it was anticipated. The interwar period provides the example of the Axis Powers. Expecting to be isolated or attacked economically when war broke out, each country took what steps it could to neutralize such measures beforehand by decoupling economically from the expected adversary and by identifying territorial conquests that would improve self-sufficiency. In this sense, the expectation of economic warfare has the potential to confound identification even further by framing both economic policies and military strategies beforehand.

While this complicates the estimation of the effects of economic warfare, it also serves to heighten our understanding of its significance. In shaping the character of twentieth century wars, economic warfare was not a secondary factor or an afterthought. It was background, centre-stage, and foreground. It helped to decide what battles would be fought and who would win them.

Economic warfare: substitute or complement?

Firmly fixed in the public mind is the idea that, in an international crisis, when "something must be done" and bloodshed is to be avoided, economic action offers a ready alternative. The American blockade of Cuba (Chapter 7) was put in place after force had failed. In the case of South Africa and Southern Rhodesia (Chapter 8), it was explicit in the case for economic sanctions that these could take the place of violence. Such arguments suggest an analogy with the economic concept of strategic substitutes (Bulow et al. 1985; Tirole 1988). Was the relationship between military and economic measures one of substitution or complementarity? More precisely, did one more unit of effort in economic warfare lower the return to military force on the battlefield (the condition for substitutes) or raise it (for complements)?

This is not a new question. Military historians have posed it repeatedly, if not in the same terms as economists. When maintaining that economic warfare played its part alongside the military struggle for territory, or that economic warfare helped to shorten a conflict, they argue for complementarity (e.g. O'Brien 2015).

The idea of complementarity is also present in the idea that threats of economic warfare could increase the likelihood of escalation to war in the absence of military deterrence.

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