

Stephen Broadberry and Mark Harrison, eds., *The Economics of World War I* (Cambridge: Cambridge University Press Pp. xvi + 345pp.)

Second novels are often thought to show if a writer has “lost his touch”, that he does not have more than one book in him. Second edited volumes can suffer a similar fate. Broadberry and Harrison have already edited a volume on the economics of World War II. Just like the first one, this collection of essays is a remarkable scholarly achievement. It is far more than a mere collection of scholarly papers on the economics of World War I. Instead, it offers a panoramic overview of how the first “total war” was fought in economic terms. For the better-known combatants, we learn much in terms of valuable historical detail, important revisions to existing data, and through the compilation of comparable statistics. At least as importantly, for the less well-known powers such as the Ottoman Empire and Austria-Hungary which have often been neglected, we now have magisterial overviews of the existing stock of knowledge.

At least as importantly, and in parallel with their earlier work, the editors use this volume to advance their hypothesis that – in essence – only economic might mattered. Once the German attempt at Blitzkrieg in the West had failed in 1914, it was only a matter of time until the larger, richer economies swept all before them. Military history buffs may struggle with the relegation of battlefield events to the fringes of WW I, but Broadberry and Harrison make a powerful case. The wider the gap between living standards in the peacetime economy and subsistence, the greater the proportion of output that government could channel into the production of guns, shells, tanks, and poison gas. Poorer combatants had to contend with another crippling problem – the unwillingness of agricultural producers to surrender their surpluses. As the supply of industrial goods dwindled, farmers had few incentives to produce much, consume little, and hand over the difference. Ill-designed policies including low price ceilings often produced perverse incentives. The worst of all possible worlds was low-productivity agriculture, combined with an effective bureaucracy enforcing bad policies. Russia, Germany and Austria-Hungary suffered from this combination, while Italy and Turkey apparently did much better because enforcement of (poor) schemes was limited. In Italy in particular, as Francesco Galassi and Mark Harrison argue, food was leaking out of the official supply chain everywhere, ensuring that peasants had incentives to keep producing.

Albrecht Ritschl offers new estimates of the proportion of GDP commanded by the German government. His figures offer an important correction of the standard view (confusingly repeated in the editors’ introduction) that nobody squeezed their economy harder than the Germans. The new figures imply a ratio of state expenditure to GDP some 8-10 percent lower than previously thought; also, it took much longer to reach the peak. Full mobilization under the “Hindenburg Programme” of 1916 was only on par with the French levels. Max-Stephan Schulze offers a colorful and informative description of the Austro-Hungarian Empire’s economic decline and fall during the war. Few readers will forget the graphic details, such as the Viennese magistrates who, faced with empty granaries in 1918, seized Rumanian barges on the Danube loaded with grain for Germany. The two halves of the Empire coordinated their policies. The import-

dependent Austrian part soon faced severe shortages, accompanied by food riots. The transport network quickly fell into such a state of disrepair that by 1917, mined coal failed to reach the factories, leaving them idle. It is nothing short of stunning that Austrian production of field guns and artillery shells was broadly comparable with peak US performance (higher for one, somewhat lower for the other).

Sevket Pamuk's chapter doesn't have the luxury of being able to fall back on national income statistics for the period. For the Ottoman Empire, the outbreak of war in 1914 followed hot on the heels of defeat in the Balkan war of 1912-13. Its financial system was weak, its main coal mine within reach of Russian naval guns, and the transport network underdeveloped. That the Ottoman Empire stayed in the war, fighting in the Arabian peninsula and in Europe while mounting a highly effective defense at Gallipoli, is nothing short of stunning. Pamuk speculates that ineffective enforcement of policies designed to squeeze the peasant population may have actually improved economic performance, and that German advisors and economic assistance may also have played a role.

Herman de Jong's chapter on the Dutch economy in WW I offers a useful benchmark for the economic performance of the belligerents. Except for a modest increase in army size and shipping losses, the Netherlands had a "good war". Germany happily bought its agricultural produce and supplied coal in exchange. Prices and demand for everything from hogs and potatoes to shipping services and banking were high. Despite this privileged position, GDP per worker actually declined by 17-23%. The lack of intermediate inputs and the increasing squeeze of the allied blockade took their toll. The Dutch case puts productivity changes elsewhere into perspective: Germany saw a decline by 29%, France by 26%. Given that, for example, 75% of French males aged 20-55 had been called up by the end of the war, these declines do not look too severe compared to the experience of a neutral power. UK productivity, on the other hand, surged by 11%, and Italy saw its output rise by one third (based on dubious figures, as explained by Broadberry in a separate appendix).

Does the central hypothesis that WW I was essentially a "numbers game" hold up? Germany and Austria-Hungary knocked Russia, part of an economically superior alliance, out of the war in 1917. The US's industrial might had barely begun to tell on the Western front by the time the Central Powers sued for peace. As Hugh Rockoff describes in his essay, much of the material used by Pershing's forces was of British and French origin, and the vast increase in armament output had not yet reached the trenches when Ludendorff and Hindenburg decided to cut their losses. Perhaps more importantly, some 30 years ago, Nick Crafts, in an essay on the British Industrial Revolution, made an eloquent plea for giving a greater role to chance in economic history. It is not hard to imagine that a bit of good luck could have turned the 1918 Ludendorff offensive on the Western front into a major rout, producing an earlier Dunkirk. Far from offering a compelling case for the editors' hypothesis, the varied performances of poorer belligerents such as Italy and the Ottoman Empire suggests that there could at times be a remarkable disconnect between economic power and military performance, even during the first of the 20th century's two "total wars". Despite these complications, the editors and contributors, by assembling such a fine summary of the available evidence and detailed

data summaries, have done much to stimulate further debate and future research about the economics of WW I. This volume belongs on the shelf of every economist, historian, and economic historian with an interest in the 20th century.