20 The first great trade collapse: The effects of World War I on international trade in the short and long run

David Jacks
Simon Fraser University

World War I changed the landscape for many economic, political, and social variables. And naturally, international trade was no exception. In this chapter, I document the evolution of world trade up to the precipice of World War I and the implosion of world trade in the initial years of the war, along with important changes in the composition of trade. Chief among these was the dramatic erosion in the share of Europe in world exports in general, and in the share of Germany in European exports in particular. Turning an eye to more long-run developments, World War I emerges as a clear inflection point in the evolution of the global economy. The diplomatic misunderstandings, economic headwinds, and political changes introduced in its wake can be discerned in the data as late as the 1970s.

The view from the precipice

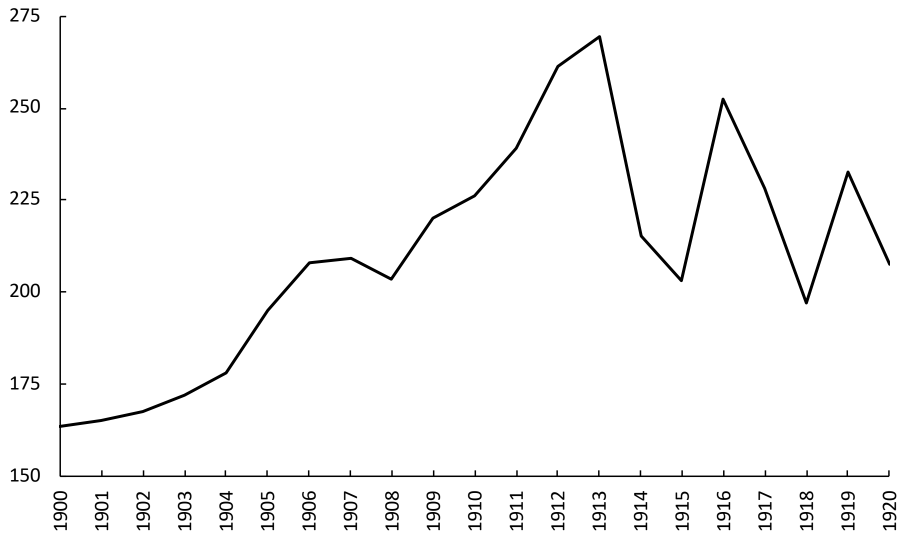
With the rise of antipathies between China and the US and the attendant – albeit somewhat remote – possibility of armed conflict, more than a few commentators have drawn parallels between the present day and the time immediately before World War I (Coker 2015). Then, as now, a once unquestionably dominant power contended with a new industrial upstart, but one influential school of thought held that there were strong countervailing forces assuring that this rivalry could remain contained and find its primary expression in the commercial and diplomatic realms. In the most famous and (perhaps unfairly) maligned contribution to this literature, Angell (1910) argued that as a pure economic proposition, a generalised and protracted European war was futile due to the various linkages put in place by decades of globalisation and the integration of financial, goods and services, and labour markets. Futile though it may have been, World War I was to have devastating effects on the global economy of the day, and nowhere was this seen as clearly as in the patterns of international trade, one of the most exposed and sensitive sectors of economic activity.

Short-run effects on trade: The first great trade collapse and changes in trade composition

In the period from the end of the last global conflict in 1816 to 1900, world exports increased by a factor of roughly 30 in real terms while the ratio of world exports to GDP increased from roughly 2% to 9.3% (Jacks et al. 2011, Jacks and Novy 2018). The sources of this trade boom are fairly easy to locate in the form of burgeoning incomes and declining trade costs due to maritime and overland transport revolutions, the liberalisation of commercial policy, and the development and improvement of transaction technologies, in particular the classical gold standard (Jacks et al. 2011). Underlying all these developments, of course, was the trade-stimulating effects of *Pax Britannica,* which came to a screeching halt in July and August of 1914, as illustrated in Figure 1.

Thus, in the first two years of the conflict, world exports – which had been growing 3.9% annually from 1900 to 1913 – declined by 24.6% in real terms. This was the first appreciable drop in world exports since the early 1890s, which saw volumes decline by 5%. At the same time, this decline pales somewhat when set against the trade bust in 1929/32 at -49.1%. Rather, it more resembles the trade collapse surrounding the Global Crisis in 2008/09 at -21.6%, which also gave way to a rapid recovery. Following the peak of 1916, however, a slow and steady decline set in with real exports in 1920 being roughly at the level they stood in 1906/08.

Figure 1 World exports, 1900-1920 (1990 US dollars, billions)

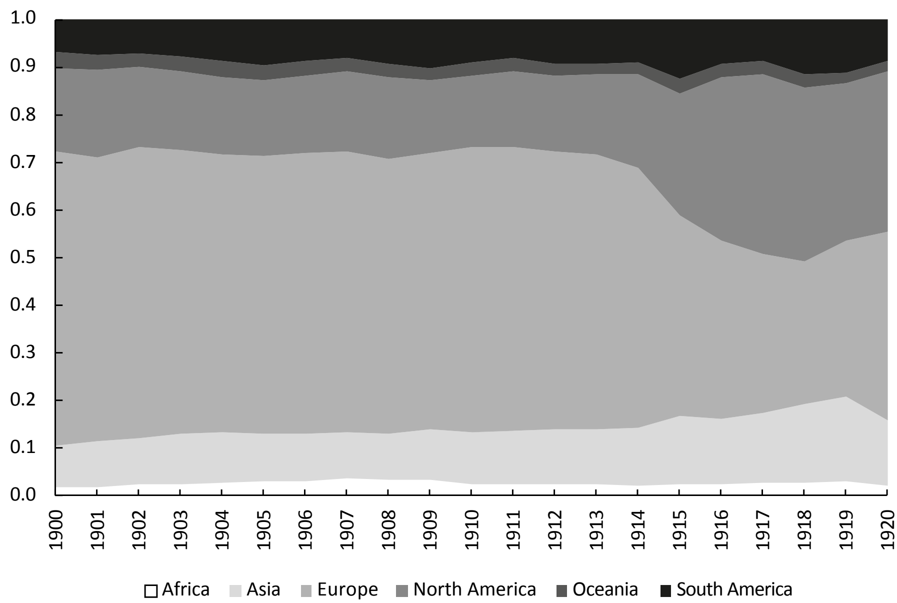


Source: Jacks and Tang (2018).

However, even this short-lived recovery in trade volumes was more apparent than real, as the composition of traded goods shifted from items intended for peacetime consumption and production towards goods intended to wage total war (Findlay and O'Rourke 2008). It also reflected a massive change in the direction of bilateral trade flows. For instance, real exports from Canada and the US to the UK – already among the world's largest trade flows in 1913 – increased from \$11.4 billion in that year to \$26.4 billion in 1918 and remained at elevated levels until 1920. Conversely, real exports from Canada and the US to Germany – also already among the world's largest trade flows in 1913 – collapsed from \$4.6 billion in that year to zero in 1918.

More importantly, World War I gave rise to a distressing erosion in the European share of world exports (Jacks and Tang 2018). This can clearly be seen in Figure 2. In 1910, Europe commanded a 60.0% share of world exports, trailed by North America at 15.0% and Asia at 10.8%. In 1920, the respective figures were 39.4%, 33.8%, and 13.7% (with the combined share of Africa, Oceania, and South America virtually unchanged). Along with the physical destruction of productive capacity and transport infrastructure, much of this process represented the incursion of American and Japanese firms into Latin American and East and Southeast Asian markets, areas which had previously been dominated by their European counterparts. This not only signalled the rising stature of Japan and the US as the preeminent industrial powers of Asia and the Atlantic economy, but also placed considerable constraints on European nations after the war. The erosion in market share, in combination with relatively anaemic levels of trade worldwide, hampered repayment of the large amount of debt accrued by European nations during the prosecution of the war. This was particularly a problem for Germany, which was saddled with reparations and which saw its 21.0% share of European exports in 1913 whittled down to an average of 12.9% in the 1920s.

Figure 2 Regional shares of world exports, 1900-1920



Source: Jacks and Tang (2018).

Long-run effects on trade: Political changes, economic headwinds, and 40 years of churn

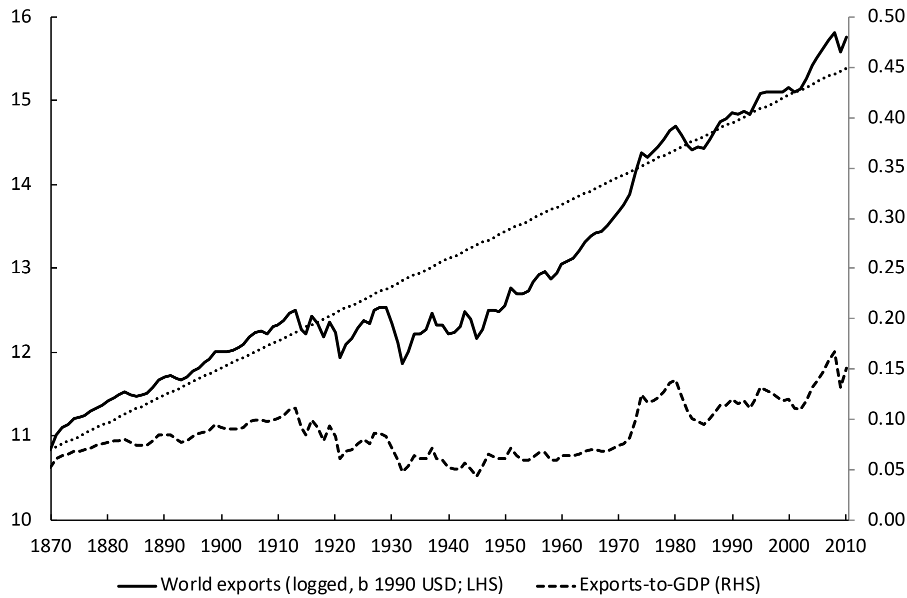
One of the most striking changes arising from World War I can be seen in the chronology of European maps. From the wreckage of Austria-Hungary and the Russian Empire, fully eleven new nation states arose. Thus, East-Central Europe went from having three principal borders (Austria-Hungary/Germany, Austria-Hungary/Russia, and Germany/

Russia) to having 13 new international borders. This was to have detrimental effects on trade within the region. The academic literature has been clear in empirically associating the existence of borders with diminished trade flows, even for countries which are economically similar, geographically proximate, and highly integrated (McCallum 1995); subsequent research has backed up this claim with evidence on cross-border flows within the region from the interwar period (Wolf et al. 2011).

Further afield, World War I played a decisive role in creating nation states that were not only new but with a decidedly different orientation to the world economy. The dissolution of the Russian Empire generated an immediate 99.8% drop in exports from 1913 to 1923, while the rise of the Soviet Union provided a model of autarkic economic development to the world which became distinctly more appealing in the coming decades. What is more, following the conclusion of World War I, many of the previously prevailing trends in trade costs confronted countervailing forces in the form of cartelisation in the transport sector, the resurrection of a hobbled gold standard, and, above all, a lingering sense of discord and distrust in international relations. Coupled with relatively modest income growth during the interwar period, this was a recipe for underperformance in the export sector.

Figure 3 plots world exports from 1870-2010. The series indicates that World War I was a lasting trauma for the global economy. A partial but sharp rebound into 1929 was fully reversed with the descent into the Great Depression, setting a seesaw pattern in which real trade volumes in 1950 were no greater than they were 40 years earlier and with trade costs on average 13% higher in 1939 than in 1921 (Jacks et al. 2011). Figure 3 also depicts the projection of the prevailing trend for the period from 1870 to 1913 (the straight dotted line). Over the course of the 20th century, World War I introduced a long period of disruption in the pace of globalisation which was only completely recovered in the 1970s and only consistently surpassed in the 1990s.

Figure 3 World exports, 1870-2010



Source: Jacks and Tang (2018).

Conclusions

Undoubtedly, World War I had a deleterious effect on international trade in the short run. The sources of this decline are easily discerned: the closure of borders for those countries which formerly competed commercially, but now squared off on the battlefield; the evaporation of financing for trade among belligerents and neutrals alike; and the explosion in costs associated with the physical movement of goods in the form of freight rates and insurance. Econometrically identifying the effects of World War I on international trade in the long run will likely never be possible. Nonetheless, it is possible to delineate likely mechanisms generated by World War I in the form of diplomatic misunderstanding, economic headwinds, and political change which left international trade treading water for the next 40 years.

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About the author

David Jacks is a Professor of Economics at Simon Fraser University and a Research Associate of the National Bureau of Economic Research. His current research interests include the course and consequences of British trade over the past three centuries, the long-run behaviour and drivers of commodity prices and maritime freight rates, the dramatic rise of manufacturing trade after World War II, and the role of repealing Federal Prohibition in explaining short- and long-run public health outcomes in the United States.