International trade cost and conflict

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The effect of conflict on trade may at first seem apparent. Such violent disruption must surely, *ceteris paribus*, reduce trade. Previous empirical findings in the literature do, indeed, generally find a negative effect of conflict on trade (see for example Glick and Taylor, 2010, and Martin et. al, 2008). One would also reasonably assume that conflict should increase the costs of trade. Mohammed and Williamson (2004) find that transportation costs doubled, tripled or even more during WWI. A study of world trade between 1870 and 2000 by Jacks, Meissner and Novy (2009) showed that increases in trade costs, in turn, have a huge impact on trade volumes. Therefore, the importance of conflict on trade costs, and therefore trade, cannot be ignored. However, the few extant studies of the effect of conflict on trade or trade costs typically only consider *inter-state* (international) conflict and do not examine *intra-state* (civil war, for example) conflicts. Such internal disruptions certainly have the possibility of affecting and reducing trade. At the same, a line of literature has developed (Novy, 2013 *inter alia*) which emphasizes that to truly understand how "close" or "far" countries are to each other in terms of international trade, one must examine the degree in which a country trades with the world *relative* to how much it trades with itself (within its own borders). As such, we would like to examine the effect of both types of conflict on such "relative" trade costs.

This paper aims to assess the effect of both types of conflicts, inter and intra, on the overall trade costs (encompassing distance, language, non-tariff barriers, etc.) between nations. This paper adds to the nascent literature in two important ways. First, much of the literature is focused on the effect of international conflict on bilateral trade. In this paper, we separately examine the effect on trade from both *intra-state* conflict (civil war) and *interstate* conflict. Second, this paper uses Novy (2013) micro-modelled based measure of (relative) trade costs. The novelty of this trade measure is that what's important when understanding "distance" between any two countries one should compare internal trade to the international trade between any two countries. As such, we measure the effect of the conflicts on these "trade costs" between countries. It is important to try and measure the relative magnitude of various elements of trade costs to overall trade costs. By doing so, we confirmed the negative effects of both types of conflict on trade, or in Novy's terms, the decrease of a warring nation's interconnectedness to its trade partners during times of conflict. We find, in our sample of 110 countries, that interstate conflict raises the bilateral trade costs by approximately 21.6% (in tariff equivalent terms), while intrastate conflict raises the trade costs by only 7%. As such, interstate conflict is roughly three times as damaging to trade on average. Comparing the damage that conflicts have on trade costs using different income groups, we find, in general, that conflict has a larger effect on trade costs low income than for high income countries. It should be noted that these figures represent a measure of bilateral trade costs of each country relative to domestic costs. Naturally, there is a great deal of variance is the size and scope of conflicts, but when viewed in relation to, say, the Smooth-Hawley tariffs of the 1930s where the US raised tariffs to nearly 50%, the effect of a shooting war seems rather small.

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