

Do Foreign Aid Shocks Cause Violent Armed Conflict?

Brief 1

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In this study we resolve part of the confusion over how foreign aid affects armed conflict. Our results suggest that aid can affect the likelihood of violent armed conflict by influencing a state's ability to credibly commit to an agreement that averts war at present and into the future. Using Aid-Data's comprehensive dataset of bilateral and multilateral aid from 1981 to 2005, we evaluate the effects of foreign aid on violent armed conflict. In addition to rare-event logit analysis, we employ matching methods to account for the possibility that aid donors anticipate conflict. The results show that negative aid shocks significantly increase the probability of armed conflict onset.



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Introduction

In the spring of 1990, Tuareg fighters in the North African Sahel launched a rebellion against the government of Mali. Desertification and severe droughts in the 1970s and 1980s impoverished Mali, especially the livestock-reliant Tuareg. During this period, Mali became heavily dependent on foreign aid; for many years Mali received more than 30% of its budget from international assistance, which at times was the largest source of government revenue. Flush with international aid, the government successfully managed a 1984 drought that threatened the Tuareg. The peace unraveled in 1989, however, when aid flows to Mali were drastically reduced, substantially weakening the government and preventing it from providing the same level of assistance to Tuareg communities then or into the future. In the following year, the Tuareg initiated their rebellion against the Malian government.

Many scholars have explored the link between foreign aid and conflict. Some arguments suggest that aid increases the likelihood of conflict by intensifying existing ethnic cleavages or by increasing the value of capturing the state (Esman and Herring 2003, Grossman 1991). Other studies argue that aid decreases the risk of civil war by promoting economic growth and strengthening state capabilities (Collier and Hoeffler 2002).

In this article we analyze the effect of changes in aid flows on conflict. Most aid changes are small enough that they do not significantly reduce the ability of the government to provide promised resources and services. Deep aid cuts, however, may shift the balance of power radically, to where rebels would likely demand more resources than the government can provide in the short term. The government may promise increased transfers from future resources, but those promises are contingent on the newly realized balance of power, which favors the rebels. If aid flows resume, the government's newfound strength will likely embolden it to renege on its commitment, making its current promises of future transfers non-credible (Powell 2004, 236). Because the expected rebel payoff from conflict is probably greater than any offer the government can credibly announce, our key hypothesis is that aid shocks—severe decreases in development finance revenues—will be associated with a higher likelihood of armed conflict. We test for the existence of a threshold effect—that is, whether large changes in aid are categorically different from smaller aid changes in how they impact the balance of power.

Data, Research Design, and Methodology

Our dependent variable is armed conflict onset as coded in the UCDP/PRIO Armed Conflict Dataset (Gleditsch et al. 2002).

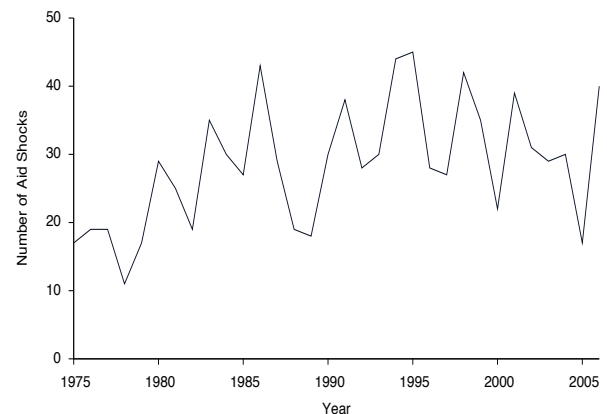
In this dataset, conflicts are coded “1” if, in a given year, at least 25 battle deaths occurred between government forces and at least one rebel group. Otherwise, the observation is coded “0.”

We obtain information on foreign aid from AidData and use the OECD definition of Official Development Assistance (ODA) as grants and loans that are “undertaken by the official sector; with the promotion of economic development and welfare as the main objective; [and] on concessional financial terms” (OECD 2006).

To measure aid shocks, we begin by calculating the change in aid (standardized by GDP) for each country-year. We average changes over the previous two years to account for the time gap between aid commitments and the time at which countries actually receive (or fail to receive) the aid.

We then define the bottom 15% of these aid changes to be “aid shocks”—negative changes that are large enough that we expect them to have a potentially destabilizing effect on recipients. Together, our time-series, cross-sectional dataset includes 139 countries from 1981 to 2005, as shown in figure 1.

Figure 1: Aid Shocks Per Year



To isolate the effect of aid shocks on conflict, we include a variety of control variables commonly used in the civil war literature, such as religious fractionalization, oil exportation, instability, and population.

We use two methods in our study. The first is a rare-events logistic regression model to assess the relationship between aid shocks and conflict. The second method is propensity score and genetic matching to address the issue of endogeneity, which arises from the possibility that donors foresee armed conflict and reduce aid in anticipation of impending violence.

Matching methods attempt to fix the “broken” experiment presented by observational data. It is possible that inherent differences between countries that do and do not experience aid shocks are the actual causes of any correlation we observe

between aid shocks and conflict. Matching solves this problem by discarding these drastically different observations and comparing “like to like” (similar to a randomized experiment).

Results

Of the 15 most severe negative aid shocks in our sample, four of the countries—Liberia (1999), Ghana (1981), Guinea-Bissau (1997), and Sierra Leone (1990)—experienced armed conflict within one year and Lesotho (1994) experienced violence within four years.

Looking beyond these cases to systematic analysis of the data, we find statistically significant evidence for our hypothesis that negative aid shocks are correlated with an increased risk of armed conflict. If the average country were to experience a negative aid shock with other factors remaining constant, the risk of violent conflict more than doubles, from 2.1% to 5.0%. In contrast, we find no evidence that positive aid shocks substantially increase the probability of conflict.

Using the matching methodology, we find that the estimated causal effect of experiencing an aid shock after matching is virtually identical to the estimated effect without matching, suggesting that the effects of aid shocks estimated by our initial model are indicative of a genuine causal relationship.

Robustness Checks

We run a variety of robustness checks to verify our result that negative aid shocks increase the likelihood of conflict.

For example, we use a dependent variable that includes only the first conflict onset (to avoid potentially misclassifying temporary lapses in violence as independent conflicts) and find that our results remain statistically significant. Further, we estimate the model by including only the onset of the 46 wars that eventually reach 1,000 battle deaths. With this robustness check our results are shy of statistical significance, so we conclude that aid shocks are less predictive of large conflict onset.

Conclusion

Our results suggest that aid shocks heighten the probability of armed conflict by shifting the balance of power between rebels and the government, thus undermining the credibility of the government’s commitment to transfers, which might appease rebels. Our findings contribute to the literature on foreign aid and armed conflict in important ways. In contrast to previous studies that find only an indirect connection between levels of foreign aid and armed conflict (Collier and Hoeffler 2002), we

find a direct connection between changes in aid and conflict.

Significant policy implications follow from our analysis. First, the finding that aid shocks precipitate armed conflict ought to give policymakers pause as they contemplate shifts in their aid portfolios. It also may enhance donors’ incentives to coordinate aid with other donors. Indeed, in recent years the calls for better aid coordination have intensified, and our results provide evidence that such coordination is warranted. Our findings indicate that, if donors decide to withdraw aid, they should do so gradually over time because sudden large decreases in aid could be deadly. Although considerable debate still exists about the effectiveness of foreign aid, our analysis suggests that changes in aid, in addition to levels of aid, are potentially very important determinants of violent conflict. As such, we recommend that donors take whatever measures they can to prevent sudden aid withdrawals.

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