

Weaponomics: The Global Market for Assault Rifles

● Phillip Killicoat

Prices for assault rifles suggest contagion effects of conflicts in neighboring countries—and reflect the arms flows feeding African battles

Small arms cause an estimated 200,000–400,000 deaths each year—and assault rifles in civil conflict about 10,000 of these. Despite the global prevalence of small arms, reliable information on the market for such weapons has been extremely limited. In 1999 the Swiss Small Arms Survey project began to compile data on production, stockpiles, transfers, and government policies. But until recently the survey lacked price data—crucial in understanding the flows of these weapons and gaining insight into policies for their control.

A recent study by Killicoat established a database of prices, observed in 117 countries from 1986 to 2005, for Kalashnikov assault rifles—or AK-47s (from *Avtomat Kalashnikova* 1947, the original model). Through preliminary analysis of those data, the study shows that conflict in neighboring countries is closely associated with large and significant declines in domestic AK-47 prices. By contrast, better governance is closely related to higher AK-47 prices, suggesting the importance of government effectiveness in restricting small arms traffic. Most strikingly, prices in Africa are dramatically lower than those elsewhere, a stark reflection of the ubiquity of AK-47s across the continent.

AK-47s are in the arsenals of more than 80 countries and in practically every theater of insurgency or guerrilla combat. This pervasiveness may be explained in large part by their simplicity. Initially designed for use by glove-wearing Soviet soldiers in arctic conditions, the AK-47 is so simple it is operated by child soldiers in the African desert. As a Soviet invention, the AK-47 was not subject to patent and so could be freely copied, and large caches were distributed to

regimes and rebels sympathetic to the Soviet Union.

The AK-47 has dominated the market for assault rifles for the past half century. Since its technology does not differ significantly from the original, the prices observed across time and countries mainly reflect market conditions, not changes in the rifle. The study therefore uses AK-47s to represent small arms flows.

Theory suggests that four factors drive prices in the small arms market: on the demand side, income and motivation, and on the supply side, regulation and supply costs. Drawing on the new database, a model of the small arms market finds that regulation and supply costs are significant determinants of price. Indicators of government effectiveness—proxies for barriers to weapons trade within and between countries—are consistently significant in determining price. Surprisingly, the collapse of the Soviet Union has a smaller impact than might be expected. The significance of the military expenditures of neighboring countries suggests that regional weapons trade is at least as important in pricing as global trade.

Weapons demand across the African continent has changed over time as local tensions have risen and receded. But without fail, AK-47 prices in Africa have been hugely and significantly lower than those elsewhere. Even controlling for income, government effectiveness, war legacy, and supply cost variables, being located in an African country makes purchasing an assault rifle on average more than \$200 cheaper than the global average. The study posits that because African borders are porous and effective trade barriers negligible, arms supply nearly meets demand and prices converge.

Countries whose neighbors have higher military spending face significantly lower weapons prices domestically. Thus mutual disarmament, where feasible, may reduce weapons supply through at least one channel. Economic development and greater

government effectiveness reduce proneness to civil war directly—and also indirectly, by raising the effective barriers to illicit trade in small arms.

Research in this area is nascent, and this study raises a range of additional questions: Does the availability of small arms (as proxied by price) affect the probability of civil war? Does it lead to longer war? Does it result in more battle deaths? If collection of the price data continues, and further analyses incorporate quantities supplied and demanded, much stronger evidence on policy options to prevent, reduce, and end civil conflict is likely to emerge.

Phillip Killicoat. 2007. "Weaponomics: The Global Market for Assault Rifles." Policy Research Working Paper 4202. World Bank, Washington, D.C. This paper is part of a series on Post-conflict Transitions.