

# **Ethnic Violence and Inter-Ethnic Cooperation: A Laboratory Experiment in Kenya**

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## **Extended Abstract**

Violent conflicts are one of the major hurdles for economic development by causing severe inefficiencies even after the violence has ended, both on a macro and a micro level. For instance, recent research has shown that work teams consisting of members of previously conflicting groups work more inefficiently than homogenous groups. Inefficiencies also increase when people are reminded of past events. Further, conflicts are not one-off events, but are ongoing and repeated. What is still missing is a clear understanding of how conflicts affect individual sensitivities towards each other, which may be based on preferences, here broadly defined as motivations for behavior, or beliefs about other people's behavior. We in this paper describe an experiment which allows the separation of the relative importance of preferences and beliefs in strategic situations in a post-violence environment.

Current research in the field implies that exposure to conflict has two different effects on behavior. Very roughly, these may be labeled an increase in discriminatory behavior leading to inefficiencies on the one hand, and an increase in in-group favoritism, which is not necessarily linked to efficiency, on the other. Mostly, this research turns towards preferences as explanation and neglects possible effects of beliefs for inefficiencies.

We investigate behaviors in a series of lab experiments in Nairobi, Kenya. The location is chosen because Kenya saw episodes of large-scale ethnic violence in the aftermath of the 2007 presidential elections. Riots between members of the Kikuyu and the Luo ethnicities were most violent. In our experiment, we are able to exploit both the history of violence and the ethnic dimension of this violence.

Our subject pool consists of 400 slum dwellers, which were partly exposed to the violence. To avoid gender effects, we chose to invite male subjects only, both from Kikuyu and Luo ethnicity. We exploit the ethnic dimension of the riots by separating two treatments: an in-group treatment, where subjects play only against ethnic fellows, and an out-group treatment, where subjects will in each round encounter a player of different ethnicity. Ethnicity is marked by a brief description of the other player, consisting of four items (age, employment status, mother tongue and marital status) where mother tongue is an indicator for ethnicity. (We test for accurateness in guessing others' ethnicity in a post-game questionnaire.) Each subject is assigned to one of these treatments and stays in this treatment for the entire experiment. The players are

matched only once before the games are played, but no information about previous play will be revealed to avoid reputation effects.

The individual exposure to violence is elicited in a questionnaire. To distinguish between long- and short-term effects of violence exposure, we use the questions related to the violence as priming tool for a sub-group of subjects. A second group answers these questions at the very end of the experiment. After the prime (or, in the non-primed group, after some innocuous filling questions), subjects then play a sequence of four one-shot standard bilateral economic games. These include i) a trust game, ii) a dictator game, iii) an assurance game and iv) a public goods game. The games are selected based on their differences in the degree of conflict of interest. The degree of conflict of interest in these games increases from the assurance game (with no conflict of interest), over the public goods games (with an intermediate level of conflict of interest) to the trust and dictator games (which have a maximum level of conflict of interest).

To gain further insight about the potential role of beliefs, we elicit beliefs about the behavior of the respective other player in the game by asking about the expected behavior before players chose their own action. We incentivize answers by giving subjects an additional monetary payout depending on how accurate their estimation is. After the games have been played, subjects respond to a second questionnaire.

Subjects complete all tasks – the initial questionnaire, the economic games and the final questionnaire - before they receive information about the other players' behavior. Payment is based on one randomly chosen round, where money is transferred by a mobile transfer system commonly used in Kenya. This accords to the standard procedures of the laboratory we employ.

Pooling all subjects, we find no evidence for out-group discrimination. However, subjects primed on their violence exposure show significantly less cooperative behavior in out-group settings, but not in in-group settings. That is, primed subjects in out-group settings send and return less in trust games, were less likely to coordinate on a high outcome in the assurance game, contributed less in the public goods game, and gave less in the dictator game. Beliefs, as measured by elicited expectations about others' play, showed no significant difference between primed and non-primed subjects, except in the assurance game. This finding, that while expectations apparently do not differ between in- and out-group members, behavior however will differ when people are reminded about their violence exposure, may help to explain why cycles of violence often re-evolve: if people are expected to be treated equally and discover that they are not, they might try to retaliate.