

# Corrupt Hierarchies

Raúl Sánchez de la Sierra\*  
Kristof Titeca†

November 23, 2018

## Abstract

On the one hand, economists' view of corruption suggests that the income of state officials can be leveraged to decrease corruption. On the other hand, however, corruption is often vertically organized and governed by rent-sharing agreements involving individuals in the hierarchy and civilians. How does the hierarchical nature of corruption interact with typical anti-corruption policy? We experimentally increase compensation of traffic police officers in the DR Congo, and find that higher income mildly reduces petty corruption through an income effect channel. We then allow informal contracts between police officers and drivers to govern corrupt transactions and effort. Accounting for this part of the hierarchy, we find that higher officer compensation induces absenteeism, reducing extortion bribes but also traffic management (and increasing the prevalence of traffic jams). We then also account for informal contracts between officers and their supervisors that are prevalent in our context: monetary transfers and number of drivers escorted to the police station. To observe these contracts, we hire 160 individuals including individuals inside the police hierarchy from different state agencies. We find suggestive evidence that increasing the income of officers corrects informal contracting frictions in the hierarchy, leading revenue from bribes to increase in some locations. Thus, optimal policy may target the supervisor's incentives. Finally, we experimentally provide incentives to supervisors to reduce the quotas of drivers they request to officers. Reducing the quotas decreases traffic jams. These findings suggest that organized corruption can undo the effects of typical anti-corruption policy and that, in some cases, vertical corruption can be socially costly on some tasks, but productive in others.

---

\*Harvard, UC Berkeley. This project was supported by Private Enterprise Development in Low income countries, Antwerp University, and the International Growth Center. We are thankful to the data collectors. We are thankful to Louise Auffray, Anna Dagorret, David Ifkovitz, Yasir Khan, Petr Martynov, Franziska Schwingeler, and Henrik Sigstad for excellent research assistance. We thank Daron Acemoglu, Matilde Bombardini, Michael Callen, Kate Casey, Donald Davis, James Fearon, Avner Greif, Leander Heldring, Saumitra Jha, Joel Mokyr, Nathan Nunn, Suresh Naidu, Benjamin Olken, Shanker Satyanath, and participants of the Canadian Institute For Advanced Research IOG of Fall 2016, the Princeton CHW/RPDS seminar, the MIT OE seminar, the PSE applied seminar, Aix-Marseille School of Economics applied seminar, the Spanish Economic Association meeting, Harvard-MIT development seminar, Harvard PPE seminar, Stanford GSB Political Economy seminar, the UCLA CP seminar, the Kellogg MEDS seminar, the Barcelona Summer Forum, the Oxford development seminar, Stockholm School of Economics seminar, the Bocconi development seminar, the WZB IPI group in Berlin, the Chicago Harris conference on conflict, the NYU development seminar, and the Berkeley development and Williamson seminars. This project obtained IRB approval from Antwerp University, UC Berkeley, and Harvard.

†Assistant Professor, Universiteit Antwerpen.