

# MISQ Archivist

## Cybercrime Deterrence and International Legislation: Evidence from Distributed Denial of Service Attacks

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### Abstract

In this paper, we estimate the impact of enforcing the Convention on Cybercrime (COC) on deterring distributed denial of service (DDoS) attacks. Our data set comprises a sample of real, random spoof-source DDoS attacks recorded in 106 countries in 177 days in the period 2004–2008. We find that enforcing the COC decreases DDoS attacks by at least 11.8 percent, but a similar deterrence effect does not exist if the enforcing countries make a reservation on international cooperation. We also find evidence of network and displacement effects in COC enforcement. Our findings imply attackers in cyberspace are rational, motivated by economic incentives, and strategic in choosing attack targets. We draw related implications.

**Keywords:** Cybercrime, deterrence, legislation, law enforcement, convention on cybercrime, distributed denial of service attack