

# Legalizing Cannabis to Fight Organized Crime

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## Abstract

Could legalizing marijuana eliminate related organized crime? Prohibition policies do not erase the demand for prohibited goods. Instead, if the demand is large, they oblige consumers to deal with criminals to satisfy their demand. Most of current prohibition policies, targeting the suppliers of illegal marijuana or the consumers, are ineffective against criminals. In this paper, we explore legalization policies to eradicate organized crime.

We model consumer choices for cannabis in a risky environment, under both prohibition and legalization. The demand comes from individuals who would like to consume marijuana and behave according to Prospect Theory. In each of the frameworks, these individuals evaluate two lotteries: a binary lottery representing the illegal choice of consumption, and a degenerate lottery associated to the legal option. We characterize the demand functions and determine the provision of illegal marijuana under prohibition and legalization. The market price is determined by the criminal networks who maximize their individual profits under à la Cournot competition.

Neither traditional repressive measures nor more "innovative" pricing tools through legalization are satisfactory policies. A legalization policy may crumble the profits derived from organized crime, and eventually annihilate the latter. Still, it also reduces the cost of marijuana consumption: legalizing cannabis eases the access to the drug, widening the pool of consumers, and eliminates part of the uncertainty that characterizes the decision process. Thereby, legalization increases marijuana use. Further, selling marijuana at the smugglers price or higher is not sufficient to eradicate organized crime. Repression, although decreasing cannabis consumption, creates a barrier to entry on which criminal organizations rely to cartelize the market and charge high prices. Lowering their prices, these organizations would therefore still be able to make a profit in response to the government entering the market and charging the black-market price. We show that merging legalization with repression policies could eliminate the black market while controlling the demand for cannabis. Concretely, we suggest a policy that combines pricing tools to push the criminals out of the market and repressive tools to limit the subsequent increases in consumption.

Our work provides insight about policy applications, shedding light on complementarities between repression and legalization. It ultimately represents the legal price to be implemented as a function of the parameters for repression the probability of arrest and the money amount for punishment. For example, based on evidence from the U.S., with a 1% probability of arrest and a USD 4,000 fine for illegal purchase, a legal price around USD 500 would evict the illegal suppliers from the market and decrease overall consumption by 12%.

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