

Illegal Drugs and Public Corruption: Crack Based Evidence from California

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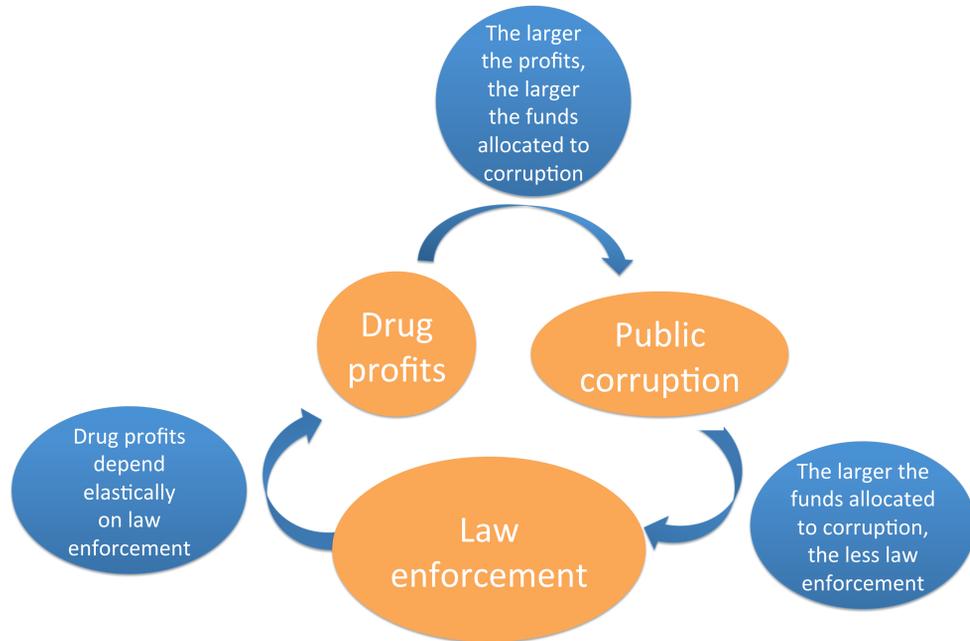
The Bottom Line

The arrival of crack markets in California substantially increased institutionalized corruption.

Abstract

We estimate the causal effect of drugs on public corruption in California adopting the synthetic control method and exploiting the fact that crack cocaine markets emerged asynchronously across the United States. Our results show that public corruption more than tripled in California in the first three years following the arrival of crack cocaine. We argue that a large trade-off between profits and law enforcement (due to a cheap technology and rigid demand), fosters a convergence of interests between criminals and corrupted public officials resulting in a positive causal impact of illegal drugs on corruption.

Motivation



- Drug profits, public corruption, and law enforcement co-evolve.
- While cheap technology and rigid demand lead to substantial drugs profits with weak law enforcement, with more rigorous law enforcement profits tend to zero.

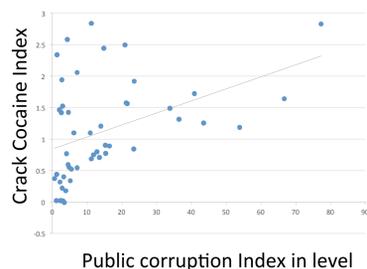
Evidence based on Correlations

Figures A - D provide preliminary evidence of a positive correlation between crack cocaine and various measures of public corruption in the United States.

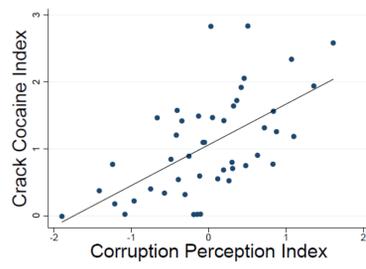
A. Plots the crack cocaine index (averaged over all available years: 1980 to 2000) versus the number of federal convictions for corruption-related crimes (averaged over 1976 to 2002).

B. and C. Utilize alternative measures for public corruption: the Campante and Do (2014) index from an online search in 2009; the Boylan and Long (2003) measure of corruption based on a public corruption perception survey of State House reporters in 2003 respectively.

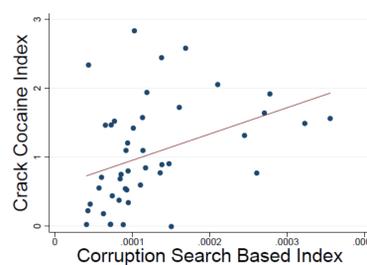
D. Relates the emergence of crack to average public corruption across all U.S. states. The x-axis shows years before and after "year zero" in which, for the first time, the crack market emerged based on the Evans et al. (2016) index.



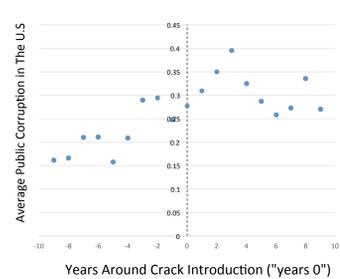
A.



B.



C.



D.

Why Crack?

Three main reasons led us to select crack cocaine to test the hypothesis that illegal drugs foster public corruption:

1. There is a lag in the crack initial arrival to each U.S. state that allows us to utilize the Synthetic Control Method (SCM);
2. Relatively cheap and a highly addictive substance; and
3. Highly profitable drug.

Methodology and Data

- SCM is a recent and powerful econometric tool for addressing the causality issue in the context of our study, as randomized control experiments are not feasible.
- SCM is the most important innovation in the policy evaluation literature over the last 15 years (Athey and Imbens, 2017).
- SCM enhances the difference-in-differences method by using weighted average of a set of controls instead of a single control group. This innovation allows one not only to control for time invariant variables, as in the DID approach, but also to control for variables which are time-varying.

Our treated unit is California (CA) because:

- Crack cocaine arrived in this state in 1981, before any other;
- Consumption of these drugs is much larger on the U.S. west coast; and
- Los Angeles is considered the world's largest retail market for cocaine and the epicentre of the U.S. crack economy.

Data and main variables:

- We construct a dataset of a panel of U.S. states for the period 1976–1985.
- Arrival and presence of crack markets based on cocaine related deaths in a particular area (Evans et al., 2016).

Results

- In 1984 institutionalized corruption in CA was more than three times larger than what it would have been if crack cocaine was not introduced in this state. This is shown by Figure 1 which plots the evolution of public corruption in CA as well as its synthetic counterpart over the period 1976 to 1985.
- Robustness analysis: Figures 2 and 3 are in-time and in-space placebo tests respectively. Figure 4 suggests that increase in corruption in CA is not an artefact due to a possible increase in law enforcement.

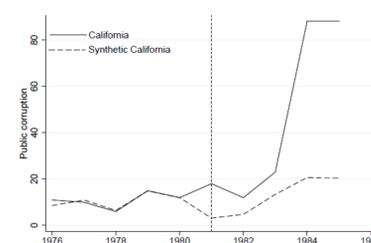


Figure 1. California vs. Synthetic California.

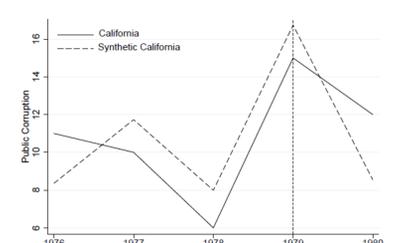


Figure 2. In-Time Placebo Test

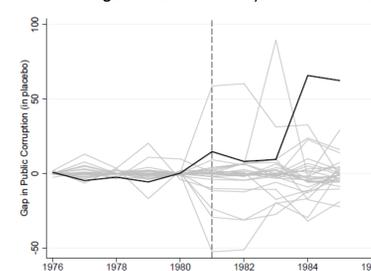


Figure 3. In-Space Placebo Test

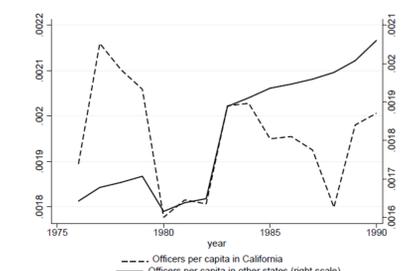


Figure 4. Law Enforcement Employees: California vs. other States.

Conclusion

- We provide evidence that illegal drugs market foster public corruption.
- The differences in the initial arrival of crack across U.S. States is a useful natural experiment to design an identification strategy *via* the synthetic control method.
- We find that the impact of the crack market on institutionalized corruption in CA was quantitatively relevant: corruption was more than three times larger than what it would have been if crack cocaine was not introduced in this state.