

ECNS 316

The Market for “Victimless” Crime

To-do list

- Reading for this lecture:

Anderson, D. Mark, Benjamin Hansen, and Daniel Rees. 2013. “Medical Marijuana Laws, Traffic Fatalities, and Alcohol Consumption.” *Journal of Law and Economics*, 56: 333-369.

-Pages 333-342 are required reading. Specifically, focus on Section 3 on “Medical Marijuana Laws and the Marijuana Market”

Cunningham, Scott and Manisha Shah. 2018. “Decriminalizing Indoor Prostitution: Implications for Sexual Violence and Public Health.” *Review of Economic Studies*, 85: 1683-1715.

Market for “Victimless Crime”

- Supply and demand models applied to market for “victimless” crimes
 - Crimes where exchange is voluntary and information is shared by the parties that participate directly in the transaction
 - E.g., drug transactions, gambling, money laundering
 - “Victimless” does not mean no one is harmed, because such harm or externality is the very basis for criminalizing the activity.
 - “Victimless” means the interaction between the persons directly involved involves voluntary exchange in a market.
- In this lecture, we will apply the theory of the firm to model illegal drug transactions between buyers and sellers.

Market for “Victimless Crime”

- Consider a model for perfect competition
 - The drug in question is a relatively homogeneous good
 - Many buyers and many sellers
 - Entry into the supply side is not complex
- Individual demand curves may be rather complex, especially given addictive nature of many illegal substances (we will cover theory of addiction later). But, market demand for drugs, aggregated over all users in an area, is downward sloping.

[insert S&D diagram]

Market for “Victimless Crime”

- Expected sanction functions analogously to a tax in an ordinary market diagram. But, there are important differences between criminalization and taxation approaches to drugs
 - Sanctions may include incarceration, which imposes further costs in addition to enforcement. Legalization and taxation should have much lower costs
 - If demand is inelastic, then what happens to aggregate revenue of drug suppliers when sanctions are made more severe?
[insert total revenue before/after an increase in expected sanction]
 - Extra revenue may be used by suppliers to help evade enforcement
 - Total expenditures by consumers goes up...so, perhaps efforts made to fund drug habits also increase (e.g., commit more property crimes)

Market for “Victimless Crime”

- As per usual, our S&D diagram can be used to model income effects, changes in tastes and preferences, and changes in the prices of substitutes (or complements)
- Q. Are suppliers the only ones who face possible punishment in the drug market?
- Let’s consider an empirical example of what happens to market equilibrium when an illegal substance is legalized...

[insert drug market w/ sanctions on both dealers and users]

[insert discussion of legalization of marijuana]

Victimless Crimes Across Markets

- Consider case of two markets in which an illegal substance can be sold. For instance, two geographic areas, *Alpha* and *Beta*.
 - Assume that consumers do not cross over the two areas, but dealers sell in both, which is sufficient to equate prices in the two areas.
 - No-arbitrage condition in place (aka “law of one price”)
 - If no-arbitrage condition did not hold, sellers would shift production from markets where expected price (net of sanctions) was low to areas where it was high; this would continue until prices equated or until there were no more sales in the low price market.
 - Further, assume there are no sanctions for possession and that sanctions and enforcement against the sale of the drug are identical in both areas.

Victimless Crimes Across Markets

- Solution of the problem requires we horizontally sum the two demand curves to form a total demand curve

[insert construction of market demand curve]

- Effects of increasing expected sanctions have different effects across markets, because the demand curves differ
 - Slopes differ
 - “Choke” price differs (i.e., vertical axis intercept point)
- Q. Might it make sense then to impose differing sanctions in each area?
 - E.g., What are the implications if demand in *Alpha* is relatively inelastic and demand in *Beta* is relatively elastic?