# Prices or Markets? The Case of Prohibition

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In the spirit of this journal's mission, this article examines the differences between prices and markets. Price theory is an important tool of economic analysis, but it is hardly the entire toolbox. In a typical textbook example, the economist can declare *"ceteris paribus!"* and proceed with price theory analysis using supply and demand. Things are not as simple when the change contemplated is a fundamental alteration of the market.

The case of prohibition and legalization is such a case. Both policies have an impact on price, but shifting from one policy regime to another also has dramatic effects that cannot be simply rolled meaningfully into a price effect. Such policy shifts change just about everything in terms of what will be produced, who will produce it, who will it be produced for, etc. In other words, the market changes dramatically once prohibition is adopted, or when it is repealed.

The overreliance of mainstream economists on price theory has left a large gap in their understanding of markets and policy. This paper demonstrates this misunderstanding by examining the case of prohibition. In outlining some features of markets, it becomes clear why economists have floundered in their analysis. Understanding the role that markets plays shows

that price is relatively unimportant and clarifies economic analysis when it comes to prohibition and legalization.

## Economists and Prohibition

While economists have studied the policy of prohibition and the War on Drugs, it would be a mistake to believe they have provided a unified analysis or that they uniformly support ending the War on Drugs. Nowhere is this misidentification clearer than the following quote from Richard McKenzie and Gordon Tullock. They assert that economists have always opposed prohibition as if dictated by some standard economic model:

> If backers of (alcohol) prohibition had consulted economists, *we are sure* they would have been told that the law would be very difficult and expensive to enforce. With this advice they might have decided not to undertake the program (i.e. alcohol prohibition) of moral elevation. (McKenzie and Tullock 1989, 7)

It is true that American economists of the alcohol prohibition era were in substantial agreement regarding prohibition, but they were supporters of alcohol prohibition and many were enthusiastic backers of the policy. For example, Simon Patten was a founding member and President of the American Economic Association. He felt that alcohol prohibition was necessary for survival and an inevitable result of evolutionary competition. One of Patten's notable contemporaries, Simon Newcomb, thought alcohol prohibition was necessary because economists knew no other way to discourage consumption of preferred goods except positive restraint. Richard T. Ely, the founder of the American Economic Association, was also a prohibitionist who promoted the cause of "modified prohibition" with heavy taxation, regulation, licensing fees, and monopoly provision to restrict consumption and to make sinners pay for their sins.

Irving Fisher, one of the most important American economists of the period, was also a leading advocate for alcohol prohibition. He reported that he could find no economist to oppose alcohol prohibition on its economic merits (Fisher 1927, 5). Fisher wrote several books on the evils of alcohol and merits of prohibition.

In more recent times, Milton Friedman and Gary Becker have advocated the liberalization of drug laws and are in large part responsible for the notion that economists support drug legalization. Upon further examination, neither provides a wholehearted endorsement of drug legalization and there actual endorsements stem from the long-standing ideological bias of the Chicago school, which is characterized as weak libertarianism. In Friedman's case his call for drug legalization seems to stem from his personal experience during Alcohol Prohibition and his libertarian policy views (Thornton 2016). He was willing to concede or tolerate a host of government interventions in order to end the War on Drugs. In Becker's case, he provides a formal model which suggests that the War on Drugs be replaced with a heavy "sin" taxes and other interventions (Thornton 2006).

Friedman and Becker's prescriptions represent the profession as a whole. In a survey of the profession, a majority of economists (58%) supported some form of liberalization of illegal drugs. In contrast to public perceptions, only 16% of the surveyed economists supported the full legalization of drugs. While support for legalization and decriminalization is much higher for economists than for the overall population, the difference disappears when demographic variables are considered. It turns out that being an economist, per se, does not make one much more likely to support drug legalization (Thornton 1991b).

When we turn to economists who have taken a public stand against the War on Drugs we do find a justification for the public perception that economists support the legalization of drugs. A survey of public pronouncements (Thornton 2004) on illegal drug policy shows that the majority of economists do overwhelmingly support liberalization and legalization in the majority. However, the bulk of those who support of legalization come from the Austrian school. That would fit the ideological perception of the Austrian school, but I would argue that the methodological and theoretical differences play a very important role, as well.

**Price Theory and Prohibition**

Economists using simple supply and demand considerations show that prohibition raises price and reduces quantity. Most supporters of legalization argue the same thing, but they posit that the social costs of prohibition outweigh the benefits. Prohibitionists understand supply and demand too, but they argue the opposite, that the social benefits of prohibition are worth the social costs. They also recognize that the total cost of the War on Drugs is high, but they view the benefits as greater than these costs. They think the cost of drug use would increase and would not be compensated by the reduced government expenditures.

Analysis of prohibition or legalization that is based wholly or primarily on price analysis is bound to fail. The failure to consider the institutional framework of the market and black markets is at the heart of market analysis. The lack of this market analysis explains the persistence of prohibitionism and for the failure of full legalization to emerge as a "realistic" alternative policy. The result has been the overriding tendency for policy recommendations to be forms of modified prohibition, sin taxes, harm reduction, and decriminalization, rather than full legalization. The institutions of prohibited markets are radically different from legal markets. The features of newly legalized drugs markets will eventually approach those of other legalized markets in that they are self-regulating, socially optimal, and generate discoveries that are corrective.

**Austrian Analysis of Prohibition**

How does prohibition impact the market for a product? It changes everything, and price becomes relatively unimportant. With prohibition there is a black market, with legalization there is a free market. Every aspect production, distribution and consumption changes as you change from one policy/market to the other.

In a free market the number of firm that produce, distribute, and sell the product is determined by competition. In new or reopened markets there will usually be a large number of small scale firms in the beginning. With a large number of entrants i.e. “Mom and Pops,” competition would result in winners taking market share from the losers. Winners would be distinguished from losers based on quality, cost, efficiency, and marketing considerations, and of course, price. The winners might develop large scale distributions systems based on “brick and mortar,” retail chain distributors, like Wal-Mart, or ecommerce via Amazon, or some combination or the three.

In the longer run, real world competition tends to result in a relatively small number of large firms, such as Coke and Pepsi, which dominate the soft drink market. This is direct contrast to the mainstream approach of perfect competition where there are a large number of small firms. Large size is important to the analysis of prohibition vs. legalization because the larger the size and value of a firm, the more there is to lose.

In contrast, firms involved with the production, distribution and sale of illegal drugs tend to remain sub-optimally small and transitory. The exception to this rule is “organized crime” which uses bribery to provide a monopoly-like status for a large scale organization that is integrated between the point of production and the point of sale.

In competitive markets, higher quality products would tend to win out over lower quality products. Quality is based on delivering the optimal mix of product attributes on a consistent basis. Products should be consistent, reliable and stable. Of course quality is restrained by cost and price considerations. In contrast, drugs in illegal markets tend to be of low quality, have a suboptimal mix of attributes, and are inconsistent, unreliable, and unstable. For example, illegal marijuana does not come processed, rolled into cigarettes, and packaged, but instead in its raw form in a 5 cent plastic bag, the contents of which can vary markedly from purchase to purchase.

One example of this quality competition is that the potency of legal drugs tends to migrate towards consumers’ tastes. Brands would emerge that would provide a product with a specified mix of product attributes, including a reliable level of potency. Over the counter drugs usually tell the consumer what the precise potency level is e.g. 200 milligram pills and often gives the consumer some notion of what that potency means e.g. “Regular Strength,” “Extra Strength,” or “Maximum Strength.” Once a successful product has been developed the recipe and potency usually remains the same, with the exception of minor changes to the recipe and more efficient, more effective production techniques (Thornton 1998).

Drug potency in illegal markets is a major problem. Prohibition discourages the inclusion of non-prohibited product attributes, such as filters on cigarettes. It also creates incentives for extremely high but unreliable potency levels (Thornton 1991). For example, powder narcotics such as cocaine and heroin are usually extremely potent when they are produced and distributed. However, as it moves through the distribution system the products are “cut” in order to increase weight, volume, and revenues. The potency of illegal drugs such as cocaine and heroin are

therefore unknown by the consumer. Furthermore, the materials used to "cut" the product can be anything from benign to highly dangerous. Sometimes drugs will be cut with highly potent legal or illegal drugs in order to cover up for the low potency of the product. They results is a major cause of drug overdoses. The heroin that killed actor Philip Seymour Hoffman was a prominent example of this phenomenon (Thornton 2014).

Another key area of difference is product information and advertising. Information about over-the-counter and prescription drugs tends to be excessive in its current form, probably due to regulation and product liability concerns. Legal drugs come in the standard two- package form where the outside package (box) provides a great deal of information about the product itself and serves as the container for the inside package (bottle) that contains the product along with further information about how to use the product, side effects, possible complications, and other warnings.

Product information and marketing in illegal drugs is practically nonexistent and limited to face-to-face verbal communications along the chain of distribution. There is little consumer protection regarding this limited information. Advertizing of almost any kind increases the risks being captured by law enforcement and successfully prosecuted.

One critical but often overlooked aspect of consumer protection is the role of "good will." Good will is critically important in markets for legal drugs. Good will is an accounting concept that is based on a company's "brands," its customers base, and its intellectual capital. In other words, good will is the dollar value accountants use when you take the market value of the company and subtract the value of its physical capital goods (with no debt); it's the intangible value of the firm that determine a company's profitability and worth. CEOs and Boards of Directors of publically traded companies try to maximize good will over time because it is a critical component of their company's stock price. Good will is a substantial component of the value of pharmaceutical drug companies, over-the-counter drug companies, alcoholic drink companies, cola companies, etc. Most importantly, entrepreneurs act to protect the company's good will because it can be quickly be adversely affected by negative events.

An example of such an event was the Chicago Tylenol Murders. These 1982 murders were a series of poisoning deaths where victims had taken Tylenol branded acetaminophen capsules that had been laced with cyanide. Seven people were murdered by the tainted capsules. It was determined that the poisoning were not the fault of the Johnson & Johnson and the company issued a $100 million (31 million bottles) recall of Tylenol products and paid for an advertising campaign to discourage the use of its products. During the 7 business days surrounding the initial murders, the company's stock lost almost 18% of its value. In the aftermath of the murders, Johnson & Johnson developed a new tamper-resistant bottle and the new caplet pill which is very hard to tamper with compared to capsules. The company's Tylenol brand soon regained its market share and Johnson & Johnson's stock price returned to its previous level.

The lessons from this example include 1. The financial damage from such events makes

entrepreneurs alert to such dangers, 2. Effective damage control serves the firm's self interest as well as those of their customers, and 3. Very often such negative events result in new innovations that are adopted across the entire market. In this case, companies that sold many types of pills and medication susceptible to tampering adopted tamper proof and tamper resistant packaging and pills.

In illegal drug markets, firms have few options for developing and maintaining good will. They have little to lose if they sell tainted products that harm their customers. One fictional example of good will in illegal drug markets is the super meth-making chemist Walter White on the hit show, *Breaking Bad*. His superior production abilities are intellectual capital that raised the value of any firm that acquired his services because every sale would take place at a higher price. Even here, the super profits his techniques provided were transitory. Legalizing drug markets would create profit opportunities for entrepreneurs who created good will and this good will provides an enormous incentive to protect consumers.

## Conclusions

Everything changes with prohibition and legalization. Price becomes relatively unimportant. Prohibition results in black markets which create multiple hazards for consumers. Legalization results in free markets which solves these hazards and creates multiple forms of consumer protections. This is just one of the many layers of market regulation that legalized markets provide and that protect consumers that are not present in black markets.

## References


Fisher, Irving, et al. 1927. "The Economics of Prohibition." *American Economic Review*. 17 (March): 5-10

McKenzie, Richard B. and Gordon Tullock. 1989. *The Best of the New World of Economics*. 5th edition. Homewood: Richard D. Irwin

Thornton, Mark 1991a. *The Economics of Prohibition*. Salt Lake City, UT: University of Utah Press.

Thornton, Mark. 1991b. "Economists on illegal drugs: A survey of the profession." *Atlantic Economic Journal,* 19 (June): 73-74.

Thornton, Mark. 1998. "The Potency of Illegal Drugs," *Journal of Drug Issues*, 28 (3): 725-740.

Thornton, Mark. 2004. "Prohibition vs. Legalization: Do Economists Reach a Conclusion on Drug Policy?" *Econ Journal Watch*. 1(1): 82-105.

Thornton, Mark. 2006. "Harm Reduction and Sin Taxes: Why Gary Becker is Wrong." *Advances in Austrian Economics,* 8 (March): 357-376.

Thornton, Mark. 2014. "How the Drug War Failed Philip Seymour Hoffman." *Mises Daily*, March 19th.

Thornton, Mark. 2016 (forthcoming). "Milton Friedman, Drug Legalization, and Public Policy," in *Milton Friedman*, ed. Robert Cord, Oxford: Oxford University Press.