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Smoking in Restaurants: Who Best to Set the House Rules?

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A comment on: Benjamin C. Alamar and Stanton A. Glantz, "Smoke-free Ordinances Increase Restaurant Profit and Value," *Contemporary Economic Policy* 22 (4): October 2004, pp. 520-525.

Abstract

On the web site of *Contemporary Economic Policy*, a journal published by the Western Economic Association International, the publisher highlights the Best Article Award for 2004. The award was granted to an article by Benjamin C. Alamar and Stanton A. Glantz (2004).

As the title of their article suggests, Alamar and Glantz conclude that "Smoke-free Ordinances Increase Restaurant Profit and Value." The final two sentences of the article are as follows:

> These results add to the growing body of literature that should give restaurant and bar owners a real economic incentive to support smoke-free laws. Despite the rhetoric that smoke-free laws hurt the restaurant business, the marketplace indicates that these laws increase the profits and the values of restaurants and bars and are good for business. (525)

One naturally wonders: We know that some people like to smoke and prefer restaurants where they can smoke. What about the restaurant that specifically caters to smokers? Do Alamar and Glantz say that such a restaurant will benefit from a ban on its niche? Or do they mean restaurants on the whole? If "on the whole," have they adequately accounted for the restaurants and would-have-been restaurants that lose?

Here I argue that Alamar and Glantz's article is bad economics. It shows

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unsound reasoning, presents empirical findings that do not lead to the authors' conclusions, and omits important considerations.

The authors note that 35 studies have "concluded that smoke-free policies had a negative impact on the hospitality industry; all of them were funded by the tobacco industry or organizations affiliated with the tobacco industry" (524). They remark repeatedly on tobacco funding of certain studies. I find these remarks on where research "is coming from" to be entirely appropriate. It is important to know if a researcher is enmeshed in an organization with a strong commitment and orientation.

Benjamin C. Alamar is a Ph.D. economist and, at the time of the article, was a postdoctoral fellow at the Center for Tobacco Control Research and Education, University of California at San Francisco. Stanton A. Glantz received his Ph.D. in applied mathematics and is professor of medicine at the same institution, the Center for Tobacco Control Research and Education at UCSF. In other words, both Alamar and Glantz were or are funded by anti-smoking sources. Glantz, moreover, is a well-known anti-smoking activist whose views have been covered by, among others, PBS.[2] Glantz was prominent in the fight to end smoking in California restaurants and bars.

My disclosure: Although I am a non-smoker who offered my daughter $2,000 if she made it to age 21 without smoking (she did), I am also a defender of people's freedom in such matters. An article that I wrote in *Fortune* (Henderson 1997) led a law firm that defends tobacco companies to hire me as an expert witness. Although I withdrew early in the process, my withdrawal had nothing to do with the merits of the tobacco company's case, which I found to be just, and everything to do with my concluding that the law firm needed an historian, not an economist.

SEARCHING FOR EXTERNALITIES

Consider an example. Suppose the law allows restaurants to decide their policy on allowing people with T-shirts, as opposed to shirts with a collar. Restaurant owners have three choices: (1) a no-T-shirt policy; (2) a policy that allows customers with T-shirts everywhere in the restaurant; and (3) a policy that limits customers with T-shirts to a section of the restaurant. I know of restaurants in the first two categories and certainly can conceive of the third.

Now, imagine that the government mandates that no restaurants be allowed to serve customers who wear T-shirts. For a restaurant that had previously banned T-shirts, there would be no direct loss; the law would simply prevent the restaurant owner from doing something he or she had already chosen not to do. Moreover,

2 See http://www.pbs.org/wgbh/pages/frontline/shows/settlement/interviews/glantz.html, accessed May 24, 2007.

the restaurants in this category could benefit in the short run from such a mandate. The reason is that some customers who would have gone to a restaurant that allows T-shirts and who, therefore, did not patronize the restaurant that banned them, would now have one less good reason to avoiding the restaurant that previously banned them.[3] But the restaurants in the second and third categories would suffer a loss because they would be prevented from serving a segment of customers that they wished to serve. If an economist found that the government's policy actually increased profits for restaurants and increased the resale value of restaurants, other economists would want an explanation.

Now, let's turn to smoking. One might think that the analysis is fundamentally different because smoking is a health issue: smokers' smoke affects the health, and certainly the comfort, of non-smoking customers. But because these non-smoking customers can choose whether or not to patronize a restaurant that allows smoking, the restaurant owner can capture a normal share of the value to them by disallowing smoking. If other customers value a smoke-free experience enough, they will be willing to visit more frequently or even pay a premium for it. Thus, a restaurant owner can then weigh those extra payments against the lost business of those who will shun the restaurant because they wish to smoke. The fact that second-hand smoking has a health dimension does not make it fundamentally different from T-shirts, which has a "second-hand" aesthetic dimension.

Of course, not just other restaurant patrons are affected by smoke. Waiters, waitresses, hosts, and hostesses are also affected. But they are quickly aware of the restaurant's smoking policy. Those who dislike working in a smoking restaurant will shun the job or, perhaps, take the job and receive a premium. Economists since Adam Smith have generally found that, all other things equal, a job with distasteful or risky aspects pays more than one without. To take one of many examples, DeSimone and Schumacher (2004) find that a 10-percent increase in the AIDS rate raises the earnings of registered nurses by about 0.8 percent. The restaurant owner can trade off the gains from catering to smokers against the lost business from non-smokers and the pecuniary and search costs of being staffed.

Thus, there is a strong reason to believe that a law banning smoking would reduce the profits (and resale value) of restaurants that otherwise would have allowed smoking. Alamar and Glantz seem to recognize this reasoning when they write:

> The tobacco industry, working through the hospitality industry, opposes these policies using the claim that smoke-free policies will harm the hospitality industry. In a world of perfect information and efficient markets operating with no externalities, this claim of harm to the industry would make economic sense, because any regulation that

3 I'm indebted to a referee for this point. He noted the parallel between this point and my point later about restaurants that ban smoking before there is a government mandate.

> restricts an owner's choice set would at best have no effect on profitability. (520)

But immediately following this statement, the authors write:

> In the real world of imperfect information, external effects on consumers and employees, or other forms of market failure, however, a restriction on the choice set could increase profitability. (520)

It is hard to conceive of external effects on consumers and employees that would vitiate my analysis above, which concludes that restrictions would hurt profitability. Alamar and Glantz assert that externalities alter the situation, but they never really identify what those externalities are. Towards the end of their article, they criticize an article by Dunham and Marlow (2000) that argues that the restaurant can act as an intermediary between smokers and non-smokers. Alamar and Glantz write:

> [S]mokers and nonsmokers are not two well-defined groups but are rather numerous individuals with varied tolerances for smoke and willingness to refrain from smoking or to go outside to smoke. Even if the staff of the restaurant is ignored, the number of interested parties is very large with greatly varied preferences in regard to the externality. The large number of interested parties would cause negotiation costs to be high, which violates the assumption of low costs in the Coase theorem. (524)

The restaurant owner, however, no more need get huge numbers of people with varying smoking preferences together to make bargains than he needs to get people together to decide the menu, the lighting, the music, and the air conditioning. In normal discussions of negative externalities, it is costly for the sufferer not only to negotiate but also to exit. It is usually assumed that they are stuck in the "game," and the emphasis is on the cost of negotiation. But in the matter of going to a restaurant, the parties in question can easily decide not to be party at all. They can drive to a different restaurant or eat at home. All the restaurant owner need do is decide on a policy, announce it to the world, and then see what happens.

In using the word "externality," Alamar and Glantz beg the question. That is, they assume that smoking in a restaurant is an externality when that claim is exactly what they need to establish.[4]

4 Alamar and Glantz are not alone in this respect. In his otherwise excellent textbook, *Public Finance*, Harvey S. Rosen writes:

> Another type of inefficiency that may arise due to the nonexistence of a market is an **externality**, a situation in which one person's behavior affects the welfare of another

Skeptics of free markets might argue that market forces do not work the way I claim. But, if so, their disagreement is almost as much with Alamar and Glantz as it is with me. If non-smoking consumers are not willing to pay more, all other things equal, to sit in a non-smoking restaurant and if non-smoking employees are not more willing to work (or not willing to work for less) at a non-smoking restaurant, whence comes the gain in profitability from banning smoking? Alamar and Glantz argue that some of the gain would come from lower labor costs. Smoking, they argue, "is linked to increases in days lost due to illness and higher worker compensation costs" (520). In other words, Alamar and Glantz are arguing that ending smoking in restaurants would reduce days lost to illness and reduce worker compensation costs. But if Alamar and Glantz are aware of this, why would employers not be? Again, they have not established an effect that can reasonably be called "external." They have not shown smoking has to be different, in any relevant way, from dress code, music volume, lighting, or air conditioning, to name just a few general conditions at a restaurant.

Alamar and Glantz seem to realize that their own reasoning requires a market failure and that this assumed failure needs to be explained. After all, if restaurant owners do not know their own interests, then there must be a reason that restaurant owners make systematic errors. Alamar and Glantz even refer to a survey of restaurant and bar owners showing that they "were fearful of smoking restrictions" (525). The authors, however, do not place much weight on the beliefs of entrepreneurs regarding matters directly connected to their personal motivation and local knowledge "because it is well documented that the tobacco industry regularly feeds misinformation to the hospitality industry to fight smoke-free ordinances" (525; see also 520, 524). In other words, Alamar and Glantz claim that people in the hospitality industry are duped into not knowing where their true interests lie.

How could individual restaurant owners be so easily duped into believing something that, if acted on, hurts them? This seems implausible. Individual restaurant owners have business acumen. Moreover, surely the various restaurant owners' associations would have an incentive to investigate whether going smokeless would lead to increased or decreased business. Alamar and Glantz do not

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> in a way that is outside existing markets. For example, suppose your roommate begins smoking large cigars, polluting the air and making you worse off. Why is this an efficiency problem? Your roommate consumes a scarce resource, clean air, when he smokers cigars. However there is no market for clean air that forces him to pay for it. (47, bold in original)

Yet elsewhere Rosen writes, "As long as someone owns a resource, its price reflects the value for alternative uses, and the resource is therefore used efficiently (at least in the absence of any other 'market failures')." If the room in which the roommate smokes is privately owned, then there would appear to be no externality. Similarly, because the air in a restaurant is owned by the restaurant owner, there is no externality. Something about smoking seems to have made both Rosen and Alamar and Glantz give up standard economic reasoning.

attempt to explain how alleged misinformation from the tobacco industry could sway hospitality entrepreneurs in a way that would directly hurt their livelihood. Their conclusion that restaurant owners are fooled is unpersuasive.

EMPIRICAL ISSUES

Alamar and Glantz use a data set on the sale of restaurants to examine whether non-smoking laws had an effect on the ratio of the sale price of the restaurant to the restaurant's annual gross revenues. They call it the price-to-sales ratio, P/S. They find that, all other things equal, having a restaurant in a smoke-free location caused the ratio to be higher. On this basis, they reach the following conclusion:

> A restaurant in a smoke-free location sold for a higher price (thus the higher P/S ratio) than a restaurant with the same sales in a smoking location. This smoke-free premium indicates that the businesses in smoke-free locales operate at a higher margin (i.e., more profits). (522)

But neither of the sentences above follows from their empirical findings. First, they found that P/S was higher in a smoke-free location, not that P was higher. Recall that P is the sale price of a restaurant and S is the restaurant's gross annual revenues. Imagine that a no-smoking ordinance reduces sales of a restaurant by 20 percent and reduces the price the restaurant sells for by 10 percent. Then P/S would rise, but that would not mean that the ordinance made restaurants more profitable. In fact, the ordinance would have made the restaurant less profitable. It is a simple mathematical fact that if all one knows is that a ratio rose, one cannot tell whether the numerator rose. And to know the effect of the ordinance on profitability, one must know whether the numerator, P, rose or fell.

There is a second problem in drawing Alamar's and Glantz's conclusion from their empirical finding. In laying out the reasoning in the previous paragraph, I wrote as if the authors had found that P/S rose after a non-smoking ordinance was passed. But they didn't find that. What they found is that, all other things equal, P/S was higher in areas with no-smoking ordinances. So even if P were higher in such areas, one would not know that P was higher due to the ordinance. To know that, one would have to do a before-and-after study to see the effect of a non-smoking ordinance—something the authors did not do.

Even if smoking bans do increase restaurant profitability—something that the authors did not demonstrate—this could be due to a reduction in competition. Just as preventing the import of textiles makes domestic textile producers more profitable than otherwise, so banning restaurants that allow smoking could make the restaurants that survive more profitable. This possibility is one that Alamar and Glantz do not consider. But if this is what in fact occurred, it would not follow that restaurant owners as a whole should, in their own self-interest, advocate no-smoking laws. Pakistani producers of textiles are hurt by U.S. government restrictions on textile imports and would therefore not advocate such restrictions. So, also, if owners of restaurants that allow smoking are hurt by restrictions on smoking, they should not be expected to advocate such laws.

THE FORGOTTEN RESTAURANTS

Alamar and Glantz push the idea that anti-smoking ordinances are good for restaurant owners. They do a Monte Carlo simulation that tells how much better owners do (in terms of P/S ratio) in smoke-free places than in places without the restrictions. But the whole logic ignores that the restrictions eliminated certain restaurants from existence. In the restricted locations, those restaurants have dropped out of the sample, and their losses are ignored. The article abstract begins: "This study estimates the value added to a restaurant by a smoke-free policy …," as though the result tells what an average restaurant could expect in added value from the new government policy. But that is not actually what the investigation does.

THE FORGOTTEN CONSUMERS

Alamar and Glantz confine their investigation to ratio of restaurant price to sales. But Alamar and Glantz fail to acknowledge the consumers. Consumers who prefer smoking would lose.

HOW ABOUT VOLUNTARY ALTERNATIVES?

Again, Alamar's and Glantz's favored explanation for the economic conundrum is that restaurant owners are duped by the tobacco industry. In Alamar's and Glantz's view, it was in the restaurant owners' interests all along to ban smoking, but they didn't realize it. But if this were the true explanation, there is an obvious voluntary solution: enlighten the unenlightened. If Alamar and Glantz are correct, then restaurant owners, once informed, would voluntarily make their restaurants smoke-free and gain a competitive advantage, with both customers and employees, over their smoky rivals. To hold that force is needed, Alamar and Glantz must believe not only that restaurant owners are misguided, but also that they are incorrigibly so. And, if restaurants owners do not voluntarily act on Alamar and Glantz's findings, which should we doubt more: the prudence of the restaurant owners or, despite its being chosen as the Western Economic Association International's "Best Article of 2004", the wisdom of their article?

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